Q1 2023

Active Insights: Interesting times?

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Are interesting times so bad?

Colin Reedie
Head of Active Strategies

Apocalyptic forecasts seem to have abated and fixed income has had a positive first quarter. What are the variables that could determine returns for the rest of the year?

It's apocryphal that the old curse 'May you live in interesting times,' emerged from China. From an investment perspective, in early 2023, we think it may not even be a curse.

As we look toward the next few quarters, there are several market-moving questions that won't remain questions for long. In short, we remain confident there will be lots for active managers to potentially take advantage of.

What questions do we see getting answered in the next few quarters?

1. Will the labour market crack?

2. Can any downturn be shallow?

3. Will central banks ease as quickly as markets want them to?

4. How much will inflation fall when unemployment rises?

1. US Bureau of Labor Statistics, 3 February 2023

... in spite of universally gloomy economic forecasts, employers have continued to hire and hand out pay rises

We noted in a recent blog that we thought markets had at one point been too inclined toward doom. With labour market data stubbornly remaining robust and refusing to play along with the prevailing narrative, it has been difficult to become conclusively negative on growth. This difficulty was underlined by the US payrolls data for January, when the American economy unexpectedly created 517,000 jobs[1].

We've seen similar resilience in labour markets all around the developed world – including here in the UK, where in spite of universally gloomy economic forecasts, employers have continued to hire and hand out pay rises.

Goldilocks in a submarine

How central banks respond is key here.

We think it is more than possible for interest rates to go higher, but in our view any future hikes are unlikely to come fast enough to creative the negative returns in fixed income that bedevilled investors last year.

We can think of the search for the 'right' interest rate (to create the fabled soft landing) as analogous to searching for the crushing depth in a submarine. We all know from submarine movies that once you cross the sub's depth rating it's wise to slow your descent.

Global policymakers appear to have concluded they have raised rates to the point where monetary policy is 'tight'. We think policymakers do not wish to send the American economy to a watery grave, so we don't think likely a sudden reacceleration from 25 bps (basis points) to 50 bps or higher.

So, if there is a ceiling on the pace of rate hikes, this makes rates' actual levels the key variable – in particular if we can identify one that they will struggle to break through.

Unfortunately, this is as difficult a question to answer as it gets, primarily because of the huge challenge in forming any substantive view around the distribution of inflation risks. This means in turn it is difficult to say at what level rates become 'restrictive'.

Let's illustrate this with an example: if we start with an interest rate of 5% and expectations for inflation move from 2% to 4%, then interest rates need to move to 7% to achieve the same level of real 'tightness'.

However, when we look at real interest rates, a lot of the uncertainty around the distribution of inflation risks disappears, so we can – in theory – say something meaningful about what a 'restrictive' level is.

Why we are optimistic around fixed income

We are comfortable saying that in a modern, developed capitalist economy, it is hard for real rates to remain above real trend growth for an extended period. Real yields on 10-year US Treasuries are (at the time of writing) 1.5% – that's within what we'd consider a plausible range of trend growth, and in response we've started adding duration with a longer-term view.

As said above, changing circumstances mean the challenging interest rate environment of 2022 is unlikely to recur. In fact, in our view there are multiple angles of opportunity for fixed income this year, and we believe all-in yields are offering attractive running returns. Our analysis suggests interest rates are now high enough that bonds could provide insurance value should a recession materialise.

...there are multiple angles of opportunity for fixed income this year, and we believe all-in yields are offering attractive running returns

Elsewhere in this outlook, you'll find our Head of European Credit Marc Rovers offering a complementary outlook for how the same conditions could dictate the year ahead for European fixed income.

Also, one year on from Russia's invasion of Ukraine, there is no end to the conflict in sight. Global Economist James Carrick marks this grim milestone by unpacking the war's impact on European energy markets and how policymakers have responded.

Finally, few of us can have let ChatGPT escape our notice in recent months. This platform appears to mark a significant milestone in both the capability and adoption of generative AI. Fund Manager Robert White and Equity Analyst Ewan Bowerbank break down the investment implications of this potentially transformative technology.

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Signed, yield, delivered?

Marc Rovers
Head of Euro Credit

How long can the good times last for yields on euro credit?

It's no secret that 2022 was tough for markets. Alongside a general rout in equities, the S&P Eurozone Investment Grade Corporate Bond Index lost -12.83%[2]; it was even worse for riskier high yield assets.

However, this brutal punishment has resulted in the highest yields for two decades.

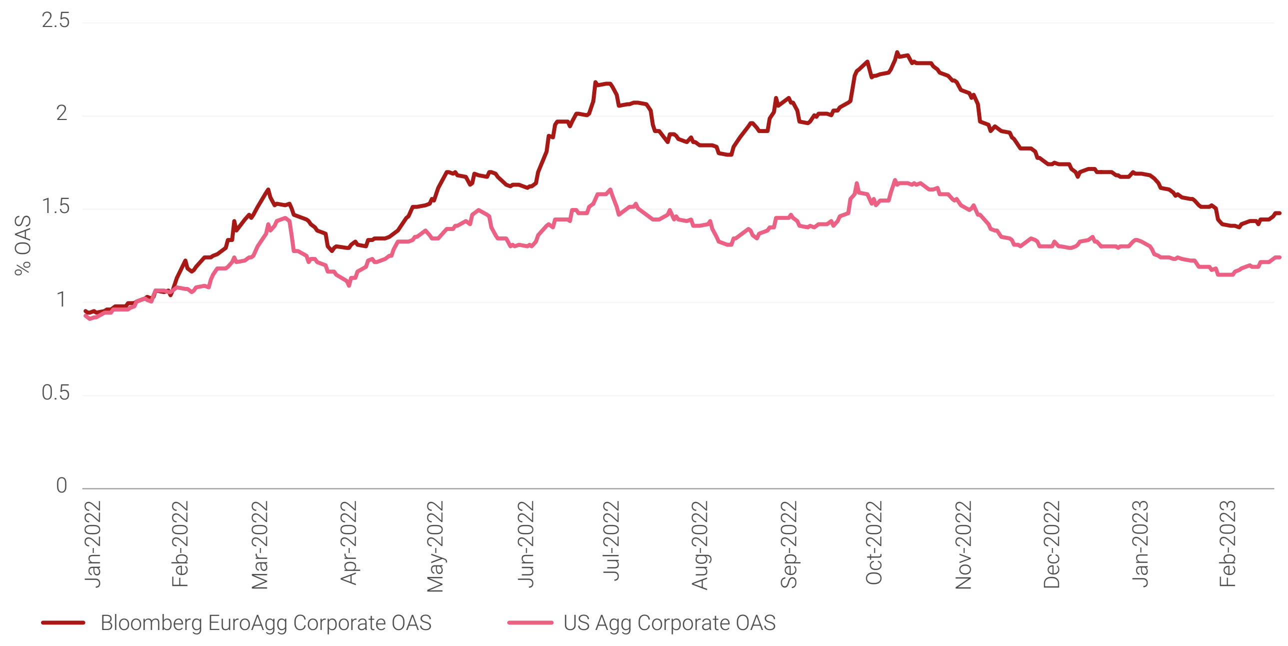
At the beginning of 2022, euro area corporate bonds yielded about 0.5%; by[3] October we were blogging about yields as high as 4.25% and arguing there was a compelling longer-term valuation argument for euro investment grade credit.

At the same time, we pointed to wider economic uncertainties in Europe created by the energy crisis, and unprecedented volatility in fixed income assets as inflation reached levels not seen for decades.

With the passing of winter without any blackouts and the significant drop in gas prices, the spread differentials of euro and USD credit indices versus government bonds have converged back to around 30 basis points (bps), having been as wide as 80bps at the end of October last year[4].

2. Source: Bloomberg as at 22 February 2023
3. Source: Bloomberg as at 22 February 2023
4. Source: Bloomberg as at 22 February 2023

Bloomberg Euro Agg Corporate OAS versus US Agg Corporate OAS



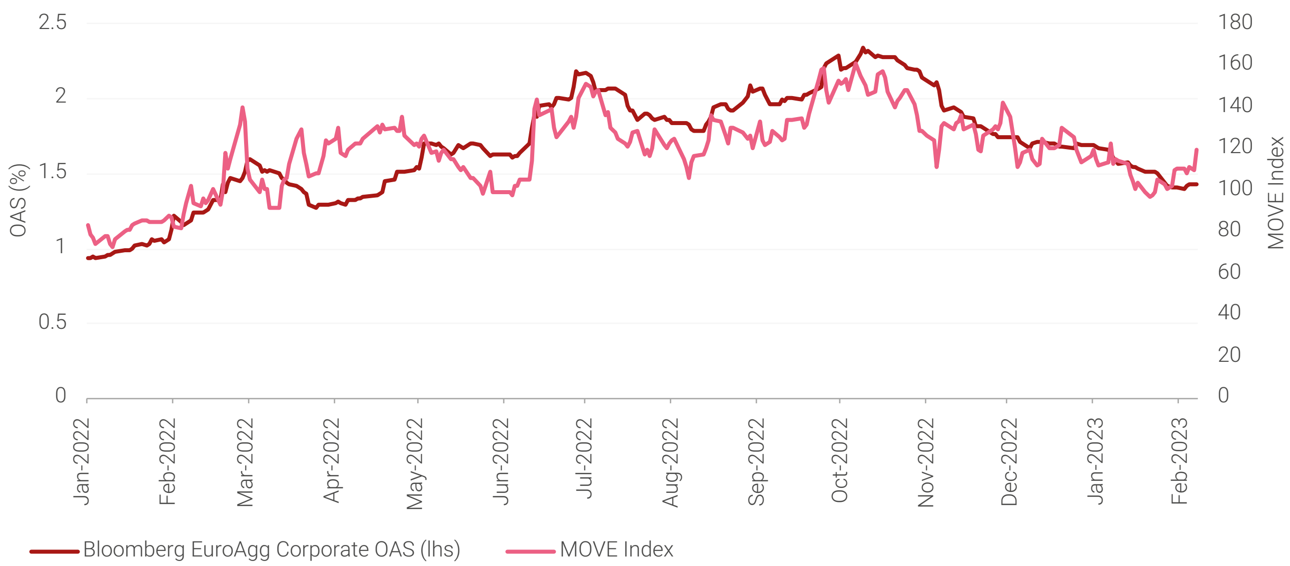
Source: Bloomberg as at 22 February 2023. **Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.**

These yields have not kept pace with inflation across Europe, of course, but it is still remarkable that investors now receive as much for holding investment grade debt as they recently received for high yield.

We've also pointed out that the limited duration of euro credit provided some insurance against uncertainty in rates.

We used the MOVE index, which captures the option premium traders charge for hedging interest rate risk in the US Treasury market, to capture this uncertainty. It shows how this premium has come down, which also fed into lower credit spreads, while at the same time government bond yields have hardly come down since inflation proved very persistent.

Option Adjusted Spread vs US Treasury Rate Volatility



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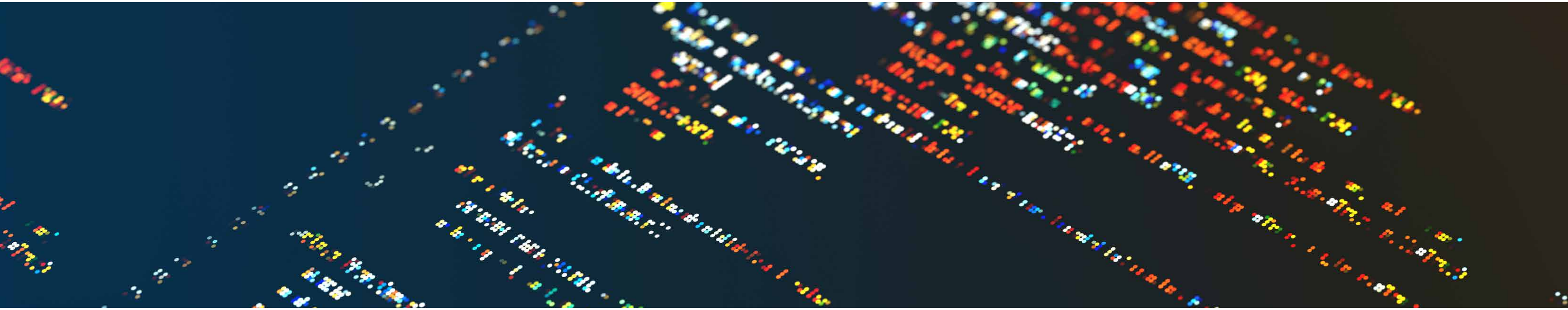


At around 145bps, investment grade euro credit spreads are close to their longer-term historical average going back to December 2006. If we look at the historical ranking of spread valuations since 2006, a period covering many crises, they are now in the 60th percentile. This means that over the past 16 years, spreads have been at this or wider levels for only 40% of the time.

Will Goldilocks stick around?

Whereas government bond yields are persistently high and, after a short-lived rally at the start of the year, back above their levels at the end of last year, credit spreads have rallied strongly.

While much of last year was dominated by gloomy outlooks, it now appears that the conditions at the end of October last year were just right to deliver a large rally in European credit. In the three months to February 14, the ICE BofA Euro Corporate Index returned a solid 3% versus a negative return on German government bonds of a similar duration[5]. In combination with the relatively high credit quality of the asset class, the comparatively attractive spread and total yield attracted strong inflows, supporting prices and pushing down credit spreads.

At the same time, the substantially reduced probability of recession has supported risk assets in Europe in both fixed income and equity. The European Commission now forecasts the euro area to grow 0.9% this year, a substantial revision upward of the 0.3% of growth it previously anticipated[6].

Can these 'just right' conditions persist?

Charting the year ahead for European fixed income

At the time of writing, spreads still compare favourably with their longer-term averages, but the rally has made us more cautious on current valuations. We need to put them in the context of tightening monetary conditions, still elevated energy prices and geopolitical uncertainty.

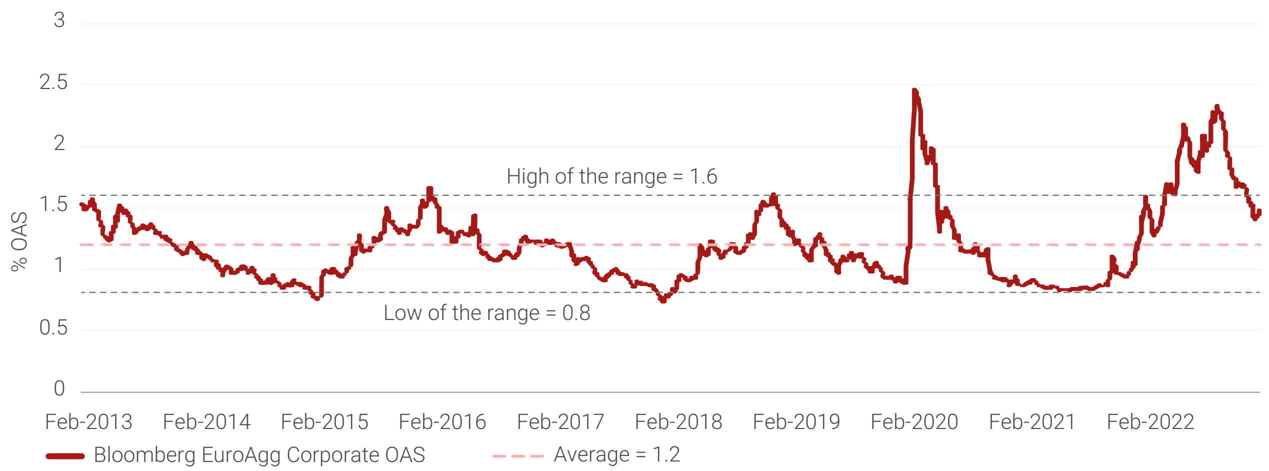
The key variable going forward is the timing and scale of further rate hikes, which in turn will be determined by the changing prognosis for a potential European recession. We believe current yields of over 4.2%[7] will provide something of a buffer against further rate rises, since due to positive carry this yield would need to go up by more than 1.25% over a 12-month period before total returns turn negative.

In any case, rate risk is relatively manageable thanks to the duration of investment grade European credit – around 4.5, compared with durations of around two years longer for the USD and GBP markets.

Quantitative tightening represents another variable. The European Central Bank (ECB) is set to reduce its asset purchases, and from next March plans to only reinvest half of the amount that comes due from maturing bonds. ECB bond purchases have been a substantial support for the market. As inflation continues to be well above target these are expected to fall from a peak of over €6bn at the peak in 2021 to €1-2bn, and may be abolished completely by the end of June[8].

5. Bloomberg as at 22 February 2023
6. Bloomberg as at 22 February 2023
7. Paolo Gentiloni speech, 13 February 2023
8. As per latest ECB press conference

Bloomberg Euro Agg Corporate OAS



Source: Bloomberg as at 22 February 2023. **Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.**

When put in this context, current Euro credit spreads are well below the levels we witnessed in earlier periods of monetary tightening, like the second half of 2018.

In conclusion, we continue to be constructive on European investment grade credit from the perspective of longer-term valuations and yields. At the same time, we believe there are multiple challenges ahead, which make us more cautious in the short term as, following the recent rally, there is less of a buffer in valuations.

From a portfolio management perspective, we express this by adopting a more conservative positioning that focuses on issuers where our credit analysts believe they can withstand a recession without facing multiple downgrades.

We continue to underweight cyclicals and bonds that are impacted by the reduction in the ECB's corporate bond buying.

We prefer lower-cash-price bonds for lower-quality bonds, as this can typically provide some downward insurance, and continue to manage for liquidity. We do this by limiting holdings in issues that are more difficult to trade as this enables us to adjust our portfolios while aiming to keep transaction costs down.

The value of any investment and any income taken from it is not guaranteed and can go down as well as up, and investors may get back less than the amount originally invested.

One year post-Ukraine, where next for European energy markets?

James Carrick
Global Economist

Last year, Europe's energy market faced almost unprecedented disruption. What did we learn, and what do these radical shifts mean for the European economy?

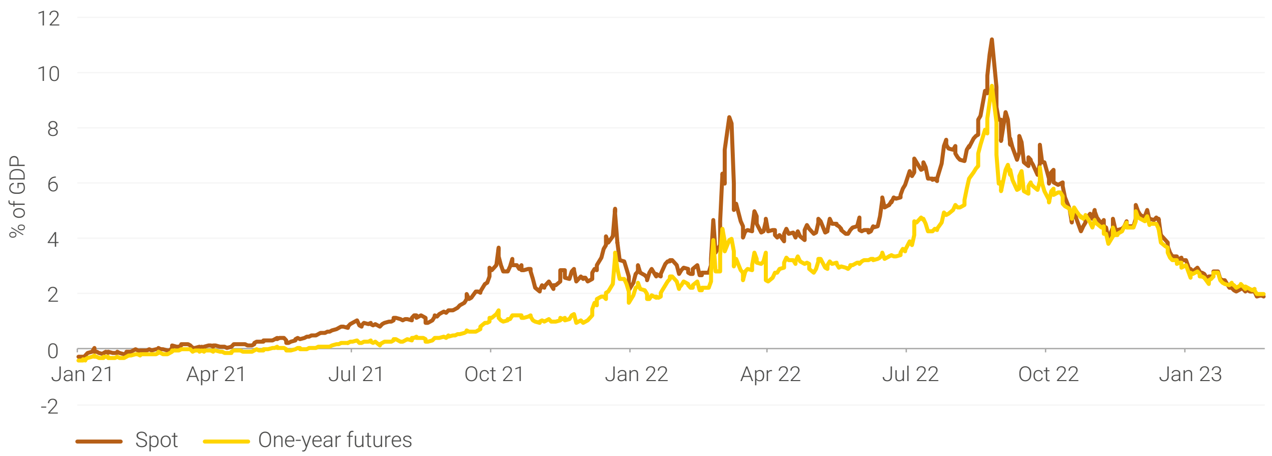
It's now more than a year since Russia's invasion of Ukraine, and the world is still wrestling with its macroeconomic consequences. Given the reliance of several key markets on imported Russian fossil fuels (gas, oil and coal), Europe's energy market was among the sectors most exposed; concerns around the impact of a potential war on energy prices had already been mounting for months before the invasion.

Now, after a year of uncertainty and the gradual turning off of the Russian taps, the European economy is still facing side-effects from the tighter monetary policy the ECB was forced into to manage the crisis.

Concurrently, Europe's energy crisis has abated thanks to efficiency savings, a mild winter and increased imports of LNG (liquid natural gas) from sources other than Russia.

At the time of writing, European gas futures have fallen to 'only' three times their pre-crisis average – compared to a peak of 15x in the summer of 2022. As a share of GDP, the cost of fossil fuels has now gone up by 'only' 2% of GDP compared to before the invasion – a fall from last summer's peak of almost double digits. To put this into perspective, the 1970s energy shocks in the US also drove energy costs up 2% of GDP on a prolonged basis[9].

Euro area fossil fuel shock. Change in cost of oil, gas & coal as % of GDP



Source: Macrobond as at 21 February 2023

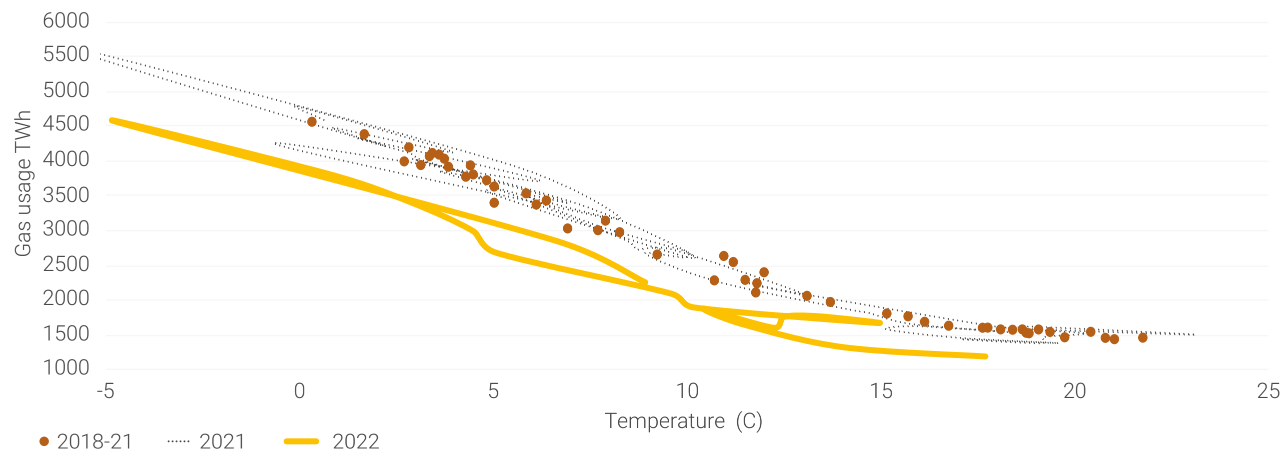
9. Macrobond as at 21 February 2023

Despite the cooling of concerns, from this angle the shock still seems recessionary. However, its blow to households and businesses has been softened by government support. A combination of subsidised prices and targeted handouts to low-income households have supported private sector cash flows and kept the economy broadly afloat so far. Higher government and external trade deficits risked 'crowding out' private sector borrowing (i.e. when corporate and mortgage bond issuers must compete with more government bond issuance), but the latest fall in prices has improved the outlook.

Why have prices been on such a rollercoaster ride? The best theory is that last summer's price frenzy was caused by governments panic-buying LNG supplies to stock up for winter. There were concerns that price subsidies would discourage efficiency savings by masking price signals, as represented by concerns that French households wouldn't cut back on consumption if the government kept prices low.

Going into winter, we were warned of potential blackouts which could in turn cause another round of supply shortages for key industries. However, these blackouts never materialised. This primarily reflects energy efficiency savings. We find German households and businesses cut gas consumption by 15-20% for a given temperature. Also, we shouldn't dismiss the good fortune of Europe facing another mild winter.

German total gas usage vs. temperature



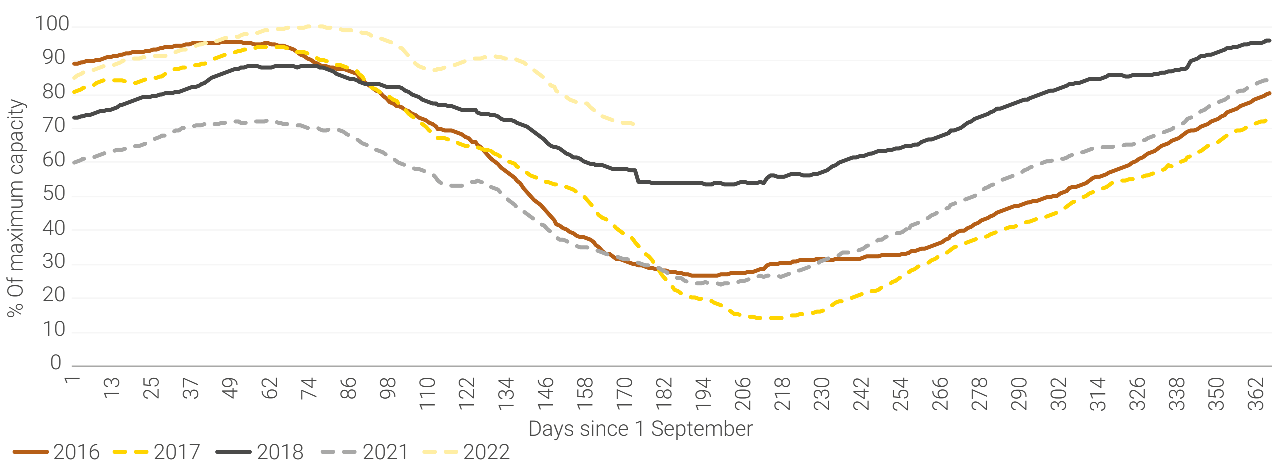
Source: Macrobond as at 21 February 2023

Today, we are approaching spring with an unprecedented amount of gas still in storage, which in turn should make it easier to re-stock supplies ahead of winter 2023. Previously, there were concerns about whether this could be accomplished with zero supply from Russia supply, compared to last year when Russian supplies were still in the mix. These concerns have been replaced by worries that China's reopening post-zero-COVID will boost global LNG demand and place supplies in question, but we also see the US economy going into recession this year, which would be likely to drag down demand.

How do we anticipate the broader European economy faring?

The good news is that after considering the expiration times of fixed-term contracts and the timing of government support schemes, we believe consumer energy bills are close to peaking. The Italian private sector will likely be one of the biggest beneficiaries, given it is most sensitive to market pricing after one of the less generous government support packages.

Gas storage in winters



Source: Macrobond as at 21 February 2023

The wild card is the time lag between inflation shocks and real household consumption. Retail sales have fallen since the summer, though this also reflects the switch from goods to services spending as economies reopened after Covid. Will retail sales volumes stabilise in tandem with energy prices or have households yet to fully react to the hit to their real incomes?

Business investment is also likely to be depressed by the twin hit to profits of rising costs and weaker volumes. We could, however, see a near-term recovery in output in some of the most energy-intensive industries, whose issues we estimate have, for example, directly reduced German GDP by just under 0.5%. This has been offset by a recovery in car production as semiconductor backlogs have improved.

These are, of course, the direct effects of the energy crisis. The elephants in the room are the indirect effects – most importantly, the aggressive policy tightening from the ECB as it has struggled to contain second-round inflation pressures.

We highlighted above how the energy shock has been similar or even greater in magnitude to those experienced in the 1970s. Central bankers seem determined not to repeat the mistakes of this period; policymakers then thought weaker growth and rising unemployment would cool inflation and monetary policy was too loose. The consequence was a de-anchoring of inflation expectations and a wage-price spiral as workers and businesses tried to maintain their living standards in the face of an external shock.

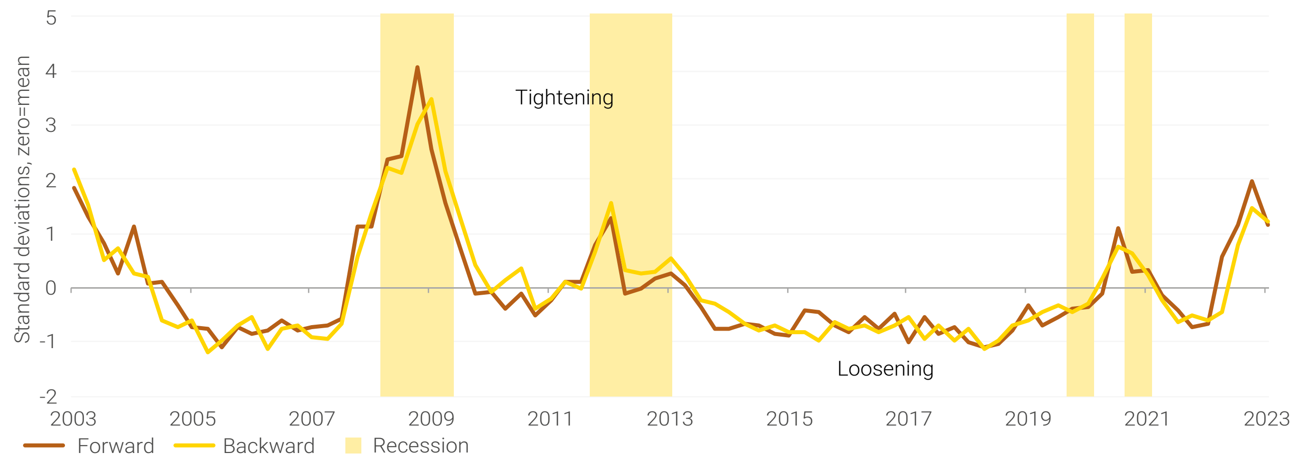
Turning to today, over the past year firms have passed on higher energy costs, pay has accelerated and households' medium-term inflation expectations have risen. This has driven the ECB to hike interest rates aggressively, with more increases still to come.

In response to this and the negative direct growth effect described above, banks have started to tighten their credit conditions – a typical forerunner of recessions. While consensus expects the European economy to recover as we head into 2024, we worry the economy will remain stagnant as the monetary shock augments its energy counterpart.

We note in particular that the euro area labour market remains extremely tight. Recruitment difficulties remain high and households remain optimistic about their job prospects. Survey data suggests that while energy costs are fading, firms are boosting their prices in response to high wages. The ECB has more to do to cool inflation pressures. This will be painful – but less so than if inflation got out of control.

To finish, Europe's energy emergency has eased compared to the most pessimistic fears of last autumn, helped by efficiency savings, government support and a mild winter. Aware of the mistakes of the 1970s, the ECB is raising interest rates aggressively to contain second-round effects. This should depress investment and consumption, keeping the economy depressed throughout the year.

ECB bank lending survey. Average of three sectors; bars = recession



Source: Macrobond as at 21 February 2023

What do investors need to know about Chat GPT?

Ewan Bowerbank
Equity Analyst

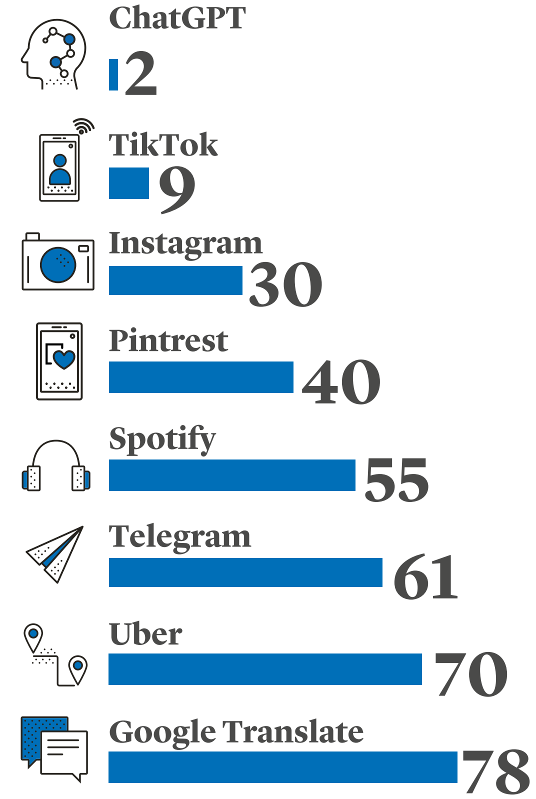
Robert White
Fund Manager

In recent months, ChatGPT and generative AI have provoked a frenzy of investor interest. Here's everything you need to know.

The release of OpenAI's Artificial Intelligence (AI) chatbot ChatGPT in late 2022 has caused a scramble among investors to understand the technology and its potential spill-over effects.

The chatbot uses a Large Language Model (LLM) called GPT-3, which deploys 'deep learning' to produce text in response to user prompts. Its public release has left users marvelling at its capabilities to write poetry, computer code, fictional stories and university coursework. Its impact has already been huge, reaching 100 million active users within two months. To put this into context, it took Instagram 30 months and Uber 70 months to achieve this.

ChatGPT is estimated to have hit 100 million users in January, two months after its launch. Here is how long it took other apps to reach that:



Source: UBS

Given these models can be used to generate articles, blog posts, and even whole books it seems apparent that many forms of content creation look vulnerable to disruption

Unbottling the genie

Ultimately, these AI models aggregate large amounts of existing information into intelligible and coherent summaries. Given these models can be used to generate articles, blog posts, and even whole books it seems apparent that many forms of content creation look vulnerable to disruption.

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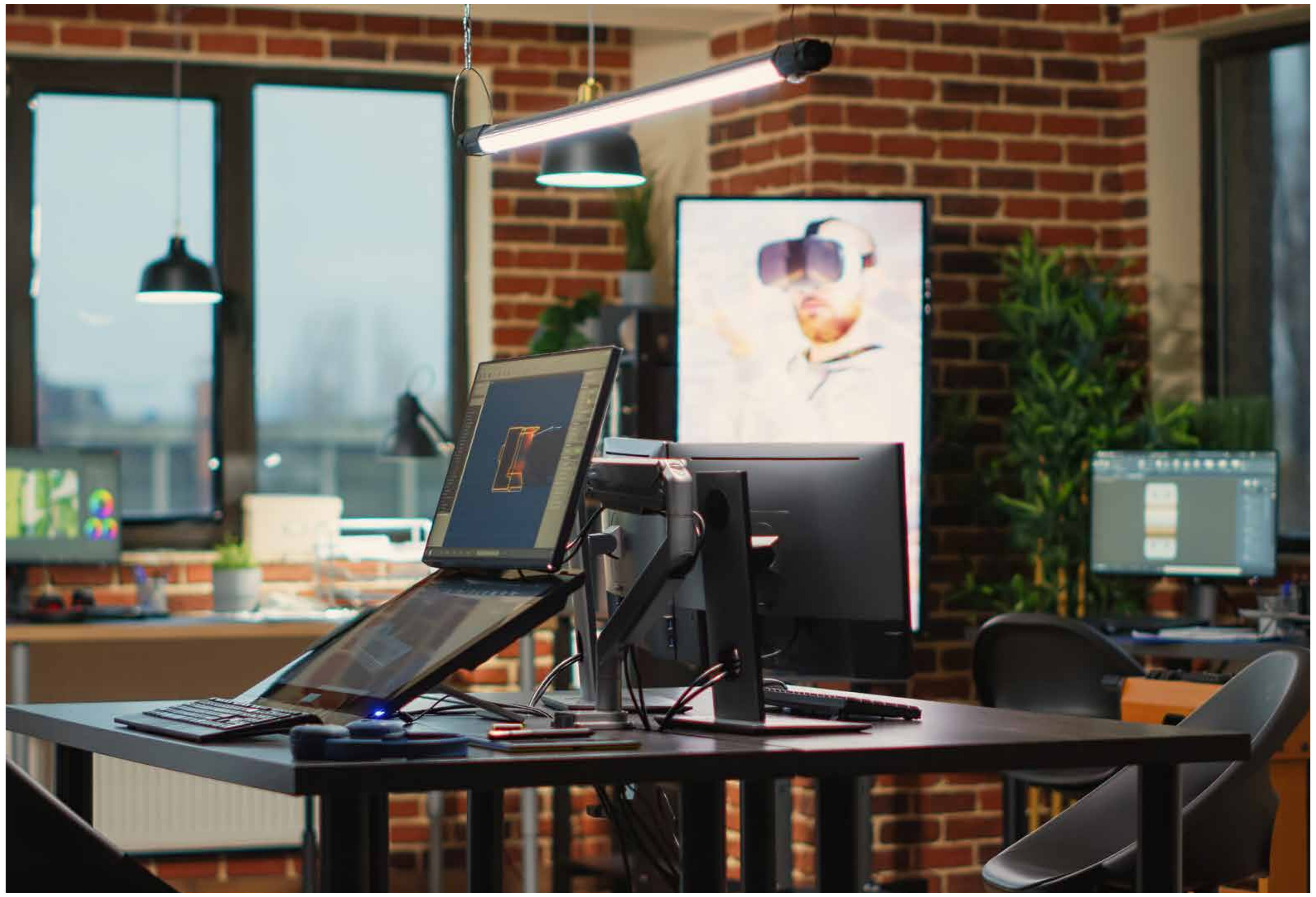

Practical applications exist beyond simple content creation. In healthcare AI models could be used to analyse large amounts of unstructured data like medical records and research papers to improve patient outcomes. Whilst applications in the legal industry could include analysing legal documents and identifying relevant information, helping lawyers and judges make more informed decisions. This list goes on.

OpenAI's image generation platform DALL-E 2 demonstrates the extent to which AI has transitioned from a purely analytical framework to exhibiting something resembling creativity. Launched in 2022, DALL-E 2 can create realistic images and 'art' from a description in natural language. (For example, on the left you'll see an image we generated with the prompt 'a robot creating art'.)

Until very recently, few people thought artists and illustrators were vulnerable to AI disruption.

History provides a useful precedent. The Industrial Revolution made many professions obsolete, but it also greatly enhanced worker productivity, created demand for new skills and roles and opened new markets, ultimately stimulating economic growth.

It's plausible that professionals will work in collaboration with generative AI, rather than be replaced by it. Lawyers, for example, will have greater capacity thanks to the efficiency savings achieved by automating routine elements of their work.

It's clear the technology has crossed the Rubicon in terms of capability; creativity and innovation in how it is integrated into existing working practices will now be key to determining its success.

What about investors?

A material part of an investor's job is the aggregation of all available information, and then extracting the most relevant points to build their investment thesis. As previously mentioned, these AI models do just this – information aggregation.

However, this creates a possible scenario where investors all using the same AI tools (and therefore predictive summaries) will accelerate a trend towards more linear and orderly thinking at the expense of intellectual curiosity. Put differently, it could reinforce mainstream opinion, with decision-making increasingly falling into the belly of a distribution curve.

To generate alpha, even greater emphasis will therefore fall on an investor's ability to interrogate and analyse the aggregated information and data, and to challenge its ability to yield non-consensus insights. Failure to do so at a market level could also mean that black swan events will have more significant impacts on price volatility than is currently the case. We believe the role of fundamental research is therefore likely to become more important than ever.

Don't believe the hype?

Before we get too excited, we should bear in mind AI has experienced hype cycles in the past, and it's valid to question whether this is another peak in interest that will ultimately fall short of expectations.

Some perspective on the underlying technology is useful here.

ChatGPT is based on transformer architecture that was developed by Google researchers in 2017; from a technical perspective, there is nothing particularly new here. The significance of ChatGPT is the user interface – the easy-to-use layout of the chatbot which has made it far more accessible for the average person to engage with AI than has previously been the case. Just like MP3 players existed before iPods and electric vehicles before Tesla, making an interface that appeals to a consumer is often as significant a gateway as the underlying technology.

Indeed, many of us are already using AI in our daily lives. Google has started to move traditional search beyond simply identifying the most relevant webpage. Search results often come with an attempt to answer the question posed while a section just below this includes answers to related queries.

There are of course some hurdles still to overcome. Cost is a primary limitation: according to Barclays, just the infrastructure (GPUs, networking equipment etc) required to train the latest LLMs costs around $100m upfront.

10. Source: Bernstein Research

Once the model is running, day-to-day hosting costs are huge: given its high computational requirements, it's been reported that ChatGPT costs $3m per month to operate. A query using ChatGPT costs 100-300x more than a query using Google search[10]. Scale efficiencies and further technological advances will very likely bring down costs, but there will undoubtedly be a focus going forward on how these models can be monetised and what the best use cases are given resource limitations.

Ethical concerns, meanwhile, focus on models producing output that is factually incorrect and/or biased. These problems stem from how the AI model generates answers: it constructs a sentence word by word, selecting the most likely 'token' that should come next based on its training on vast quantities of pre-existing online material.

While the accuracy of the output should improve through continued user feedback, if the dataset the model has been trained on includes biases the resultant output will likely reflect this, at least temporarily.

Overall, despite these caveats, wider AI adoption is very likely to cause disruption across almost all industries. In bringing AI to the forefront of public awareness, ChatGPT is in the vanguard. Whether significant change comes abruptly or more incrementally, we believe it is crucial for investors to continually assess the widespread implications, as both risks and potential opportunities will arise.

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Key risks

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