

# FINANCIAL MARKETS AND THE ECONOMY IN 2024

## Paradox and profitability

*Lessons from 2024 and selected updates: be skeptical about intuition, rules of thumb, financial orthodoxy, and textbooks.*

At the outset of 2024, interest rates were still the main concern in financial markets, with expectations of rate cuts totalling 125 basis points from the US Federal Reserve and up to 150 basis points from the European Central Bank (ECB). There were also expectations of rate cuts in Norway, albeit more modest – around 50 basis points.

Throughout 2024, inflation rates fell, as expected, clearing the way for rate cuts. By the end of the year, both the Federal Reserve and the ECB had cut their key rates by 100 basis points. The Swedish Riksbank cut as much as 125 basis points (and a further 25 basis points just after year-end), while Norges Bank, as an exception, left its key interest rate unchanged at 4.5%.

Market rates followed suit, but only at the very short end. The yield on 2-year US government bonds hardly budged. And the world's presumably most important interest rate, the yield on 10-year US government bonds, instead rose from 3.88% to 4.54%. This was about one percentage point higher than

expectations at the start of the year – despite monetary policy expectations in general being met.

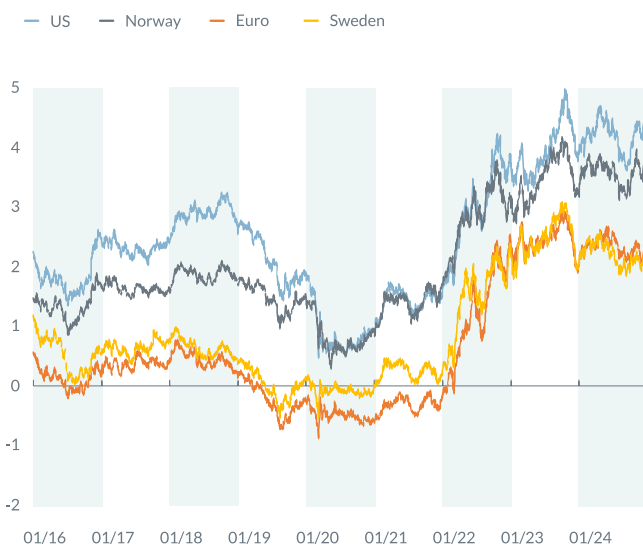
Getting your expectations right does not guarantee that you are right about the consequences.

### THE FOOLPROOF INDICATOR THAT FAILED

The fixed income market also heralded a real risk of recession in the foreseeable future for the US economy, which because of its economic weight is central to all such analyses. Upon entering 2024, the yield curve had been inverted for a year and a half, and many considered an inverted yield curve to be a sure sign – practically foolproof – of an impending recession.

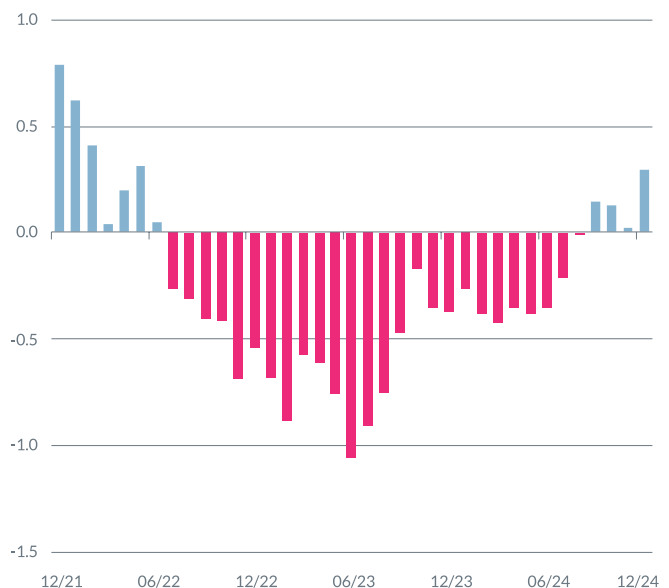
An inverted yield curve means that short-term interest rates are higher than long-term interest rates. As short-term interest rates are traditionally considered to be more influenced by monetary policy, while long-term interest rates are set in the market, an inverted yield curve can be understood to mean that monetary policy brakes are applied more forcefully than economic fundamentals warrant.

No sign of cuts in long market rates



Per cent yield, 10-year government bonds. Source: FactSet

26 cries of wolf



US term premium: yield on US 10-year Treasuries less yield on 2-year US Treasuries. Source: FactSet

In fact, the market managed to rack up a total of 26 months with an inverted yield curve before it started to slope upwards again. By then, it was clear that the US economy, instead of entering a recession, was in fact alive and kicking. It is now estimated that US GDP grew by 2.8 per cent in 2024.

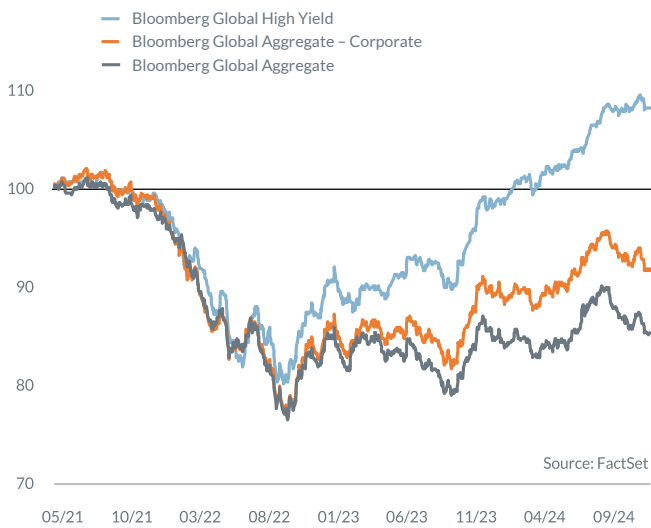
As for the yield curve, it had then been inverted for so long that, whatever happens going forward, I suggest we can agree that the indicator failed this time. One cannot stretch the outlook period indefinitely.

### LARGE INVESTMENT GRADE LOSSES

Due to the rising long rates, global investment grade bonds had another year of failing returns. The key Bloomberg Global Aggregate index, which covers investment grade globally and now has a duration of approximately 6.5 years, delivered a return of minus 1.6 per cent this year. The bonds in this index account for almost half of the global bond market, and this year's decline thus represents a total loss of approximately one trillion US dollars.

If we start counting when this index peaked in 2021 (it's a total return index), the total decline amounts to almost 16 per cent. Hence, as a rough estimate, aggregate losses are approaching 10 trillion US dollars.

#### Long-duration roller coaster (season 4, episode 12)



More than half of this index is made up of sovereign bonds, a large share of which from the US. According to Wikipedia, US Treasury bonds are often assumed to be risk-free bonds. This, I may add, presupposes that they are held to maturity. In the meantime, as this index demonstrates, the risk can be substantial.

I don't have a textbook reference here, but in my view, interest rate risk constitutes a form of systematic risk. It can be reduced by reducing duration, like systematic risk in stocks can be reduced by reducing beta, but it cannot be diversified away. Diversification can instead be used to reduce credit risk, which, accordingly, is a form of idiosyncratic risk.

As it happens, credit risk was not in focus this year. High-yield spreads fell again in 2024, boosting prices of high-yield bonds. The related Bloomberg Global High Yield index returned 9.2 per cent in 2024, following 14 per cent the previous year. This was the bond market's way of stating that the market sentiment was clearly risk-on.

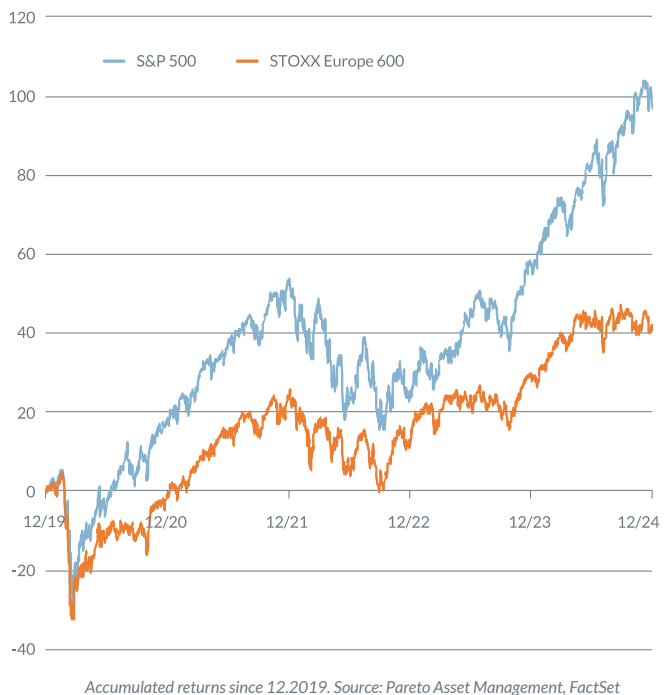
#### Two years of steadily falling risk aversion



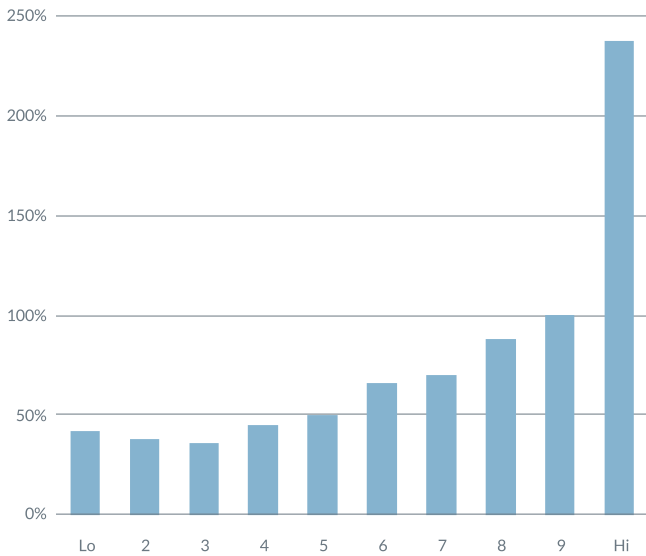
### US EXUBERANCE

The sentiment was no less risk-on in the stock market, at least in the US. The S&P 500 concluded the year with a total return of 25 per cent, pulled up of course by strong returns from the Magnificent Seven: Alphabet, Amazon, Apple, Meta Platforms, Microsoft, NVIDIA, and Tesla.

#### Atlantic divide



### All pricing increases are not created equal



Per cent, increase in current P/E multiples 2009-2024 by decile, value-weighted. Source: Kenneth French Data Library, Pareto Asset Management

By contrast, European stock markets were a lot less exuberant. The STOXX Europe 600 rose by 9.5 per cent, while the MSCI Nordic Countries index hardly budged (+0.6 per cent). Admittedly, the latter was pulled down by a very weak December for heavyweight Novo Nordisk, but the difference was still striking.

Part of the strong returns in the US was due to higher pricing, as the next 12 months' P/E multiple increased by almost 10 per cent. The increase was more pronounced for the most expensive stocks, as has been the case for a number of years: In the US stock market, multiples have risen the most for the stocks with the highest multiples to begin with. These stocks, which also tend to have a higher market capitalisation, must have inspired analysts to hold sunny expectations of future earnings.

We can see this clearly from another pair of indices: The MSCI World Growth index returned 28.7 per cent last year, as opposed to the notably more modest 14.5 per cent returned by the MSCI World Value index. This came on the back of an even more pronounced difference the preceding year.

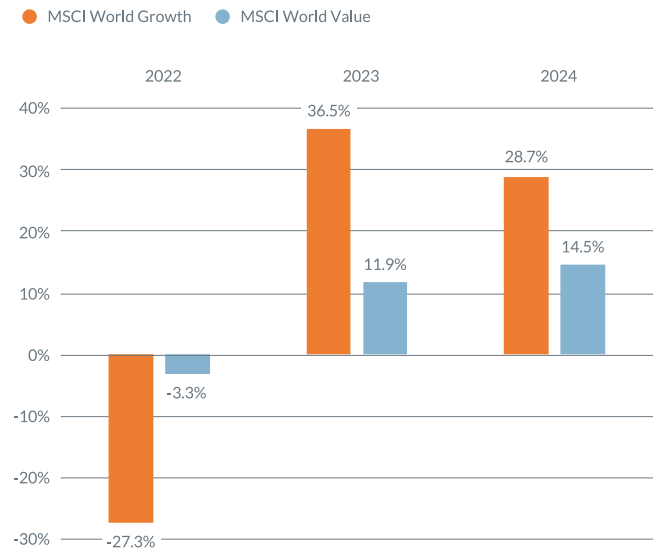
Considering that growth stocks have more of their earnings further into the future, and thus a higher implied duration, this is not what you would expect knowing that long-term interest rates rose this year.

Again: Markets don't adhere to rules of thumb. They're more complicated than that (which is what makes this business so fun).

### RISING STOCK PRICES BECAUSE OF INDEXING?

Let me just point to an alternative explanation of appreciating heavyweights. It so happens that in 2024, a lot of research was published on the concept of stock market elasticity.

### A whole nother market



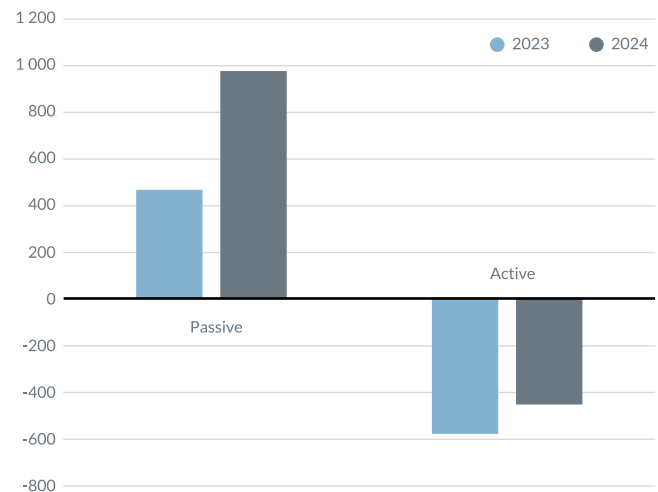
Total return indices in local currency. Source: FactSet

In basic economics, we talk about price elasticity. If a price rise of 1% lowers the volume of goods sold by 5%, demand is highly elastic – meaning it is very sensitive to changes in price.

In finance, the concept is turned on its head: We want to know the sensitivity of the stock price to changes in capital invested through mutual funds, pension funds etc. If the market is elastic, it can absorb this supply of capital without really changing the price. Given a price elasticity of 5 (a multiplier of just 0.2), an inflow of 5% would only increase the price level by 1%.

In standard models, the market is even more elastic. When prices rise, more investors find stocks expensive and decide to sell. There's perfect competition and a given price in a perfect market.

### More dumb money



Net flows into mutual funds globally in USD billion. Source: Lipper, Morningstar

Not so in real life. What if investors don't find the new price level expensive? What if they actually don't care about the price?

This is the case for investors with a fixed mandate, most notably passive investors like index funds. If they have an inflow of a billion dollars, this capital must be invested in the index. If that makes prices rise, so be it.

And they certainly do. According to research now gaining traction in the financial community, the stock market is highly inelastic: 1 dollar invested in the stock market makes the aggregate market value rise by as much as 5 dollars (a multiplier of 5). The rising share of passive investment means that fewer investors now find the new price level too high. There are simply more investors for whom the price level is irrelevant.

This applies primarily to index stocks, which explains why many active investors have struggled over the past 15 or so years. Large fund flows into passive funds have pushed up the prices of index stocks. And research indicates that the effect is disproportionately more powerful for larger stocks. It also increases with the share of passive ownership.

The good news, of sorts, is that it has lifted stock prices. The bad news is that it will not go on forever.

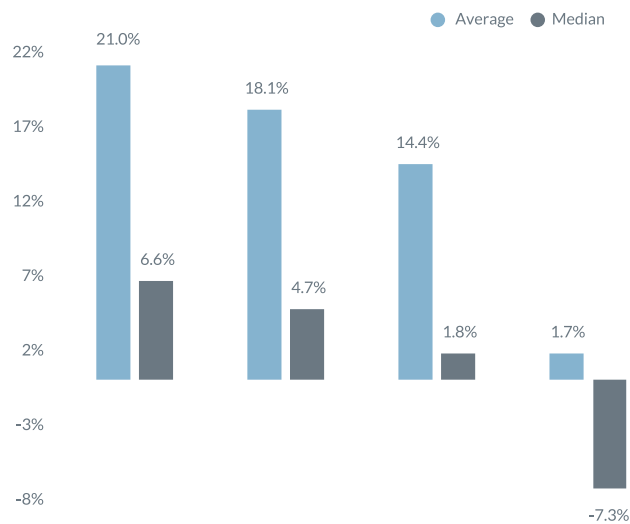
### NEGATIVE REWARDS TO RISK

Here's another example of financial heresy, updated with 2024 figures. To the best of my knowledge, every investment textbook in the world states that you should expect higher returns from higher beta stocks. In the real world, higher beta stocks have instead delivered conspicuously lower returns. We really need to question the logic of expecting to see something totally opposite going forward.

Don't take my word for it; take my numbers. The idea is that on every New Year's Eve, you sort stocks according to their beta in the year just ended. You then invest in the quartile with the highest beta and repeat this exercise every year. If you did this in Norway, starting with beta figures at the end of 2000, you would have reaped a compound return of a meagre 1.7 per cent. If, on the other hand, you picked the lowest-beta quartile, your compound return would be a full 21.0 per cent.

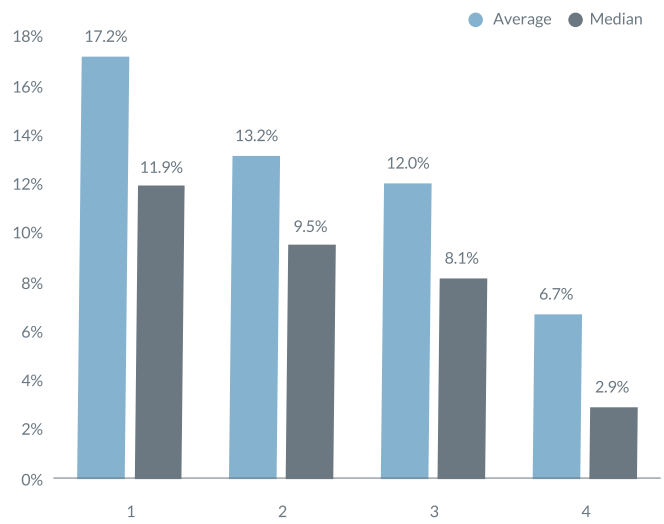
We find the very same pattern in the Nordic market, although with slightly less spectacular differences. And for both markets, the relationship is monotonic, meaning that as we move to quartiles with higher beta, returns are lower. In papers demonstrating the same pattern in US stocks, I've seen this referred to as the world's biggest anomaly. For some of us, it may also be a lucrative hint at where you should put your money.

Negative returns to beta in Norway



Average compound return 2001-2024 sorted by previous year's beta for stocks in the OSEAX. Source: Pareto Asset Management, FactSet

Negative returns to beta in the Nordics



Average compound return 2001-2024 sorted by previous year's beta for stocks in the VINX Benchmark index. Source: Pareto Asset Management, Bloomberg

### BE PATIENT ...

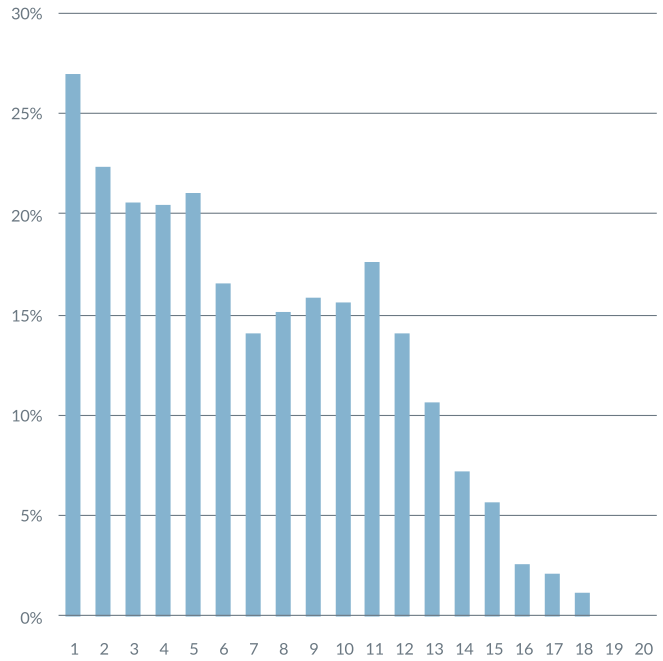
Weather forecasts for the next couple of days are fairly accurate. Further into the future, it gets blurrier. For the stock market, it's the other way around. The next few days' development is anybody's guess. Looking further into the future, we can say something about expected returns with far more certainty.

Let's first look at the S&P 500, limiting ourselves to the post World War II period for reasons of representativeness (although figures dating back to 1871 paint a very similar picture). With a bit of luck and a 12-month horizon, you could have gotten a return of almost 57 per cent. If instead you were really unlucky with your starting month, you could have lost more than 41 per cent. Note, however, that if we extend the horizon, the range of outcomes becomes successively narrower. If you had stayed put for 20 years, your compound return would be somewhere between 0.4 and 13.7 per cent.

Yes, that's right, it would have been impossible to lose money. Oh, and I must add that these are real returns, after deducting inflation.

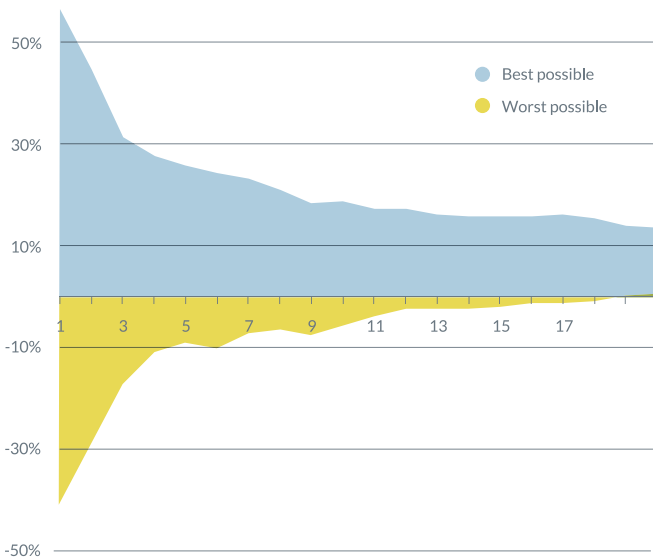
The same pattern holds for the Norwegian stock market. Since the introduction of modern indices upon entering 1983, it has simply not been possible to lose money – after inflation – with a holding period of 10 years or more. And in this case, I have data covering every possible day and not just months.

### Getting less risky with patience



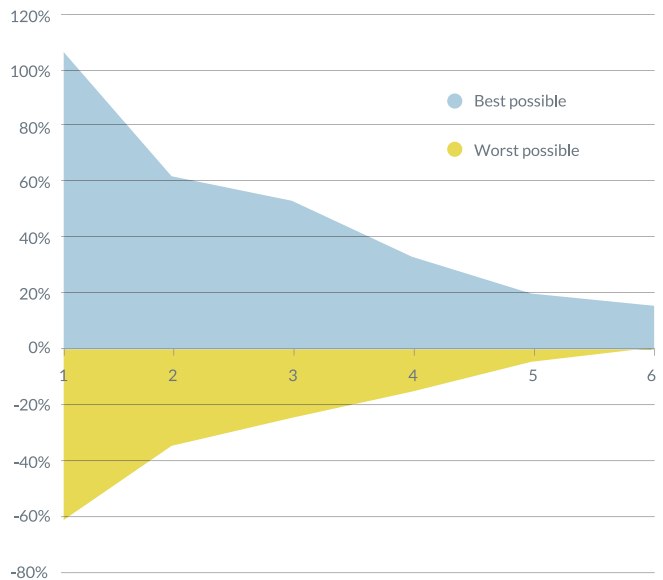
Probability of real loss in the S&P 500 given length of investment period in years, 1946-2024. Source: Robert Shiller, Pareto Asset Management

### Getting clearer with patience



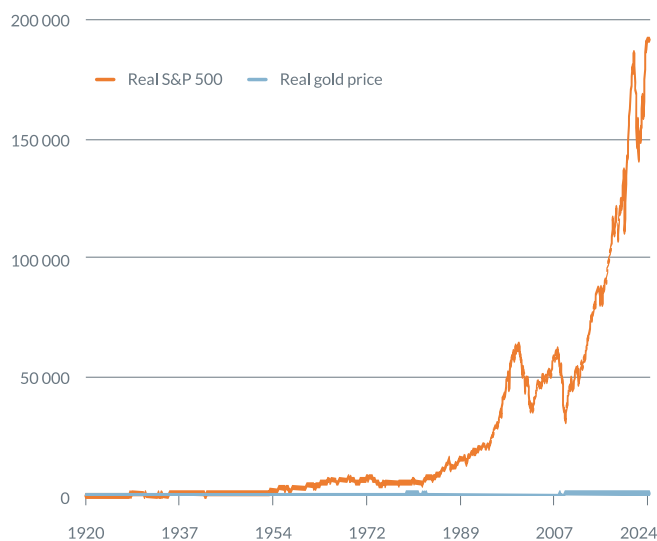
The best and worst possible annualised real returns in the S&P 500 depending on investment period (in years, starting in any month), 1946-2024. Source: Robert Shiller, Pareto Asset Management

### It gets a lot more boring with time



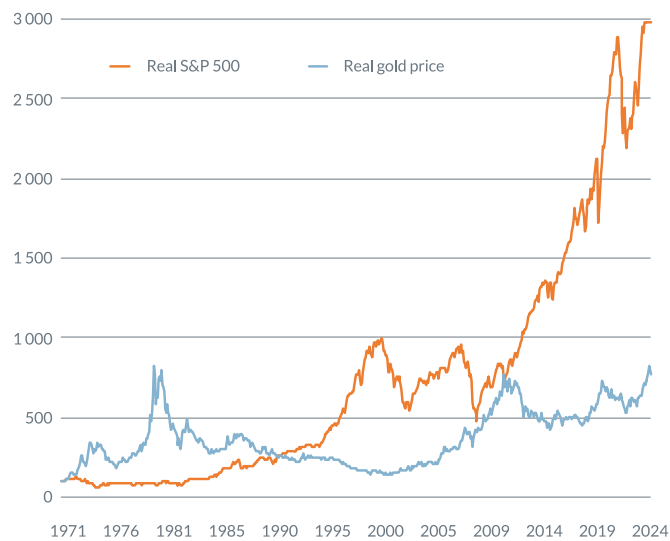
The very best/worst annualised real return possible in OSEBX 1983-2024 regardless of day of investment. Scaled by number of years invested. Source: Oslo Børs, SSB, Pareto Asset Management

### Can you discover gold in this chart?



Rebased, January 1920 = 100. Source: FactSet, Robert Shiller, Pareto Asset Management

### Behind inflation since January 1980



Rebased, August 1971 = 100. Source: FactSet, Pareto Asset Management

### ... AND BE IN THE RIGHT MARKET

Here's another long-term perspective of interest. I have compiled gold prices since 1920 and compared them with the development of the S&P 500. Gold is supposed to be a safe haven for long-term investments and a good inflationary hedge, so I've deducted inflation in this case as well.

As you can easily see from the chart, the stock market return truly dwarfs the appreciation in the gold price. I may add that the stock market return includes dividends. Gold, of course, has no dividends.

Let's fast forward from 1920 to August 1971, when US President Nixon suspended the dollar's convertibility into gold (it was later cancelled indefinitely). Over the next eight plus years, until early 1980, the dollar lost a lot of value through inflation that peaked at almost 15%, while gold increased by more than 1,800%. In real terms, the gold price rose eightfold. No wonder gold acquired a reputation for inflation protection.

Do note, however, that as of December 2024, the real price of gold had never managed to surpass its January 1980 apex. A few weeks into 2025 it did indeed set a new all-time high in real terms, but in the meantime the real value of the S&P 500 had increased by a factor of 30 since 1980. The stock market not only preserved the real value of your money but also increased it on a scale gold has never been able to reach.

### OIL DEPENDENCY?

Natural gas for European delivery also rose in 2024, fuelled by a still tight market balance after the destruction of the Baltic Sea pipelines in 2022 and an announced cessation of a Ukrainian transit contract on January 1, 2025. After a colder-than-expected start to this year, natural gas prices kept rising

until the second week of February 2025, having more than doubled since the bottom in 2024.

The oil price moved very little in 2024, but this question resurfaced recently: Are we underestimating the impact of the petroleum sector on the Norwegian mainland economy? I'm inclined to answer in the affirmative.

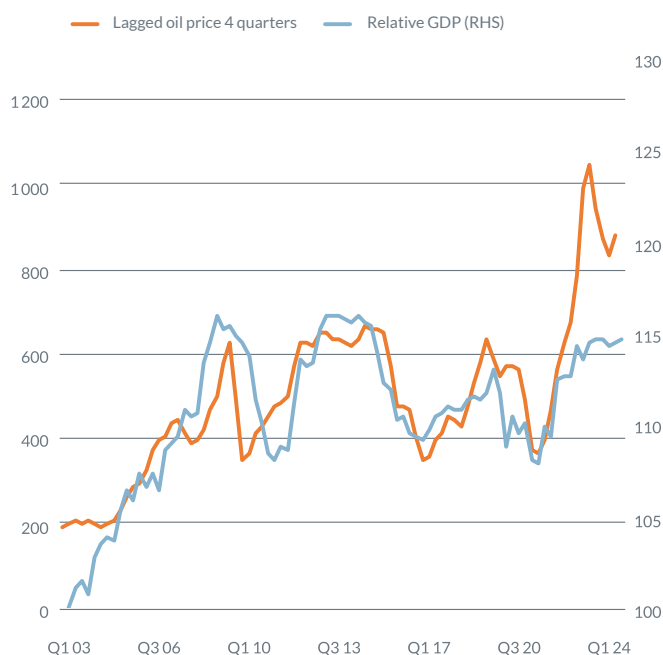
According to the government report on long-term economic perspectives, demand from the petroleum sector last year was equivalent to roughly nine per cent of mainland GDP. For the mainland economy, then, the North Sea is a slightly larger export market than the entire Nordic region.

This of course is just the immediate demand. Multipliers may be difficult to quantify, but pricing towards a sector with fluctuating resource rents logically has a greater impact on value than on volume, which is what we measure in the national accounts. We have seen for years that some of the resource rent is flowing to the supplier industry – through an increase in the cost level on the Norwegian continental shelf. Profitability is generally conducive to technological development and productivity growth, and I doubt the petroleum supplier industry is an exception.

The North Sea is a volatile market, however. After rising by more than 60 per cent from 2004 to 2014, demand from the petroleum sector fell by about one third in the following decade.

To illustrate these fluctuations, I have created an index showing the relative development of mainland GDP to the GDP of neighbouring Sweden on a quarterly basis. Somewhat simplified, these economies are exposed to the

### Mainland oil price effect?



Source: SSB, SCB, FactSet, Pareto Asset Management

same international business cycles – except for the uniquely Norwegian impulses from the petroleum sector. To the extent that the two economies develop differently, the North Sea is an obvious factor to credit or blame.

The level is unimportant here. The point is to highlight the fluctuations. We see that relative growth follows the oil price quite closely (correlation close to 0.8). The oil price is measured in Norwegian kroner, but it makes little difference if we use the dollar price or remove government GDP from the comparison. Since it takes time for changes in the oil price to have an impact, I've used a four-quarter lag. Consequently, the spike at the right end refers to the second quarter of 2022, when both oil and gas were boosted by the invasion of Ukraine. Demand from the petroleum industry fell that year, despite the price jump. Up until then, correlation was above 0.8.

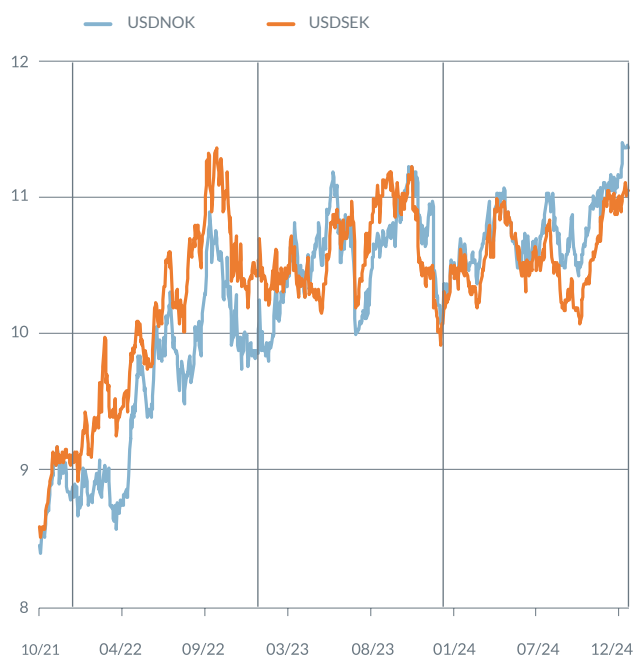
Of course, Norway has greater financial muscles to smooth the business cycle or even boost trend growth over time, by using steadily more oil money. But neither level nor trend is of interest here. The simple point is that the mainland economy's relative development varies with the oil price.

You'd be hard pressed to argue that this has nothing to do with the petroleum business.

### ANOTHER NORWEGIAN EXCEPTION

In 2024, the primary relevance of inflation was its role in facilitating or preventing further rate cuts. After having fallen sharply through 2023, US CPI inflation declined more slowly in 2024, from 3.3% to 2.9%. Eurozone inflation was reduced by half a percentage point, to 2.4%.

### A weak couple of years



Source: FactSet

Headline inflation had a more pronounced decline in Norway, from 4.8% to 2.2%, and core inflation fell even more, from 5.5% to 2.7%. Admittedly, the decline was just as large in Sweden, but the Riksbank implemented a number of rate cuts. Why was Norway alone in not cutting its key rate?

The answer is probably very simple: the exchange rate. After having slipped for a number of years, the Norwegian krone was at a level which might prevent inflation from being further reduced – or so it seemed that Norges Bank reasoned. It had actually stabilised during the past couple of years, but then slipped toward the end of 2024. CPI readings at the start of 2025 seem to vindicate this reasoning.

### A TOO MIGHTY DOLLAR?

For the US, the situation is quite the opposite. A useful gauge is the effective exchange rate, which is measured against a basket of other currencies. If we also adjust this measure for differences in price levels, we get what is known as the real effective exchange rate. If the US real exchange rate rises, it tells us that US goods and services have become more expensive relative to goods and services from other countries. If it's unchanged, we have purchasing power parity.

On this measure, the real US dollar has appreciated by 50 per cent since 2011. It is now at a level not seen since 1985, when the US, the UK, France, West Germany and Japan signed the Plaza Accord, intended to depreciate the US dollar by currency market interventions. They certainly succeeded, as we can see from the chart here.

The incumbent US president certainly wants to reduce the large US current account deficit. While he erroneously attributes the blame to bilateral trade deficits with different trading partners, he also seems to blame the strong dollar. Let's look at the fundamentals here. The current account deficit is by definition equal to saving less investment. In the US, investment has exceeded saving for years. As saving is the sum of household saving, retained corporate profits (after dividends and buybacks), and government saving (imagine budget surpluses), there is no shortage of uniquely US factors inflating the US current account deficit.

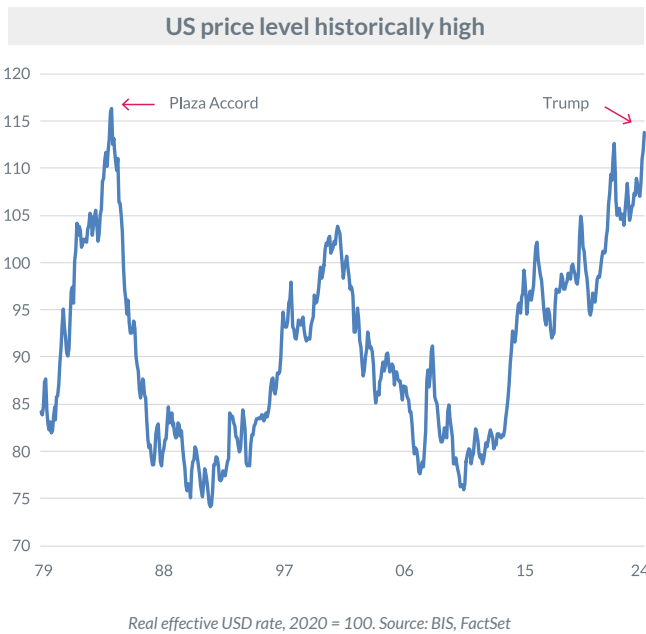
As another accounting definition, the current account deficit must also equal the capital account surplus. Part of the blame may thus be directed at the very attractive US capital market, in both stocks and sovereign bonds.

All of this goes to show that efforts directed at reducing bilateral trade deficits are not likely to accomplish much. Attention may then be directed at the US dollar.

The traditional way of weakening a currency is through central bank interventions, which may be somewhat more effective for a country holding the international reserve currency. It may not have a lasting effect until other countries act accordingly, but President Trump is no big fan of concerted efforts. Instead, various fanciful ideas have circulated, some of them involving the US in effect reneging on part of its government debt (the Mar-a-Lago Accord). The general idea is to soften the burden of servicing the US government debt.

Judging by initial market reactions, none of these ideas are seen as very realistic. They don't need to be implemented to make an impact, however; a few startling White House statements may suffice. As there has been no dearth of such surprises lately, nothing can be ruled out completely. Little suggests that the near future will be less exciting. We know from experience, though, that strong, vibrant companies will prosper in the long run whatever happens in politics.

So stay tuned. And, if your investment horizon is long enough, stay invested.



2024 in a nutshell	
OSEBX	9.1%
S&P 500 return	25.0%
MSCI World net (USD)	18.7%
3-month NIBOR	from 4.73% to 4.68%
10-year Norwegian Treasury	from 3.25% to 3.86%
10-year Swedish Treasury	from 2.03% to 2.42%
10-year US Treasury	from 3.88% to 4.54%
10-year Euro Treasury	from 2.00% to 2.35%
Brent Blend	from USD 77.04 to USD 74.64
USD/NOK	from 10.16 to 11.36
EUR/NOK	from 11.22 to 11.76
USD/SEK	from 10.08 to 11.05
GDP growth, global	3.2%
GDP growth, Norway	2.1%
GDP growth, Sweden	1.0%
GDP growth, Mainland Norway	0.6%

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