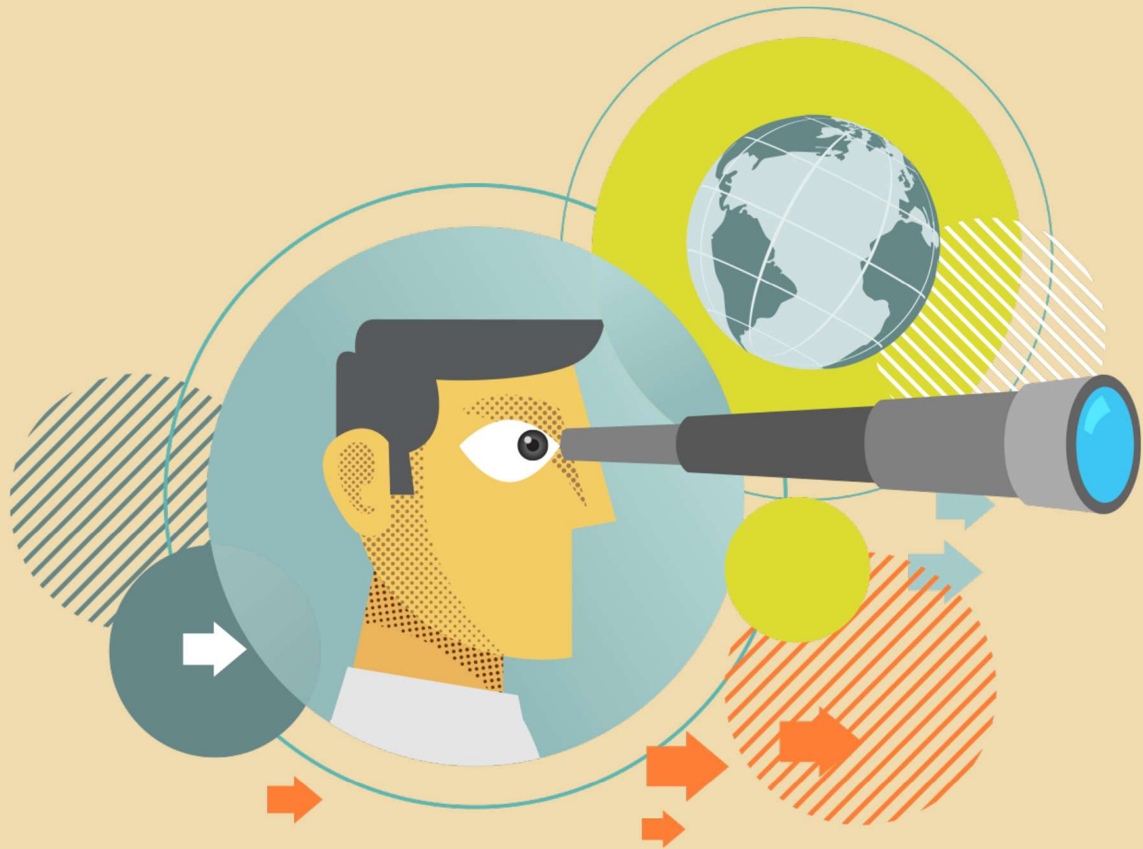
NORD/LB

Zum wahren Nutzen.



Economic Adviser

Macro Research

April 2024 ♦ Date of issue: 25 March 2024

Finanzgruppe

Contents

Special: Long-term impacts of climate change on economic growth and inflation ... 3
Sobering COP28 stocktake: same goal, less time! ... 3
NGFS scenario landscape: from net zero to status quo ... 3
Impacts of climate change on economic growth and inflation ... 4

USA: Labour market data remain a grab bag of surprises ... 5
Labour market data from the USA continue to surprise ... 5
The economic environment remains difficult for the FOMC to interpret ... 5
The Fed pauses – but the decision has positive side effects ... 6

Euroland: ECB heading towards a first rate cut in June ... 7
Disinflation trend continues – distortions in March and April will complicate interpretation ... 7
ECB prepares for an initial rate cut in June – renewed “dovish” adjustment of projections ... 7
New monetary policy framework changes little for the time being ... 8

Germany: Economy to remain weak for now ... 9
Economic indicators paint a mixed picture – slight GDP decline expected for Q1 as well ... 9
Downward inflation trend continues – Easter-related distortion of March and April data ... 9
Marked improvement in the ifo Business Climate Index fuels hopes of recovery ... 10

Switzerland: Bold move – SNB lowers key interest rate ... 11
Economy with trend towards stability – growth remains moderate ... 11
Rate hike not completely unexpected – inflation below the 2.0-percent target mark since May 2023 ... 11

Japan: Wage demands prompt central bank reaction ... 12
End of an era ... 12
High wage demands prompt central bank reaction ... 12
Yen not yet able to benefit from the new monetary policy orientation ... 12

China: Ambitious growth target and the role played by Beijing ... 13
Ambitious 5-percent growth target likely only feasible with Beijing's support ... 13
China's stock markets reacted with volatility ... 13
Renminbi’s stability a priority; PBOC's leeway currently (still) limited, however ... 13

Britain: BoE irresolute – despite recession ... 14
Central bank remains in wait-and-see mode ... 14
The inflation trend creates a bit of leeway for the central bank ... 14
UK Manufacturing PMI surprises on the upside ... 14

Portfolio strategies 15
Yield curve, Euroland 15
Portfolio strategies 16
International yield curve: 3-month & 12-month horizons 16
Portfolio strategies 17
Stock market strategy; 3-month, 6-month & 12-month horizons 17
Overview of forecasts 18

Special: Long-term impacts of climate change on economic growth and inflation

Analysts: Valentin Jansen // Constantin Lüer

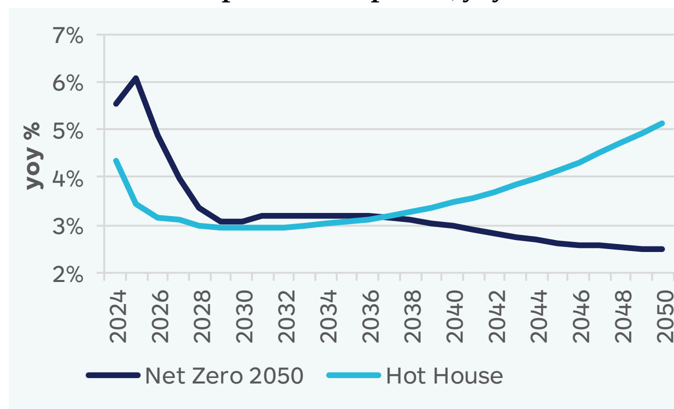
Sobering COP28 stocktake: same goal, less time!

The discussion on how to deal with the global consequences of climate change is becoming increasingly prevalent, not only in private but also and above all in state forums. One of the most important of these is undoubtedly the annual UN climate conference entitled "Conference of Parties" (COP), the 28th edition of which took place last December. In preparation for the conference, a "global stocktake" was conducted for the first time, within the framework of which the progress in the implementation of the Paris climate goals was the focus of critical evaluation. The result is not exactly a surprise on the upside. Too little has happened across all areas of activity, from the reduction of CO_2 emissions to the strengthening of resilience to climate change, right through to the provision of financial and technological support to countries that are particularly vulnerable to the impacts of climate change. The résumé of COP28 therefore focuses primarily on progress-accelerating measures for implementation by 2030, for example in the key area of transition. Specifically, a tripling of capacities in the area of renewable energies by 2030 is intended to make for a certain degree of compensation of the identified shortcomings. The global stocktaking is based on the work of the "Network of Central Banks and Supervisors for Greening the Financial System" (NGFS), which is regarded as fundamentally consensual in the ESG context. The NGFS constantly develops scenarios that, from the current starting point, sketch out possible development paths depending on the current or rather future success in climate change mitigation.

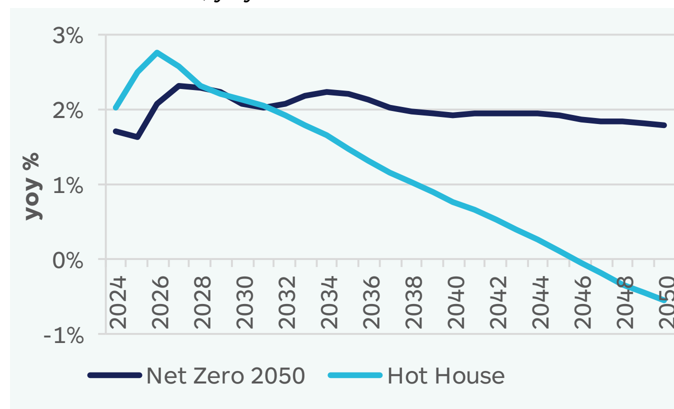
NGFS scenario landscape: from net zero to status quo

Starting out from the current baseline situation, the NGFS is currently mapping out seven scenarios. These differ in varying degrees of transition risks (negative effects due to the transition to a low-carbon economy) and the physical effects of rising average temperatures, for example extreme weather events or rising sea levels. They are based on socio-economic assumptions and trends, climate system development paths, technological developments and political measures. Owing to their diametrical development paths, the two scenarios "Net Zero 2050" and "Current Policies" are particularly relevant. The former assumes net zero CO_2 emissions by 2050 (limitation of average global warming to 1.4°C). To this end, adequate climate policy measures must be implemented without delay and decarbonization also needs to be accelerated. The physical risks, which show clear effects in the course of the 2030s, are the lowest in this case, while transition risks have the strongest impact on the economy in the short term. The contrasting Current Policies scenario assumes that the status quo of current global climate policy will be maintained until 2060. Following this path, the CO_2 emissions peak would not be reached until 2080 and an average global warming level of about 3°C would be in place as early as mid-century. These climate changes are irreversible, with effects such as sharply rising sea levels. This is where the physical risks are highest in the NGFS scenario landscape, while the transition risk is the lowest (no low-carbon realignment of the global economy). While the "Net Zero 2050"scenario is assigned to the superordinate category "Orderly", the 3°C scenario falls under the "Hot house world" category. The other five scenarios basically differ in terms of the effectiveness and speed of economic transformation, alongside political effectiveness.

Global consumer price development, yoy



Global real GDP, yoy



Sources: Oxford Economics, NORD/LB Research

Impacts of climate change on economic growth and inflation

The NGFS scenarios are generally regarded as a consensual working basis, and are used and further developed for more extensive macroeconomic analyses. CO_2 prices are a key lever in this context. In the Net Zero 2050 scenario it can, for example, be assumed that politically driven CO_2 price increases will prompt a sensitive reaction from, in particular, those inflation measurement components that are still strongly based on fossil fuels. This effect will likely diminish with the decreasing significance and use of fossil fuels. Thus, there is likely to be an increased price surge in the short and medium term, particularly in countries intensively using fossil fuels for energy, affecting them more severely than others. In the long term, however, the upward price pressures will decrease as the economy's transition progresses, and return to lowest inflation trajectory within the recognized climate scenarios. In contrast, supply shocks make for massive increases in terms of production factors and food prices if there is no reduction in CO_2 emissions whatsoever and global average temperatures rise by about 3°C. As regards GDP , the inflation upswing within the Net Zero 2050 framework reduces real economic output at the beginning of the forecast period. Towards mid-century, this effect diminishes and the productivity-related benefits of high investment activity become evident. In the Hot house scenario, the economic damage resulting from physical and chronic climate damage – such as the destruction of habitat, production areas and work productivity – becomes increasingly evident. In addition to impacts on economic growth and inflation, the scenarios also imply country-specific increases in the risk premiums of financing instruments – a development that would, in turn, bring additional actors into play within the framework of monetary policy reactions.

"Green Monetary Policy": ECB takes a pioneering role, the Fed focuses on its mandate

Central banks, too, can no longer avoid addressing the relationship between climate change and price stability within the scope of their mandate. The ECB has recognized the significance of climate change in relation to price stability, and now takes account of climate change mitigation considerations in its monetary policy framework – even if not all members of the ECB Executive Board are pulling in the same direction. The measures already implemented include the EU-wide climate stress test in risk management and the aim of aligning the Eurosystem's carbon footprint with the Paris climate protection goals. In contrast to the ECB, the US Federal Reserve is taking a more cautious stance – under the motto that the central bankers are not "climate politicians". Fed Chairman Jerome Powell sees his task primarily in fulfilling the dual mandate in terms of price stability and a healthy labour market. Nevertheless, the Fed, too, is increasingly taking climate risks into account and giving supervised financial institutions structured sets of guidelines on how potential risk exposures can be managed.

USA: Labour market data remain a grab bag of surprises

Analysts: Tobias Basse // Constantin Lüer

Labour market data from the USA continue to surprise

The recently reported US labour market data remain a veritable grab bag of surprises for market participants. This is reflected in the fact that while the preliminary data reported on non-farm payroll growth – expressed in concrete figures, 275,000 new jobs – in February as month under review were unexpectedly pleasing, there was at the same time a downward revision of the figures reported for January. The latter news ought not to have made for any great amazement, however. In addition, the official US statisticians reported an upturn in the separately calculated unemployment rate to 3.9 percent for February. The data on wage growth rather surprised on the downside, too, with an increase of just 0.1 percent mom in February. Against this background, optimists and pessimists alike thus find confirmation in the current figures to bolster their respective assessments regarding the state of the US economy. That said, it nevertheless has to be emphasized that the employment situation in the United States can still be described as rather positive. In this context, attention should also be paid to the annual rate of development in hourly wages; at 4.3 percent, this is markedly outpacing the rise in consumer prices at the present time, which should give households additional scope for more consumption, at least in the short term. The prospects are therefore not (yet?) unfriendly.

Chart: US interest rates

Sources: Macrobond, NORD/LB Macro Research

The economic environment remains difficult for the FOMC to interpret

The situation on the US labour market thus remains rather pleasing for now. Moreover, it now looks as if the mood in the US real estate industry is steadily improving. Generally a very reliable leading indicator for the development of real estate prices, the NAHB Housing Market Index rose to 51 points in March. This signals a preponderance of optimistic feedback again. Furthermore, the latest US price data have provided no indication of the easing tendencies coming to an end. Given this environment, the Fed ought not to feel any great urge to take action for the time being. Though an appreciable slowdown in economic growth in the USA is still to be reckoned with, the currently very high degree of uncertainty regarding further trends ought to nevertheless prompt the US central bankers to continue taking a cautious approach for the time being, as was the case in their last meeting in March.

The Fed pauses – but the decision has positive side effects

It could be said that the Fed is in a comfortable position. Tighter monetary policy as a result of fighting inflation typically puts pressure on the labour market; however, as already noted, the labour market is proving quite robust. The Fed can therefore afford to avoid rushing ahead too aggressively, and instead can carefully assess the situation before taking calm and appropriate action. For example, after its most recent meeting in March, the FOMC decided to hold its key rate at the 5.25 - 5.50 percent band. This had been widely expected. Of particular interest to the capital markets this time were the central bankers' individual projections – the so-called "dot plots" – which are only updated four times a year. These were given an update in the course of last week's decision announcement, and can be interpreted such that, on average, there could be three rate cuts over the course of this year. It goes without saying that this figure is not set in stone, however, and that this viewpoint is not shared by all central bankers. Indeed, two of the 19 FOMC members actually expect no rate cut this year, and another two anticipate just one downward adjustment. It is therefore essential to at all times take account of the fact that the opinions among the FOMC's members are in a state of flux and can change from time to time in line with fresh economic findings. However, it is not the case that the US economy is free of problematic issues. The commercial real estate sector is likely to be most pleased about falling interest rates.

Fundamental forecasts, USA

	2023	2024	2025
GDP	2.5	1.8	1.9
Private consumption	2.2	1.6	1.5
Govt. consumption	2.7	1.9	1.1
Fixed investment	2.0	1.8	2.6
Exports	2.7	1.6	2.6
Imports	-1.6	1.2	2.2
Inflation	4.1	2.7	2.3
Unemployment rate[1]	3.6	4.1	4.2
Budget balance[2]	-6.5	-6.0	-6.2
Current acct. balance[2]	-3.0	-3.1	-3.0

Change vs previous year as percentage; [1] as percentage of the labour force; [2] as percentage of GDP

Sources: Feri, NORD/LB Macro Research

Quarterly forecasts, USA

	II/23	III/23	IV/23	I/24	II/24
GDP qoq ann.	7.0	4.9	3.2	0.8	0.0
GDP yoy	2.4	2.9	3.1	2.2	1.0
Inflation yoy	4.0	3.5	3.2	0.0	3.0

Change as percentage

Sources: Feri, NORD/LB Macro Research

Interest and exchange rates, USA

	21.03.	3M	6M	12M
Fed funds target rate	5.50	5.50	5.25	5.00
3M rate	5.32	5.20	5.00	4.70
10Y Treasuries	4.27	3.90	3.70	3.50
Spread 10Y Bund	186	160	150	130
EUR in USD	1.09	1.06	1.07	1.08

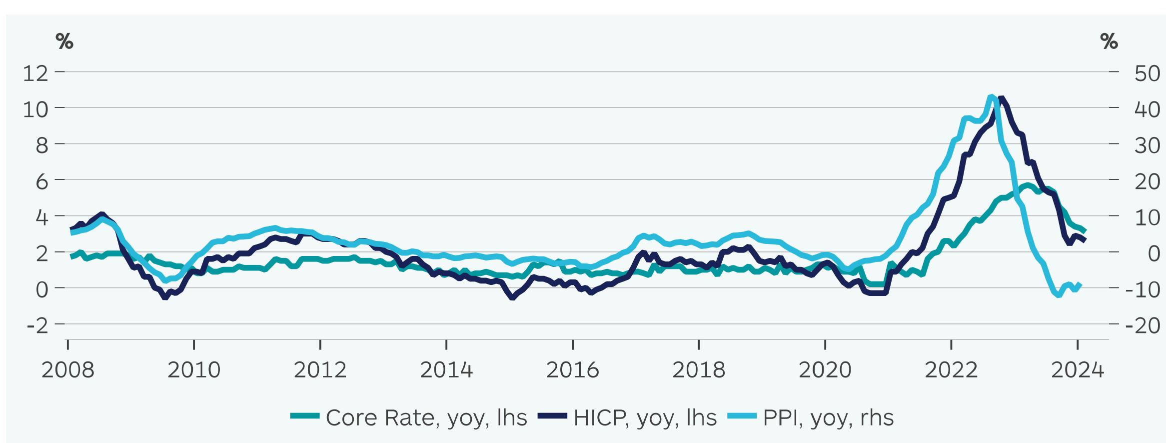
Sources: Bloomberg, NORD/LB Macro Research

Euroland: ECB heading towards a first rate cut in June

Analysts: Christian Lips, Chief Economist // Christian Reuter

Disinflation trend continues – distortions in March and April will complicate interpretation
The downward inflation trend remains ongoing in the eurozone. February saw the annual HICP rate fall to 2.6 percent yoy. The core rate remains slightly higher than that, at 3.1 percent yoy, but likewise lower than in January. The decline in energy prices continues to have a dampening effect, even though the annual rate stands at just -3.7 percent yoy after previously -6.1 percent yoy. As the relieving base effects fade out, the focus is increasingly shifting towards underlying inflation. Given the persistently high price dynamics in services (+4.0 percent yoy), an all-clear cannot yet be given. That said, some price increases of late were of a one-off nature, for which reason the momentum here too can be expected to soon point downwards. Due to the timing of the Easter holidays this year and corresponding distortions, however, the data in March and April will make interpretation difficult. Another good reason for the ECB to wait a bit longer before starting to lower interest rates.

Chart: Disinflationary trend continues – timing of the Easter holidays distorts annual rate



Sources: Eurostat, Macrobond, NORD/LB Macro Research

ECB prepares for an initial rate cut in June – renewed "dovish" adjustment of projections
The ECB remains clearly on track for an initial rate cut in June. March saw no major surprises in terms of monetary policy decisions. This also applies to the lowering of projections, as many economists had already pointed out the need for adjustment in advance. The ECB lowered its growth forecast for 2024 to 0.6 percent, but sees the two following years in a quite optimistic light (+1.5 and +1.6 percent respectively). At 2.3 percent, the inflation rate in 2024 is now expected to be significantly lower than had been expected in December, besides which the central bankers expect a return to the inflation target of 2.0 percent in 2025, followed by 1.9 percent in 2026.
Much like the devil with holy water, the ECB's Governing Council still steers clear of any explicit predetermination of the future interest rate path. Mainly in light of the even more persistent domestic price pressure currently prevailing, the Council is not looking to give any further guidance, but instead continues to emphasize the data-dependent approach. This cautious stance is due to the relatively high rate of nominal wage growth in the eurozone and the associated concerns as to second-round effects. Christine Lagarde pointed out that the decisions were taken unanimously. She added that rate cuts had not been discussed at the Governing Council's meeting in March, and that the members had instead only just begun to discuss dialling back the ECB's restrictive stance. This cautious communication is the preparation for the preparation in April, and is easy to translate: the central bankers are still playing for time. Despite the recent progress, inflation has not yet been defeated, especially since domestic price pressure is still too high. In this respect, the ECB is waiting for the next wage data, with the

recent strikes being symbolic of the new balance of power on the labour market. Overall, however, there are growing indications of an initial rate cut by the ECB in June, however.
As regards to the pace of adjustment after a first rate cut, there is still a lot to be said for a gradual approach. While not wishing to commit herself in this respect, Christine Lagarde always points out that it is a matter of "normalization". The projected growth rates for 2025 and 2026 above its trend restrict the potential for lowering interest rates as well, in light of which the Governing Council will more likely aim for a neutral orientation of its monetary policy. We continue to see an initial rate cut in June and a total of four downward adjustments this year as the most likely scenario.

New monetary policy framework changes little for the time being
Moreover, the ECB answered structural questions concerning monetary policy in March. First, the deposit rate will remain the relevant key rate. The spread to the rate for main refinancing operations will be narrowed from 50 to 15 basis points starting in September – and this will be done by technically lowering the mro rate (and in tow the marginal lending rate) by 35 basis points. Apart from this technical adjustment of the key-rate band, there is no need for any changes to our interest rate forecast in this respect. The ECB also aims to provide longer-term liquidity and build up a structural portfolio of securities over the medium term. The council has not yet presented any details, however.
Ultimately, in the current environment of falling, but still very high excess liquidity for the foreseeable future, the floor system will remain in place over the near term, with money market rates anchored to the deposit facility rate. In the medium term, the money market rates could be allowed somewhat more leeway again (demand-driven), but the central bankers have not yet ventured more than a "soft corridor system" with a few basis points of additional volatility – and that also only in the medium term.

Fundamental forecasts, Euroland

	2023	2024	2025
GDP	0.5	0.5	1.4
Private consumption	0.6	1.1	1.6
Govt. consumption	0.7	1.3	0.7
Fixed investment	1.4	1.0	2.6
Net exports[1]	0.2	-0.4	-0.1
Inflation	5.4	2.2	2.0
Unemployment rate[2]	6.5	6.4	6.3
Budget balance[3]	-3.2	-2.8	-2.6
Current account balance[3]	1.9	1.9	1.7

Change vs previous year as percentage, [1] as contribution to GDP growth; [2] as percentage of the labour force; [3] as percentage of GDP

Sources: Feri, NORD/LB Macro Research

Quarterly forecasts, Euroland

	II/23	III/23	IV/23	I/24	II/24
GDP sa qoq	0.1	-0.1	0.0	0.1	0.2
GDP sa yoy	0.6	0.1	0.1	0.1	0.2
Inflation yoy	6.2	5.0	2.7	2.8	2.3

Change as percentage

Sources: Feri, NORD/LB Macro Research

Interest rates, Euroland

	21.03.	3M	6M	12M
Repo rate ECB	4.50	4.25	3.65	2.90
3M rate	3.93	3.70	3.30	2.70
10Y Bund	2.41	2.30	2.20	2.20

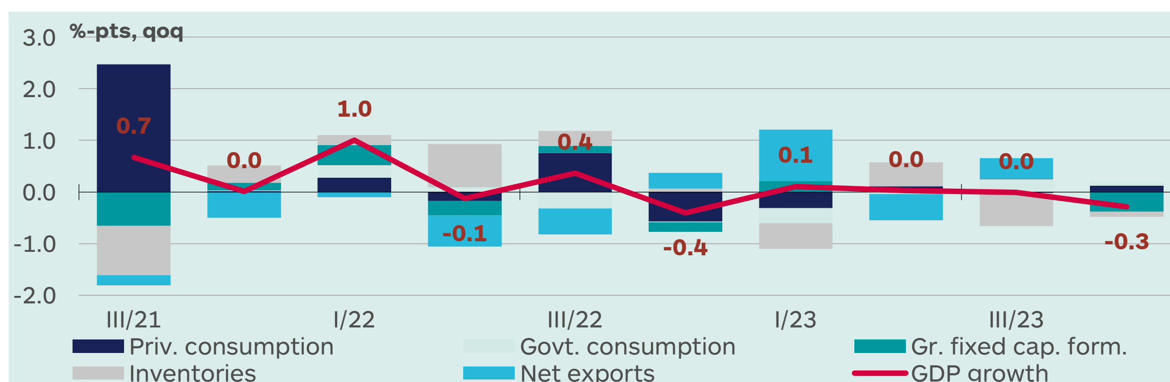
Sources: Bloomberg, NORD/LB Macro Research

Germany: Economy to remain weak for now

Analysts: Christian Lips, Chief Economist // Valentin Jansen

Economic indicators paint a mixed picture – slight GDP decline expected for Q1 as well
Germany has been in a state of economic weakness for almost two years, and this will remain the case for now. The economic policy uncertainty remains hightened, in both historical and international comparison. Along with tighter financing conditions, this is increasingly weighing on the investment climate. Indeed, there had already been a significant downturn in investment back in Q4/2023. Besides the construction investments that have been under pressure for some time, investments in machinery and equipment were now also more severely hit. The minimal growth contributions from consumption were insufficient to compensate for these burdens; real GDP, seasonally and calendar adjusted, contracted by 0.3 percent qoq (see chart).
As measured by the hard economic indicators, the start into 2024 was modest. While January as month under review saw industrial output register appreciable growth for the first time since February 2023, with a figure of +1.0 percent mom, the construction industry's month-on-month upsurge of 2.7 percent is largely to be seen in relation to December's weather-induced slump (-3.1 percent mom). Three trends are particularly worthy of note where the manufacturing sector (+1.1 percent mom) is concerned: first, the overall increase was solely accounted for by the main groups of consumer and intermediate goods (+4.0 percent and +4.4 percent mom respectively), while output in capital goods declined once again (-2.1 percent mom). Second, after a lengthy period of time the energy-intensive industries were at last able to register a more substantial upturn in their output (+2.8 percent mom) again, though overall output remains well short of the levels reported in early 2022. And third, the downturn in vehicle construction accelerated once again in January (-7.3 percent mom), contrasting to the general trend and indeed making for a double-digit decline of -11.7 percent in year-on-year comparison.
The previous month's upsurge in order intake due to a wave of large-scale orders was considerably corrected (-11.3 percent mom). And real retail sales started the year with their third month-on-month decline in a row. All in all, therefore, Q1 will likely have seen a slight contraction in GDP again.

Chart: Contributions to GDP growth (real, swda)



Sources: Destatis, Feri, NORD/LB Macro Research

Downward inflation trend continues – Easter-related distortion of March and April data
Inflation continued its downward trend in February as expected, with the annual rate of the national CPI standing at 2.5 percent and the HICP slightly higher at 2.7 percent yoy. The slight year-on-year decline in energy prices (-2.4 percent yoy) continues to have a dampening effect – despite the higher CO_2 price in place since January and the simultaneous removal of the energy price brakes. Moreover, the downward trend in food prices continued. As regards the two coming months under review, account

should be taken of the fact that the early timing of Easter this year will make for considerable distortions in the annual rate. Especially the movable Easter season, and consequently the Easter holidays as well, often make interpreting the inflation rate difficult in spring. The traditional "Easter effect" is now likely to fully kick in in March rather than April, particularly in the case of package holiday and fuel prices. This means we can expect the rate of inflation to rise in March slightly, followed by a disproportionate decline in April. From May onward, the levels will then be free of distortion again, and can be expected to confirm a continuation of the disinflationary trend as against February.

Marked improvement in the ifo Business Climate Index fuels hopes of recovery

The latest data from the sentiment indicators fuel hopes of an imminent economic recovery, with, for example, ZEW's economic expectations improving significantly to 31.7 points in March. The ifo Business Climate Index's strong upsurge to 87.8 points in March came as a big surprise on the upside. This key leading indicator for Germany's economic development last registered a higher level in June 2023. The expectations component improved by more than three index points to 87.5 points and, at 88.1 points, the current business situation was also rated as having significantly improved. The upswing in sentiment is broadly endorsed by all sectors under review.

After many negative reports that had severely impacted sentiment in recent months, there has been some positive news for the German economy of late. For example, there are signs of an agreement in the long-running labour dispute between Deutsche Bahn and the German Train Drivers' Union (GDL), thus averting any further strikes for now. Moreover, the economic activities in key foreign markets appear to be running better than expected, which ought to boost export business. The Federal Council's approval of the Growth Opportunities Act involving billions of euros in relief for the German economy was likely anticipated by the companies. And, due to the recent mild weather and declining workforce sickness rates, some of the burdens from the previous months finally appear to be subsiding.

One swallow doesn't make a summer, however, and confirmation of a trend reversal remains to be seen. That said, there are at least indications of the winter half-year having seen a bottoming out and that a moderate economic upturn could likely begin in the spring.

Fundamental forecasts, Germany

	2023	2024	2025
GDP	-0.3	0.0	1.2
Private consumption	-0.7	1.1	1.6
Govt. consumption	-1.5	1.2	1.2
Fixed investment	-0.7	-1.7	2.5
Exports	-2.1	-1.1	3.9
Imports	-3.4	-0.7	5.0
Net exports[1]	0.6	-0.2	-0.3
Inflation[2]	6.0	2.4	2.2
Unemployment rate[3]	5.7	5.9	5.7
Budget balance[4]	-2.0	-1.7	-1.0
Current account balance[4]	6.0	6.7	6.1

Change vs previous year as percentage, [1]as contribution to GDP growth; [2]HICP; [3]as percentage of the civil labour force (Federal Employment Office definition); [4] as percentage of GDP

Sources: Feri, NORD/LB Macro Research

Quarterly forecasts, Germany

	II/23	III/23	IV/23	I/24	II/24
GDP sa qoq	0.0	0.0	-0.3	-0.2	0.3
GDP nsa yoy	-0.4	-0.7	-0.4	-1.2	0.3
Inflation yoy	6.9	5.7	3.0	2.9	2.4

Change as percentage

Sources: Feri, NORD/LB Macro Research

Switzerland: Bold move – SNB lowers key interest rate

Analyst: Christian Reuter

Economy with trend towards stability – growth remains moderate

Q4/2023 saw real GDP – adjusted for seasonal, calendar and sporting events – register moderate growth of 0.3 percent yoy, thus closing the year as a whole with a plus of 1.3 percent. The service sector once again proved to be a mainstay of the economy, also continuing to drive employment. The hospitality sector was once more a key growth driver. The industrial sector at least showed signs of a bottoming out, with value added in the manufacturing sector – excluding chemicals and pharmaceuticals – rising again for the first time after two quarters in the negative zone. Domestic demand, however, declined slightly in the past quarter, primarily owing to the sharp downward trend in investment in plant and equipment. February saw the economic barometers continue to deliver a consistent picture, showing a continuation of the moderate growth trend with signs of recovery in the manufacturing sector and slowing momentum in the service sectors. The Industry PMI climbed by 1.1 points to 44.0, though continuing to signal a contraction of the sector, albeit somewhat slower than in the previous month. The gap to the Services PMI remained substantial. The latter fell by 1.6 points but, at 53.0 points, continues to point in the direct of healthy growth. Worthy of note at this point is the fact the service sector accounts for three quarters of Switzerland's GDP. Downward interest rates and a weakening currency will likely give stimulus to the manufacturing industry. The exchange rate ought to benefit the service sector, too, since international tourism has gained growing importance after COVID-19. Overall, however, we expect growth to remain rather moderate due to the weakness of the global economy.

Rate hike not completely unexpected – inflation below the 2.0-percent target mark since May 2023

22 March saw the SNB become the first major central bank to lower its key interest, doing so from 1.75 to 1.50 percent and pointing out a marked slowdown in inflation. At 1.2 percent yoy, the price increase rate was again lower than expected by observers and indeed the SNB itself. The core rate also declined further, meaning that the central bank's fears of another rebound at the beginning of the year have failed to materialize. The SNB lowered its inflation expectations again, and its current conditional forecast anticipates that inflation will now remain below 2 percent for the foreseeable future. Immediately after the decision, the euro appreciated by 1 percent against the Swiss franc to 0.978 EUR/CHF. On the forex market the Swiss currency had already moved away from its all-time high of 0.927 EUR/CHF recorded in December 2023 since the beginning of the year. This was probably not an unwelcome development from the central bankers' point of view, given the weak industrial economy in Switzerland and the favourable inflation trend, and they had let the exchange rate fluctuate freely of late. In its communication, however, the SNB retained the passage on its commitment to intervene in the forex market if need be. No mention was made of the announced change at the helm of the institute – SNB Chairman Thomas Jordan will be stepping down in September this year.

Fundamental forecasts*, Switzerland

	2023	2024	2025
GDP	0.7	1.3	1.8
Inflation (CPI)	2.1	1.3	1.2
Unemployment rate[1]	2.0	2.2	2.1
Budget balance[2]	0.5	0.6	0.5
Current account balance[2]	8.2	8.0	7.5

Interest and exchange rates, Switzerland

	21.03.	3M	6M	12M
SNB policy rate	1.50	1.25	1.00	1.00
3M rate	1.43	1.10	0.90	0.90
10Y	0.65	0.70	0.70	0.70
Spread 10Y Bund	-176	-160	-150	-150
EUR in CHF	0.97	0.96	0.97	0.97

* Change vs previous year as percentage; [1] as percentage of the labour force, [2] as percentage of GDP

Sources: Feri, Bloomberg, NORD/LB Macro Research

Japan: Wage demands prompt central bank reaction

Analyst: Tobias Basse

End of an era

The central bankers in Tokyo have finally scrapped their negative interest rate policy. This marks the end of an era in the Land of the Rising Sun. The Bank of Japan now plans to keep the traditional policy rate level in the range of 0.00 to 0.10 percent. In addition, the central bankers in Tokyo have ended their yield control measures, meaning that the target yield on Japanese government bonds, which in any case had merely symbolic significance of late, no longer officially exists. The central bank's ETF purchases are also set to be terminated.

High wage demands prompt central bank reaction

The monetary policymakers in Tokyo are thus showing an almost unusually high degree of activity. While measures of this nature were to have been expected, the timing of the rate hike can nevertheless be described as rather bold by its standards. It is therefore not surprising that this interest rate decision was not taken unanimously in the Land of the Rising Sun – a country in which decision-making is usually based on consensus. Two central bankers, namely Toyoaki Nakamura and Asahi Noguchi, voted against the upward adjustment. In this context, the former emphasized that he would have preferred to wait for clearer indications of rising wages, also where SMEs are concerned, before raising interest rates. However, the comments on the part of BoJ governor Kazuo Ueda, show that recent wage demands in particular were likely the deciding factor behind the rate hike. The central bank in Tokyo didn't want to give clear signals in the direction of further key-rate hikes. In our view, adjustments to Japan's monetary policy will only be made with the greatest of caution in the months ahead – against which background a veritable sequence of rate hikes is hardly likely. The virtually collective fear of deflation in Japan will likely continue having a marked impact on future monetary policy in Tokyo.

Yen not yet able to benefit from the new monetary policy orientation

The forex market also appears to share this view, as reflected in the fact that the yen depreciated against the US dollar immediately after the interest rate decision in Tokyo and the statement on the part of BoJ governor Ueda, subsequently stabilizing above the psychologically important mark of JPY 150 per USD. It goes without saying that this is merely a momentary snapshot, however. In principle, higher interest rates in Japan will certainly benefit the country's currency in the future – especially as other currency areas appear to be leaning towards near-term rate cuts. Lower US key interest rates in particular ought to give the yen a fairly clear prospect of appreciation against the US currency in the course of 2024. However, every positive development ends at some point – so both central banks will be looking to act more cautiously in the months ahead!

Fundamental forecasts*, Japan

	2023	2024	2025
GDP	1.9	0.8	1.3
Inflation	3.3	2.2	1.8
Unemployment rate[1]	2.6	2.5	2.4
Budget balance[2]	-5.2	-4.2	-3.7
Current account balance[2]	3.5	3.5	3.5

* Change vs previous year as percentage;

[1] as percentage of the labour force; [2] as percentage of GDP

Sources: Feri, Bloomberg, NORD/LB Macro Research

Interest and exchange rates, Japan

	21.03.	3M	6M	12M
Key rate	0.10	0.10	0.10	0.20
3M rate	0.25	0.20	0.25	0.30
10Y	0.66	0.80	1.00	1.10
Spread 10Y Bund	-175	-150	-120	-110
EUR in JPY	165	157	153	148
USD in JPY	152	148	143	137

China: Ambitious growth target and Beijing's role

Analyst: Valentin Jansen

Ambitious 5-percent growth target likely only feasible with Beijing's support
Against a background of simmering economic problems, the messages delivered by the central government at this year's National People's Congress were the subject of particularly close attention among market participants. The planned growth target of 5 percent is certainly quite ambitious, seeing as the crisis-ridden real estate sector had traditionally accounted for around one quarter of China's GDP, and this now needs to be generated elsewhere. In addition, there are computationally favourable base effects that will no longer apply this year, as Premier Li Qiang acknowledged. A certain degree of hope therefore rests on private consumption, though there too, the outlook remains cautiously optimistic. Many market participants had therefore hoped for clearer signals in terms of fiscal and monetary policy. Although the issuance of government bonds is set to be slightly scaled up, the officially planned budget deficit of 3 percent remains short of expectations. The leeway available here is also limited, however, given the high levels of debt held by local government bodies as result of Beijing's zero-COVID policy. Overall, China's economy will likely be accompanied this year by a moderately supportive fiscal policy, including readjustments. Beijing is endeavouring to start up the actual medium- and long-term growth engine with "new productive forces" (artificial intelligence, big data, electromobility, renewable energies). In the long term, this is certainly good news in terms of potential growth, but in the short term its impetus will probably not be enough to overcome the prevailing economic weakness. In Addition, conflicts are already brewing now with China's key trading partners, as recently evidenced by the examination by the EU on the imposition of import tariffs on EVs from the Middle Kingdom.

China's stock markets reacted with volatility
China's stock markets reacted to the messages of the People's Congress with volatility; for example the Hang Seng Index temporarily registering a drop of -3 percent shortly after the growth target's announcement. On a three-month horizon, however, there are, all in all, signs of upward trends after the new local lows shortly after the turn of the year. That said, the economic indicators traditionally reported cumulatively for January and February in the context of the People's Congress will have likely contributed to this development, with for example, those for industrial output (+7.0 percent yoy) and foreign trade (exports: +7.1 percent; imports: +3.5 percent) sending out unexpectedly positive signals.

Renminbi's stability a priority; PBOC's leeway currently (still) limited, however
Unsurprisingly, the issue of the renminbi's stability was given high priority in the government's plans. The leeway available to the PBOC in terms of further easing is likely limited at present, at least until the two most important central banks on the left and right sides of the Atlantic start rolling back their restrictive monetary policy. Increased interest rate differentials would make for heightened pressure on the renminbi. Against this background, it will not be until the second half of the year that any significant monetary and fiscal stimulus can be expected from the PBOC.

Fundamental forecasts*, China

	2023	2024	2025
GDP	5.2	4.6	4.5
Inflation	0.3	1.0	1.6
Unemployment rate[1]	5.2	5.2	5.2
Budget balance[2]	-6.0	-5.0	-5.0
Current account bal.[2]	1.5	1.2	1.1

* Change vs previous year as percentage

[1] as percentage of the labour force; [2] as percentage of GDP

Sources: Feri, Bloomberg, NORD/LB Macro Research

Interest and exchange rates, China

	21.03.	3M	6M	12M
Deposit rate	1.50	1.50	1.50	1.50
3M SHIBOR	2.16	2.25	2.25	2.25
10Y	2.29	2.50	2.50	2.50
Spread 10Y Bund	-12	20	30	30
EUR in CNY	7.82	7.58	7.60	7.61
USD in CNY	7.20	7.15	7.10	7.05

Britain: BoE irresolute – despite recession

Analyst: Constantin Lüer

Central bank remains in wait-and-see mode

At its last meeting in March the Bank of England's MPC resolved to hold the Bank Rate at 5.25 percent as had been widely expected. The committee had always stressed that they first wanted to see sustainable progress in disinflation before considering interest rate cuts. At any rate, there was no support for more hikes, with one member (again) voting for a cut of 25 basis points. This meant the MPC voted this time by a majority of 8-1 to pause rate adjustments. It was made clear that monetary policy will need to be kept restrictive for sufficiently long until the risk of inflation becoming embedded above the targeted level of 2 percent target dissipates. There are, naturally, upside risks to be contended with in this context, especially considering various conflicts and associated restrictions in goods transport. That said, the headline inflation rate in the UK has made progress of late and now stands at 3.4 percent yoy. While this represents a further step in the right direction, it was evidently not pronounced enough for the MPC. While there are no limits to the imagination, the likelihood of rate cuts should only then be seriously considered when inflation stands well below the mark of 3 percent.

The inflation trend creates a bit of leeway for the central bank

Along with the headline inflation rate, the CPIHs, i.e. the consumer prices indices including owner occupiers' housing costs, also registered a downward trend. These fell from 4.2 to 3.8 percent yoy in February, and in month-on-month comparison to just 0.6 percent from January's level of 1.0 percent. The largest contributions to this downward movement in both the CPI and CPIH indices came from food and restaurant / cafe prices. The former registered a welcome decline of 2.0 ppts to 5.0 percent yoy, and the cost of eating out likewise fell, by 1.1 ppts to 6.0 percent yoy. This relative relief is likely to be very much to the liking of British consumers. The biggest upward price drivers were similarly direct goods, however, namely housing costs (e.g. rent) with a year-on-year change rate of 2.9 percent (from 2.5 percent), and motor fuels. Year-on-year motor fuel inflation has now been negative for 12 consecutive months and, according to the latest data, fell by 6.5 percent yoy in February, though picking up by 2.7 ppts yoy compared to the previous month.

UK Manufacturing PMI surprises on the upside

The purchasing managers' indices are slowly converging. The PMI for the service sector fell by 0.4 points to a – still satisfactory – level of 53.4 points. The Manufacturing PMI surprised on the upside, on the other hand, narrowly missing the 50-point mark with a level of 49.9 points. The purchasing managers are thus seeing the future in a more positive light for the first time since July 2022.

Fundamental forecasts*, Britain

	2023	2024	2025
GDP	0.1	0.5	1.2
Inflation (CPI)	7.3	2.9	2.2
Unemployment rate[1]	4.0	4.7	4.7
Budget balance[2]	-5.0	-3.6	-3.0
Current account bal.[2]	-2.8	-2.5	-2.4

* Change vs previous year as percentage

[1] as percentage of the labour force as per ILO concept

Sources: Feri, Bloomberg, NORD/LB Macro Research

Interest and exchange rates, Britain

	21.03.	3M	6M	12M
Repo rate	5.25	5.25	5.00	4.75
3M rate	5.32	5.20	4.95	4.50
10Y	4.00	3.90	3.85	3.65
Spread 10Y Bund	159	160	165	145
EUR in GBP	0.86	0.87	0.88	0.87
GBP in USD	1.27	1.22	1.22	1.24

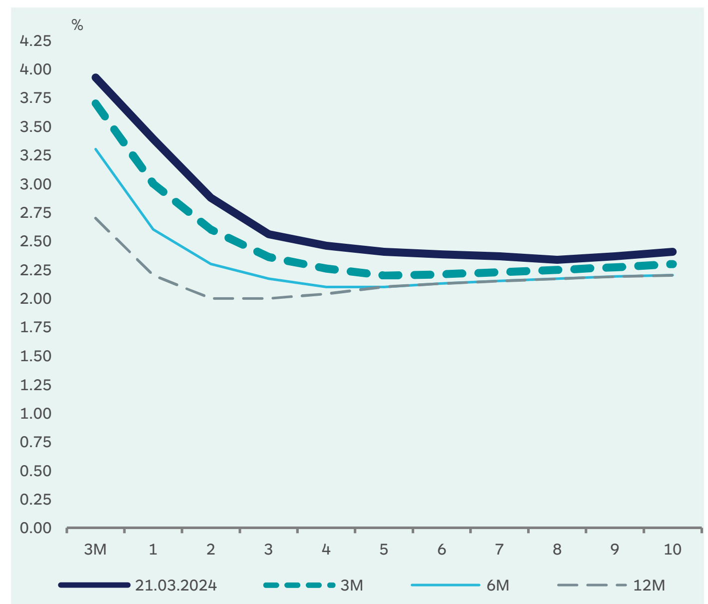
Portfolio strategies Yield curve, Euroland

Yields and forecasts (Bunds/Swap)

Yields (in %)		NORD/LB forecasts for horizons		
	21.03.2024	**3M**	**6M**	**12M**
3M	3.93	3.70	3.30	2.70
1Y	3.39	3.00	2.60	2.20
2Y	2.88	2.60	2.30	2.00
3Y	2.56	2.36	2.17	2.00
4Y	2.46	2.26	2.10	2.04
5Y	2.41	2.20	2.10	2.10
6Y	2.38	2.21	2.13	2.13
7Y	2.37	2.23	2.15	2.15
8Y	2.34	2.25	2.17	2.17
9Y	2.37	2.27	2.19	2.19
10Y	2.41	2.30	2.20	2.20
2Y (Swap)	3.19	2.95	2.65	2.40
5Y (Swap)	2.75	2.55	2.45	2.50
10Y (Swap)	2.69	2.65	2.55	2.60

Sources: Bloomberg, NORD/LB Macro Research

Yield curve forecasts (Bunds)



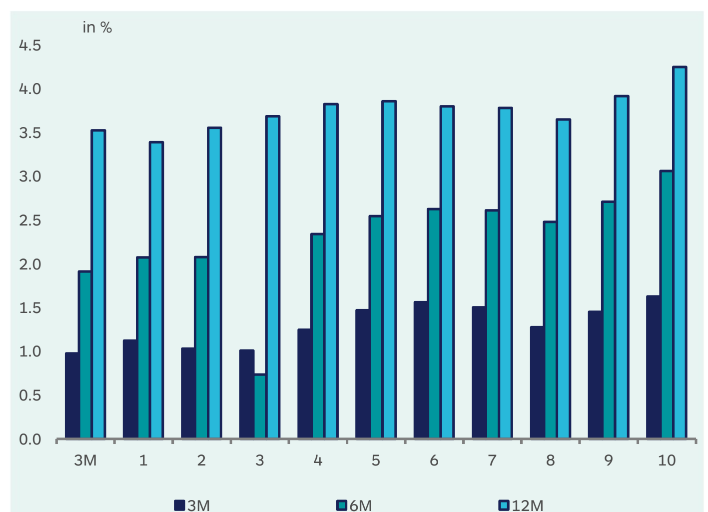
Sources: Bloomberg, NORD/LB Macro Research

Forecasts and total returns

	Total returns (in %) for horizons...		
	3M	**6M**	**12M**
3M	0.98	1.92	3.53
1Y	1.15	2.10	3.42
2Y	1.12	2.17	3.65
3Y	1.14	0.86	3.82
4Y	1.39	2.48	3.97
5Y	1.66	2.74	4.06
6Y	1.77	2.84	4.02
7Y	1.73	2.84	4.01
8Y	1.50	2.71	3.88
9Y	1.68	2.95	4.15
10Y	1.87	3.31	4.50

Sources: Bloomberg, NORD/LB Macro Research

Expected total returns



Sources: Bloomberg, NORD/LB Macro Research

A total return is the absolute profit from an investment in the time period under consideration, with account being taken of the pro-rata yields plus the price gains or losses to be anticipated on the basis of the forecast yield curve change.

Portfolio strategies International yield curve: 3-month & 12-month horizons

3-month horizon

Expected total returns (as percentage) in euro

	EUR	USD	GBP	JPY	CHF
1Y	1.2	3.6	-0.7	4.9	1.8
2Y	1.1	3.1	-1.7	5.0	1.7
3Y	1.1	3.3	-2.9	4.8	1.6
4Y	1.4	3.5	-3.2	4.9	1.6
5Y	1.7	3.4	-4.2	5.2	1.3
6Y	1.8	4.5	-4.7	5.1	0.9
7Y	1.7	3.1	-4.6	5.2	1.0
8Y	1.5	3.1	-3.9	5.1	0.8
9Y	1.7	3.1	-3.1	4.9	1.1
10Y	1.9	3.2	-1.2	4.7	1.2

Sources: Bloomberg, NORD/LB Macro Research

Expected total returns (as percentage) in national currencies

	USD	GBP	JPY	CHF
1Y	1.1	0.7	0.0	0.2
2Y	0.6	-0.3	-0.1	0.1
3Y	0.9	-1.5	-0.1	0.1
4Y	1.0	-1.9	0.0	0.0
5Y	0.9	-2.8	0.3	-0.3
6Y	2.0	-3.4	0.2	-0.6
7Y	0.7	-3.3	0.3	-0.5
8Y	0.6	-2.6	0.3	-0.7
9Y	0.7	-1.7	0.0	-0.4
10Y	0.7	0.2	-0.1	-0.4

Sources: Bloomberg, NORD/LB Macro Research

12-month horizon

Expected total returns (as percentage) in euro

	EUR	USD	GBP	JPY	CHF
1Y	3.4	5.4	3.1	11.3	1.5
2Y	3.6	4.5	2.4	11.5	1.4
3Y	3.8	5.2	1.7	11.3	1.4
4Y	4.0	5.5	1.5	11.3	1.3
5Y	4.1	5.7	0.9	11.6	1.2
6Y	4.0	7.3	0.5	11.5	1.0
7Y	4.0	5.8	0.5	11.6	0.9
8Y	3.9	6.0	0.9	11.4	0.7
9Y	4.2	6.3	1.5	10.9	0.1
10Y	4.5	6.9	2.6	10.2	-0.3

Sources: Bloomberg, NORD/LB Macro Research

Expected total returns (as percentage) in national currencies

	USD	GBP	JPY	CHF
1Y	4.8	4.5	0.1	1.0
2Y	3.9	3.9	0.2	0.9
3Y	4.6	3.1	0.1	0.9
4Y	4.9	2.9	0.0	0.8
5Y	5.1	2.3	0.3	0.7
6Y	6.7	1.9	0.2	0.5
7Y	5.3	1.9	0.3	0.4
8Y	5.4	2.3	0.1	0.2
9Y	5.8	2.9	-0.4	-0.4
10Y	6.3	4.1	-0.9	-0.7

Sources: Bloomberg, NORD/LB Macro Research

A total return is the absolute profit from an investment in the time period under consideration, with account being taken of the pro-rata yields plus the price gains or losses to be anticipated on the basis of the forecast yield curve and exchange rate change.

Portfolio strategies
Stock market strategy; 3-month, 6-month & 12-month horizons

Levels and performance

Index	Level as at 21.03.2024	Status Prev. month	Status Start of year	Performance since Prev. month	Performance since Start of year
DAX	18,179.25	17,678.19	16,751.64	2.83%	8.52%
MDAX	26,473.05	25,824.65	27,137.30	2.51%	-2.45%
EuroSTOXX50	5,052.31	4,877.77	4,521.44	3.58%	11.74%
STOXX50	4,402.37	4,277.81	4,093.37	2.91%	7.55%
STOXX600	509.77	494.61	478.99	3.07%	6.43%
Dow Jones	39,781.37	38,996.39	37,689.54	2.01%	5.55%
S&P 500	5,241.53	5,096.27	4,769.83	2.85%	9.89%
Nikkei	40,815.66	39,166.19	33,464.17	4.21%	21.97%

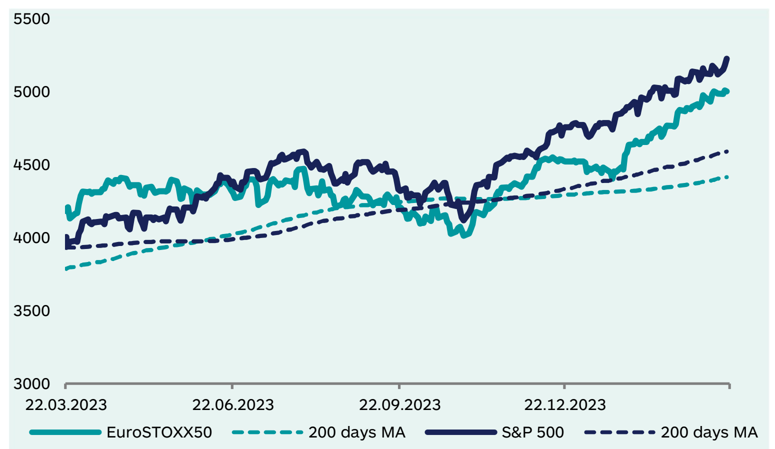
Sources: Bloomberg, NORD/LB Macro Research

Index forecasts

Index	NORD/LB forecast for horizons ...		
	3M	6M	12M
DAX	17,200	16,800	17,500
MDAX	26,100	25,500	26,800
EuroSTOXX50	4,800	4,650	4,850
STOXX50	4,300	4,100	4,300
STOXX600	490	480	490
Dow Jones	38,500	37,000	37,500
S&P 500	4,950	4,750	4,850
Nikkei	38,000	36,500	37,000

Sources: Bloomberg, NORD/LB Macro Research

EuroSTOXX50 and S&P500



Sources: Bloomberg, NORD/LB Macro Research

Date of going to press for data, forecasts and texts was **Friday 22 March 2024**
The next English issue of Economic Adviser will be appearing on **29 April 2024**.

Overview of forecasts

Fundamental forecasts

in %	GDP growth			Rate of inflation			Unemployment rate[1]			Budgetary balance[2]		
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
USA	2.5	1.8	1.9	4.1	2.7	2.3	3.6	4.1	4.2	-6.5	-6.0	-6.2
Euroland	0.5	0.5	1.4	5.4	2.2	2.0	6.5	6.4	6.3	-3.2	-2.8	-2.6
Germany	-0.3	0.0	1.2	6.0	2.4	2.2	5.7	5.9	5.7	-2.0	-1.7	-1.0
Japan	1.9	0.8	1.3	3.3	2.2	1.8	2.6	2.5	2.4	-5.2	-4.2	-3.7
Britain	0.1	0.5	1.2	7.3	2.9	2.2	4.0	4.7	4.7	-5.0	-3.6	-3.0
Switzerland	0.7	1.3	1.8	2.1	1.3	1.2	2.0	2.2	2.1	0.5	0.6	0.5
China	5.2	4.6	4.5	0.3	1.0	1.6	5.2	5.2	5.2	-6.0	-5.0	-5.0

Change vs previous year as percentage; [1] as percentage of the labour force (Germany: as per Federal Employment Office definition); [2] as percentage of GDP
Sources: Feri, NORD/LB Macro Research

Key interest rates

In %	21.03.24	3M	6M	12M
USD	5.50	5.50	5.25	5.00
EUR	4.50	4.25	3.65	2.90
JPY	0.10	0.10	0.10	0.20
GBP	5.25	5.25	5.00	4.75
CHF	1.50	1.25	1.00	1.00
CNY	1.50	1.50	1.50	1.50

Sources: Bloomberg, NORD/LB Macro Research

Exchange rates

EUR in...	21.03.24	3M	6M	12M
USD	1.09	1.06	1.07	1.08
JPY	165	157	153	148
GBP	0.86	0.87	0.88	0.87
CHF	0.97	0.96	0.97	0.97
CNY	7.82	7.58	7.60	7.61

Interest rates (government bonds)

	3M rates				Yields 2Y				Yields 5Y				Yields 10Y			
	21.03.	3M	6M	12M	21.03.	3M	6M	12M	21.03.	3M	6M	12M	21.03.	3M	6M	12M
USD	5.32	5.20	5.00	4.70	4.64	4.25	3.90	3.60	4.25	3.85	3.60	3.50	4.27	3.90	3.70	3.50
EUR	3.93	3.70	3.30	2.70	2.88	2.60	2.30	2.00	2.41	2.20	2.10	2.10	2.41	2.30	2.20	2.20
JPY	0.25	0.20	0.25	0.30	0.06	0.20	0.25	0.30	0.26	0.35	0.40	0.45	0.66	0.80	1.00	1.10
GBP	5.32	5.20	4.95	4.50	4.18	4.98	4.89	4.38	3.88	4.70	4.70	4.22	4.00	3.90	3.85	3.65
CHF	1.43	1.10	0.90	0.90	0.86	0.80	0.75	0.75	0.69	0.75	0.75	0.70	0.65	0.70	0.70	0.70

Sources: Bloomberg, NORD/LB Macro Research

Spreads (bp)

	3M EURIBOR				2Y Bunds				5Y Bunds				10Y Bunds			
	21.03.	3M	6M	12M	21.03.	3M	6M	12M	21.03.	3M	6M	12M	21.03.	3M	6M	12M
USD	139	150	170	200	176	165	160	160	185	165	150	140	186	160	150	130
JPY	-368	-350	-305	-240	-282	-240	-205	-170	-215	-185	-170	-165	-175	-150	-120	-110
GBP	139	150	165	180	130	238	259	238	147	250	260	212	159	160	165	145
CHF	-249	-260	-240	-180	-201	-180	-155	-125	-171	-145	-135	-140	-176	-160	-150	-150

Sources: Bloomberg, NORD/LB Macro Research

Annex

Ansprechpartner in der NORD/LB

Dr. Martina Noss
Head of Research
+49 172 512 2742
martina.noss@nordlb.de

Christian Lips
Chief Economist
Head of Macro Research
+49 172 735 1531
christian.lips@nordlb.de

Tobias Basse
Macro Research
+49 511 361-2722
tobias.basse@nordlb.de

Christian Reuter
Macro Research
+49 152 0412 9316
christian.reuter@nordlb.de

Valentin Jansen
Macro Research
+49 157 8516 7232
valentin.jansen@nordlb.de

Constantin Lüer
Macro Research
+49 157 8516 4838
constantin.lueer@nordlb.de

Assisted by: Anna Jöns

Further contacts

Sales

Institutional Sales
+49 511 9818-9440

Sales Sparkassen &
Regional Banks
+49 511 9818-9400

Sales MM/FX
+49 511 9818-9460

Sales Europe
+352 452211-515

Sales Asia
+65 64 203136

Origination & Syndicate

Origination FI
+49 511 9818-6600

Origination Corporates
+49 511 361-2911

Treasury

Liquidity Management
+49 511 9818-9620
+49 511 9818-9650

Trading

Covereds/SSA
+49 511 9818-8040

Financials
+49 511 9818-9490

Governments
+49 511 9818-9660

Federal States/Regions
+49 511 9818-9550

Frequent Issuers
+49 511 9818-9640

Sales Wholesale Customers

Corporate Customers
+49 511 361-4003

Asset Finance
+49 511 361-8150

Important legal framework conditions

This Information report (hereinafter referred to as “Material”) was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE („NORD/LB“). The supervisory authorities in charge of NORD/LB are the European Central Bank („ECB“), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleitungsaufsicht - „BaFin“), Graurheindorfer Str. 108, D-53117 Bonn, and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. If this Material has been provided to you by your Sparkasse, this Sparkasse is also subject to supervision by BaFin and, if applicable, also by the ECB. Generally, this Material or the products or services described therein have not been reviewed or approved by the competent supervisory authority.

This Material is addressed exclusively to recipients in Australia, Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter the „Relevant Persons” or „Recipients”). The contents of this Material are disclosed to the Recipients on a strictly confidential basis and, by accepting this Material, the Recipients agree that they will not forward to third parties, copy in whole or in part or translate into other languages, and/or reproduce this Material without NORD/LB’s prior written consent. This Material is only addressed to the Relevant Persons and any persons other than the Relevant Persons must not rely on the information in this Material. In particular, neither this Material nor any copy thereof must be forwarded or transmitted to Japan or the United States of America or its territories or possessions or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

This Material is not an investment recommendation/investment strategy recommendation, but customer information solely intended for general information purposes. For this reason, this Material has not been drawn up in consideration of all statutory requirements with regard to the impartiality of investment recommendations/investment strategy recommendations. Furthermore, this Material is not subject to the prohibition of trading before the publication of investment recommendations/investment strategy recommendations.

This Material have been compiled and are provided exclusively for information purposes. This Material is not intended as an investment incentive. It is provided for the Recipient’s personal information, subject to the express understanding, which is acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this Material NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of NORD/LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurance as to or assume any responsibility or liability for the accuracy, adequacy and completeness of this Material or any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the Material or any statements or opinions set forth in this Material (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performances are not a reliable indicator of future performances. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. In connection with securities (purchase, sell, custody) fees and commissions apply, which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily give an indication of its future performance.

Also this Material as a whole or any part thereof is not a sales or other prospectus. Correspondingly, the information contained herein merely constitutes an overview and does not form the basis for an investor‘s potential decision to buy or sell. A full description of the details relating to the financial instruments or transactions, which may relate to the subject matter of this Material is set forth in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB’s own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB’s relevant registration form, all of which are available for downloading at www.nordlb.de and may be obtained, free of charge, from NORD/LB, Friedrichswall 10, 30159 Hanover, shall be solely binding. Any potential investment decision should at any rate be made exclusively on the basis of such (financing) documentation. This Material cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies as contemplated herein as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks, political, fair value, commodity and market risks. The financial instruments could experience a sudden substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor’s assessment of its individual financial situation as well as of the suitability and risks of the investment.

The information set forth in this Material shall supersede all previous versions of any relevant information and refer exclusively to the date as of which this Material has been drawn up. Any future versions of this Material shall supersede this present version. NORD/LB shall not be under any obligation to update and/or review this Material at regular intervals. Therefore, no assurance can be given as to its currentness and continued accuracy.

By making use of this Material, the Recipient shall accept the foregoing terms and conditions.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is set forth in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for recipients in Australia
NORD/LB IS NOT A BANK OR AN AUTHORISED DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE BANKING ACT 1959 OF AUSTRALIA. IT IS NOT REGULATED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY.

NORD/LB is not providing personal advice with this Material, and has not considered one or more of the recipient’s objectives, financial situation and need (other than for anti-money laundering purposes).

Additional information for recipients in Austria
None of the information contained in this Material constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient.

For regulatory reasons, products mentioned in this Material may not being offered into Austria and are not available to investors in Austria. Therefore, NORD/LB might not be able to sell or issue these products, nor shall it accept any request to sell or issues these products, to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for recipients in Belgium
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for recipients in Canada
This Material has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this Material and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for recipients in Cyprus
This Material constitutes an analysis within the meaning of the definition section of the Cyprus Directive D1444-2007-01(No 426/07). Furthermore, this Material is provided for informational and advertising purposes only and does not constitute an invitation or offer to sell or buy or subscribe any investment product.

Additional information for recipients in Czech Republic
There is no guarantee to get back the invested amount. Past performance is no guarantee of future results. The value of investments could go up and down.

The information contained in this Material is provided on a non-reliance basis and its author does not accept any responsibility for its content in terms of correctness, accuracy or otherwise.

Additional information for recipients in Denmark
This Material does not constitute a prospectus under Danish securities law and consequently is not required to be nor has been filed with or approved by the Danish Financial Supervisory Authority as this Material either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for recipients in Estonia
It is advisable to examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipient of this Material should consult with an expert.

Additional information for recipients in Finland
The financial products described in this Material may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, those shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee to get back the invested amount. Past performance is no guarantee of future results.

Additional information for recipients in France
NORD/LB is partially regulated by the Autorité des Marchés Financiers for the conduct of French business. Details about the extent of our regulation by the respective authorities are available from us on request.

This Material constitutes an analysis within the meaning of Article 24(1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code and does qualify as recommendation under Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for recipients in Greece
The information herein contained describes the view of the author at the time of its publication and it must not be used by its Recipient unless having first confirmed that it remains accurate and up to date at the time of its use.

Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Mutual funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for recipients in Indonesia
This Material contains generic information and has not been tailored to certain Recipient’s specific circumstances. This Material is part of NORD/LB’s marketing materials.

Additional information for recipients in Ireland
This Material has not been prepared in accordance with Directive 2003/71/EC, as amended, on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or those measures and therefore may not contain all the information required where a document is prepared pursuant to the Prospectus Directive or those laws.

Additional information for recipients in Korea
This Material has been provided to you without charge for your convenience only. All information contained in this Material is factual information and does not reflect any opinion or judgement of NORD/LB. The Material contained in this Material should not be construed as an offer, marketing, solicitation or investment advice with respect to financial investment products in this Material.

Additional information for recipients in Luxembourg
Under no circumstances shall this Material constitute an offer to sell, or issue or the solicitation of an offer to buy or subscribe for Products or Services in Luxembourg.

Additional information for recipients in New Zealand
NORD/LB is not a registered Bank in New Zealand. This Material is general information only. It does not take into account your financial situation or goals and is not a personalized financial adviser service under the Financial Advisers Act 2008.

Additional information for recipients in Netherlands
The value of your investments may fluctuate. Results achieved in the past do not offer any guarantee for the future (De waarde van uw belegging kan fluctueren. In het verleden behaalde resultaten bieden geen garantie voor de toekomst).

Additional information for recipients in Poland
This Material does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for recipients in Portugal
This Material is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. This Material does not constitute or form part of an offer to buy or sell any of the securities covered by the report nor can be understood as a request to buy or sell securities where that practice may be deemed unlawful. This Material is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views herein contained are solely expression of our research and analysis and subject to change without notice.

Additional information for recipients in Singapore
This Material is intended only for Accredited Investors or Institutional Investors as defined under the Securities and Futures Act in Singapore. If you have any queries, please contact your respective financial adviser in Singapore.

This Material is intended for general circulation only. It does not constitute investment recommendation and does not take into account the specific investment objectives, financial situation or particular needs of the Recipient. Advice should be sought from a financial adviser regarding the suitability of the investment product, taking into account the specific investment objectives, financial situation or particular needs of the Recipient, before the Recipient makes a commitment to purchase the investment product.

Additional information for recipients in Sweden
This Material does not constitute or form part of, and should not be construed as a prospectus or offering memorandum or an offer or invitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. This Material has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under EC Prospectus Directive, and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for recipients in Switzerland
This Material has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority "FINMA" on 1 January 2009).

NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research, as amended.

This Material does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. This Material is published solely for the purpose of information on the products mentioned in this Material. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to the supervision by the Swiss Financial Market Supervisory Authority (FINMA).

Additional information for recipients in the Republic of China (Taiwan)
This Material is provided for general information only and does not take into account any investor's particular needs, financial status, or investment objectives. Nothing in this Material should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the Material provided when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice.

NORD/LB has taken all reasonable care in producing this Material and trusts that the information is reliable and suitable for your situation at the date of publication or delivery, but no representation or warranty of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in this Material. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Additional information for recipients in the UK
NORD/LB is subject to limited regulation by the Financial Conduct Authority ("FCA") and the Prudential Regulation Authority ("PRA"). Details about the extent of our regulation by the FCA and PRA are available from NORD/LB on request.

This Material is a financial promotion. Relevant Persons in the UK should contact NORD/LB's London Branch, Investment Banking Department, Telephone: 0044 / 2079725400 with any queries.

Investing in financial instruments referred to in this Material may expose an investor to a significant risk of losing all of the amount invested.

Editorial deadline: Monday, 25 March 2024, 2:44 PM.