# FINANCIAL MARKETS AND THE ECONOMY IN 2020

### Heaven to hell, roundtrip

## A year of unprecedented declines and record rises provided some very useful lessons in investing.

What a year this was! Going into 2020, financial markets were characterised by restrained optimism, as rate cuts in the preceding year had triggered a bull market in stocks and tightening credit spreads. Then came a turn of events that must be very close to the economic definition of an external shock.

At the end of January, the World Health Organization (WHO) declared a global health crisis due to a new virus that had appeared in China. A few weeks later it became clear that the fight against this virus would require drastic, comprehensive measures in all affected countries – which soon turned out to be more or less the entire world.

On March 12, the Norwegian government introduced the strictest measures ever in peacetime, banning a number of events, introducing limited quarantines, partial travel bans and much more. And Norway was by no means alone. Within a few weeks, more than half of the world's population was subject to some kind of lockdown.

As investors quickly realized that this would have significant economic consequences, stock markets plummeted. In little more than a month, both the MSCI World Index and the Oslo

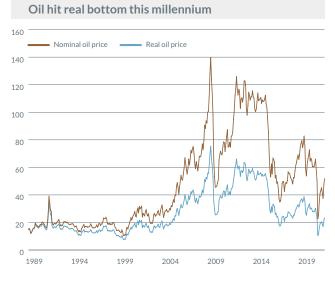
Stock Exchange benchmark index fell by exactly 33 percent. The bottom was reached on March 23.

Now, be as honest as you can be with the benefit of hindsight: At that point, where would you expect the markets to be on New Year's Eve?

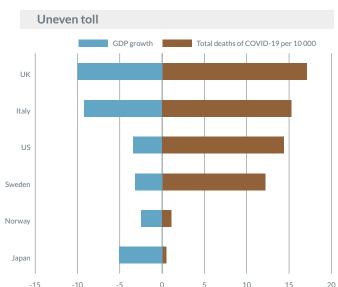
#### THE ANATOMY OF PANIC

One may certainly be excused for describing the March 2020 market situation as a state of panic. Not only did stock markets plunge; all risk assets fell in value, from corporate bonds to commodities.

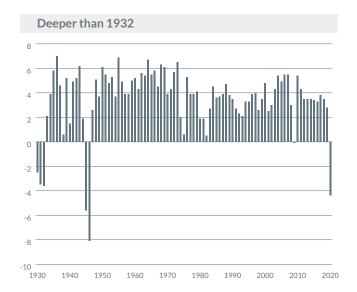
In late March, Nordic high-yield corporate bonds were quoted some 25-30 per cent below their value at the end of February. From a midwinter peak of \$59/bbl, the Brent Blend crude oil price hit \$19/bbl towards the end of April. And currency markets experienced wild swings, with the somewhat typical risk-off movement out of small currencies. In less than two weeks, US dollars shot up by more than 23 per cent versus Norwegian kroner. You would be excused for thinking that the magnitude of fall was not fully unrelated to the plunging oil price; versus Swedish kroner, the dollar appreciation was less than half.



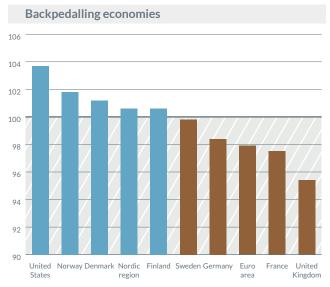
Oil price (Brent Blend), current quotes and adjusted for American CPI. Source: FactSet, US Bureau of Labor Statistics, Pareto Asset Management



Souce: IMF, OECD, OurWorldInData.org, Statistics Norway and Norges Bank



Annual real global GDP growth in per cent. Source: IMF, World Bank, IEA



Estimated 2021 GDP in per cent of 2018 GDP. Source: IMF WEO January 2021 update, Pareto Asset Management

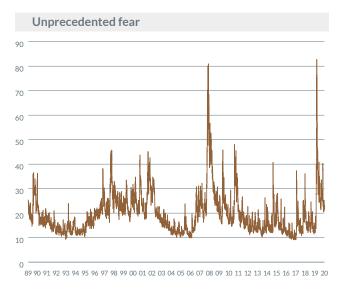
Market fears had a logical rationale: the global economy would come to a halt. In fact, estimates of dramatically negative GDP growth soon appeared, only to be fully confirmed – and more – as the year progressed. The United Kingdom, being one of the worst affected countries, is now believed to have experienced a contraction of as much as 10 per cent in 2020. For the Norwegian mainland economy, it was the worst drop since 1944.

#### THE LOGIC OF PANIC

And then we had a classical knee-jerk reaction, exacerbating the fall. Please allow me a bit of a detour through behavioural economics. We all have different psychological discount rates, meaning that we have different time preferences for capital. A dollar tomorrow is worth less than a dollar today, but how much less?



World trade to GDP ratio in per cent. Source: World Bank, IMF, own estimates (2020)

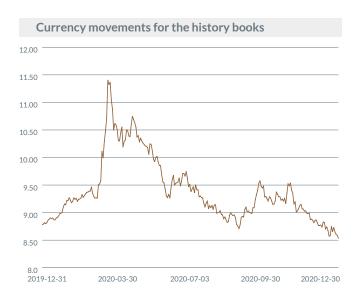


VIX - the CBOE Market Volatility Index - a.k.a. the Fear Index. Source: FactSet

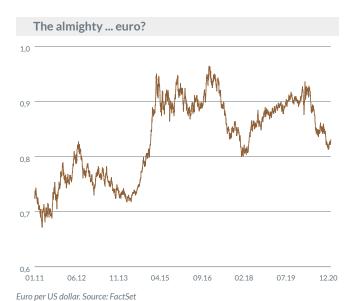
Here's the quirk: it depends. Our psychological discount rate is not a given. It fluctuates, depending on e.g. your mood. When you are depressed, it may increase dramatically. The clinically depressed have a hard time imagining the day after tomorrow or perhaps next year.

Back to 2020: The coronavirus was (and is) scary. We became insecure, discouraged by the torrent of bad news. The psychological discount rate increased. And we all know the implication: falling prices on stocks and other risk assets. We don't specify any particular rate, but collectively, we act as if we did.

This time, the VIX index, popularly known as the fear index, spiked to record levels. One might surmise that the ensuing, swift recovery would go some way towards inoculating the



Norwegian kroner per US dollar. Source: FactSet



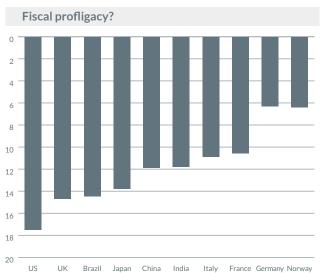
market from similar declines in the future. Given the role of human psychology, I strongly doubt it. There will be more market panics like 2020 – only to be succeeded, of course, by new price climbs.

In the short run, though, the rapid recovery may certainly have boosted confidence, reinforcing the magnitude of the recovery.

#### A PARTICULAR FOREX SIDE EFFECT

The sharp currency appreciation in March was not limited to the dollar. The euro rose almost as quickly and, in a longer-term perspective, the euro has in fact been stronger, having appreciated through the presidency of the former US president Donald J. Trump.

For Nordic investors in foreign securities, the sharp fall in the value of the local currencies certainly cushioned the blow,



Total fiscal deficit in per cent of GDP. Source: IMF, Norges Bank

demonstrating the advantages of unhedged diversification in foreign currency. For Norwegian investors in bond funds, however, there was an unusual side effect.

Many funds hedge bonds quoted in a foreign currency to Norwegian kroner, in order to eliminate the currency risk for their unitholders. The funds then have to put up a margin as collateral for the counterparty bank. With the precipitous fall in Norwegian kroner, these funds had to increase their collateral at a time when, collectively, redemptions dwarfed subscriptions. Their only source of liquidity was thus selling bonds, which of course aggravated the falls.

In Sweden, which did not suffer similar margin call problems, there was nevertheless a liquidity crunch in the market for corporate bonds, forcing a number of funds to suspend trading. It is a fair conjecture that many of their unitholders were surprised by the actual risk of their investments.

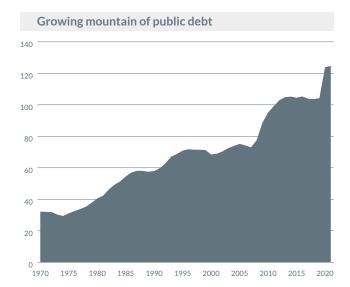
During the worst market panic in March, many Nordic highyield corporate bond funds fell by some 25-30 per cent, although it must be noted that this development was not sustained by a matching increase in defaults.

And it didn't last long. A prompt and fairly concerted global government response to the crisis ensured that confidence soon began picking up.

#### FISCAL CAUTION TO THE WIND

There was little hesitation. In a matter of days, key rates were cut in most of the developed world. Quantitative measures were expanded or reinstated, as was the case in Norway, where the Government Bond Fund was rekindled with a starting capital of NOK 50 billion.

Market rates of course responded immediately to the crisis, with short-term rates falling deeper – producing a distinctly more positive yield curve. Long-term rates fell too, though.



Public debt as a share of GDP in per cent, advanced economies, actual and estimates (2020 and 2021). Source: IMF, Norges Bank

The yield on 10-year US government bonds, having ended the previous year at more than 1.9%, briefly dipped to 0.5%. In the euro area, the corresponding rate almost went down to -0.9%.

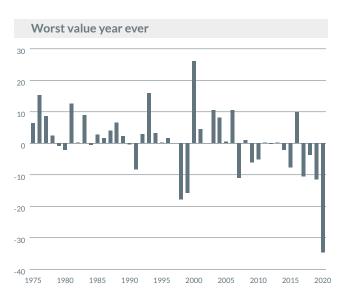
As for fiscal policy, the last decade's call for more restraint and better balanced budgets was noticeably absent. The government deficit in the US, with no lack of vocal fiscal hawks, is now estimated at a record-high 17.5 per cent of GDP – and that's before president Joe Biden's \$1.9 trillion stimulus plan has been put before the vote. Given the size of the US economy, and of US imports, this provides a powerful stimulus to the entire world economy. Even in Germany, normally a model economy for the prudent-minded, the deficit probably reached 6.3 per cent of GDP – more than 12 times the limit in the European fiscal compact.

In terms of economic policies, then, 2020 was a powerful reminder that authorities were indeed not out of policy tools. To some extent, the very manifestation of a forceful reaction may have been just as important as the details of the measures taken. In Norway, the news of the re-establishment of the Government Bond Fund was probably more important than the fund itself. At the beginning of July, only NOK 3.6 billion had been invested. Confidence is a central, if nebulous factor in financial markets.

Of course, the highly expansionary fiscal policies are not without side effects. After deep concern in the years following the global financial crisis, public debt is again shooting up most everywhere. At some point, this will reappear in the worry spotlight. For now, with the extremely low government bond yields – long euro bonds are still in negative territory – it is not that difficult to finance.

#### **FUELLING THE STOCK MARKET**

Low interest rates also affect the structure of stock prices. In particular, so-called growth stocks – with high expected future earnings growth and similarly high pricing in the stock market – appreciate in value relative to more moderately priced value

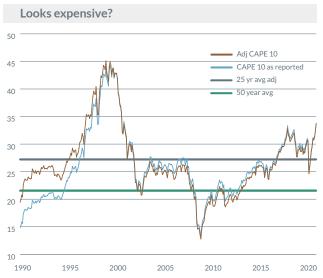


Difference in annual total return, MSCI Value less MSCI Growth, percentage points.

stocks. The low interest rates imply that future earnings have a higher present value.

If you ever wondered whether this was merely a theoretical construct, 2020 delivered an unmistakably clear useful lesson. The MSCI World Growth Index rose an impressive 34.2 per cent in dollar terms. The MSCI World Value index, on the other hand, actually fell by 0.4 per cent. Put differently, relative to growth stocks, 2020 was the worst value year ever since the inception of these indices in 1975.

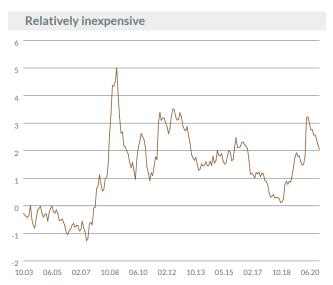
Of course, there may be other possible explanations. With a limited number of large-cap stocks looming large in the return calculations of even the world index, company-specific factors cannot be discounted. Still ... a difference of this magnitude? One would be hard-pressed to state that interest rates don't enter into the equation.



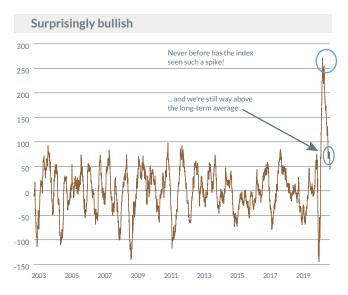
CAPE adjusted for changing dividend payout ratios.
Source: Robert Shiller / S&P Dow Jones Indices / Pareto Asset Management

Mega-cap stocks getting more expensive is also part of the explanation for the apparently higher pricing of the wider stock market. In December 2020, the cyclically adjusted P/E ratio (CAPE) in the US stock market almost reached 34, only surpassed by the years leading up to the dot-com bubble bursting.

This, too, can be easily explained by the behaviour of interest rates – or at least be made to look more sensible. During 2020, the yield spread on US equities (the CAPE earnings yield relative to the yield on 10-year government bonds) increased, which many would take to represent an increased margin of safety. The same holds for other stock markets, although long-term interest rates have climbed a bit after the end of 2020.



Yield spread: Earnings yield as defined by the adjusted CAPE 10 less the current yield on 10 yr Treasuries. Source: Robert Shiller, Pareto Asset Management



The Citi Economic Surprise Index. Source: FactSet

#### **FUNDAMENTAL FUEL**

As the year progressed, positive news on vaccines bolstered optimism, while a seemingly calm US presidential election calmed nerves. Markets had been expecting the worst and kept getting good news, as evidenced by the surprisingly bullish Citi Economic Surprise Index.

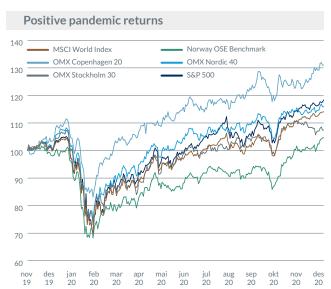
Whereas monetary stimuli may produce immediate results, fiscal stimuli take a bit more time to work their way through the economy. Hence, despite the disastrous GDP estimates for 2020, it seemed obvious that 2021 would be far better.

A similar argument can be made for private consumption; there is more to come. With a lot of goods and services suspended or practically unavailable, the savings rate increased substantially in economies under some degree of lockdown. In Norway, the savings rate has tended to oscillate between 6 and 8 per cent. Now, Statistics Norway estimates last year's savings rate at almost 15 per cent. That's a lot of consumption waiting to happen.

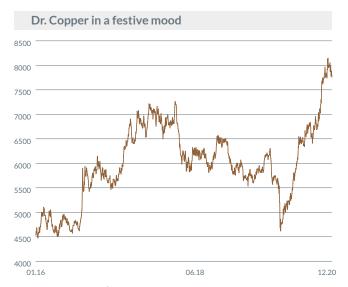
Good news in the pipeline is generally appreciated right away by financial markets. So too in 2020. Towards the end of the year, we had a string of all-time highs in a number of stock markets around the world. With the possible exception of typical value stocks, and disregarding the extreme turbulence en route, 2020 can be summarised as a good year for stocks.

#### **FOOLED BY THE GDP GROWTH?**

Upon entering 2021, the outlook is decidedly upbeat. The copper price, a traditional business cycle indicator, has reached levels not seen for eight years. The oil price has risen further. The IMF has raised its 2021 global GDP growth forecast.



Total return indices, rebased 31 December 2019 = 100. Source: FactSet



Copper cash official LME, \$/t. Source: FactSet

Risk assets, from stocks to corporate bonds, have appreciated further. The pandemic is far from over, but there seems to be a more credible timeline for vaccines in most countries.

A caveat is in place, though. Among the lessons learnt in 2020, this one seems indisputable: There is no clear contemporaneous relationship between economic growth and the stock market. After all, the market ended up doing pretty well in a year that was disastrous to the real economy. And, in case you have forgotten, the very same development took place in 2009.

That being said, we are still in a phase with steadily improving fundamentals and more to come from further stimuli and suspended consumption, while key interest rates are expected to remain low for some time to come. That's usually a good environment for risk assets.

And remember: Risk is all about your time perspective. If you have the solvency and the patience to hold on, well diversified investments in risk assets pay off. Sometimes, as in the months following the 2020 March plunge, you don't even have to wait for long. You just need to have the confidence that comes from understanding financial markets.

2020 in a nutshell	
OSEBX	4.6%
S&P 500 return	18.4%
MSCI World net (USD)	15.9%
3-month NIBOR	from 1.84 to 0.49%
3-month STIBOR	from 0.149 to -0.046%
10-year Norwegian Treasury	from 1.55 to 0.96%
10-year Swedish Treasury	from 0.15 to 0.03%
10-year US Treasury	from 1.92 to 0.92%
Brent Blend	from USD 66.00 to USD 51.80
USD/NOK	from 8.78 to 8.53
EUR/NOK	from 9.86 to 10.47
GDP growth, global	-3.5%
GDP growth, Norway	-0.8%
GDP growth, Sweden	-2.8%
GDP growth, Mainland Norway	-2.5%

 $Sources: Oslo\ B \"{o}rs, S\&P\ Dow\ Jones\ Indices,\ MSCI,\ Norges\ Bank,\ FactSet,\ IMF,\ SSB,\ SCB,\ Riksbanken,\ Pareto.$