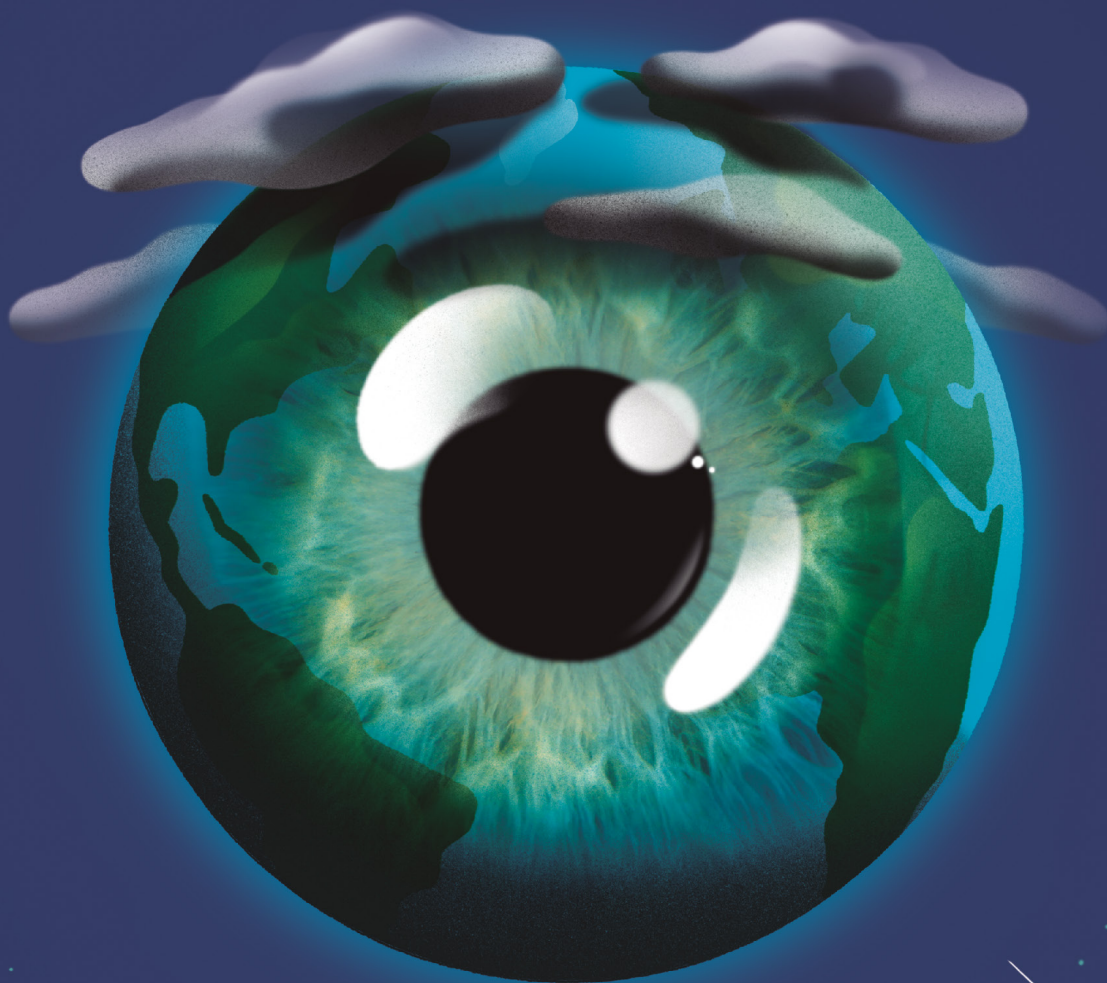


Deutsche Bank  
Chief Investment Office



March 2022

# CIO Insights



Weathering many storms  
Economic and investment outlook



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## Letter to Investors



Christian Nolting  
Global CIO

# Weathering many storms

As if “living with Covid” were not sufficiently challenging, the war in Ukraine and its human costs have added another geopolitical layer of complexity to the healing process for the global economy following the Covid recession. Markets however look set to weather the storms reasonably well.

Hefty increases in energy prices, stubbornly persistent and now even more prolonged supply chain disruptions and labour shortages had already sent inflation rates around the globe soaring to levels not seen for many decades. Entering 2022, hopes of an eventual fall in the number of Omicron cases in the U.S. and in many European countries offered scope for pent-up consumer demand to be satisfied, while full order books promised considerable upside for the industrial sector too.

However, with the sanctions now imposed on Russia by the international community and existing shortages being exacerbated by the conflict, economic growth may now be lower and the forecasts in this report reflect this. We now expect U.S. growth to outstrip that of the Eurozone in both 2022 and 2023 because of the Eurozone's geographical proximity to the conflict zone and Europe's structural disadvantage as the world's largest net importer of energy.

In the developed economies, already elevated inflation rates may now be driven even higher given the conflict-induced oil and gas price shock.

Household consumption may be dampened by higher energy prices, which could delay economic recovery. And although the general economic environment should remain favourable, the spectre of a temporary bout of stagflation in developed markets cannot be ruled out in the short term.

Asia should in theory benefit from a pick-up in global trade as increasing re-openings may well lead to a sustained period of robust demand. After all, much of Asia is still relatively locked down and thus economic activity is far below pre-Covid levels. That said, the current headwinds for growth (i.e. demand) in Europe may postpone the recovery in trade that many expected before the current Ukraine crisis.

With economies beginning to get to grips with recent supply side shocks, including the coronavirus pandemic, disrupted U.S./China trade relations and higher energy prices, U.S. and European corporates had been reporting prior to the invasion that demand was generally very robust and well above production capacity. Many firms are still planning to increase output and hire staff, which may put upward pressure on wages, with these higher costs then being passed to customers. A sustained deterioration in the outlook for corporates has not yet been observed, but at least some downside adjustments are likely going forward.

Finally, the decarbonisation of economies is still a secular inflation driver, via carbon pricing and underinvestment in traditional energy sources.

Central banks are now facing a dilemma as price pressures are unlikely to abate anytime soon and their economies need ample liquidity provision in light of deteriorating financial conditions and rising risks to growth. Monetary policy will be tricky and is likely to be increasingly data-driven and dependent on how the conflict evolves. But a corner now appears to have been turned: government bond yields have moved up markedly in recent weeks and can be expected to trend higher over time, due to inflationary pressures that are here to stay and responses by the main central banks.

Credit looks in a reasonable state to weather the storm. With strong balance sheet cash positions and record-low default rates the case appears to remain fundamentally positive for developed market (DM) credit. The case for emerging market (EM) credit remains intact. Bouts of technical selling pressure are to be expected, though, whenever risk sentiment sours due to the conflict situation or other factors like inflation spikes and/or central bank action.

We still remain cautiously constructive on equities. Despite rising interest rates, low or often negative real rates (given higher levels of inflation) continue to support the “there is no alternative” (TINA) argument and the earnings outlook is still positive; but the uncertainty surrounding our outlook has risen substantially and high levels of stock market volatility are likely to persist. “Risky rotations” on the stock markets will also likely stay with us for quite some time. And while, many real rates are expected to stay slightly negative on a 12-month horizon, they are likely to be volatile and “data-as well as Fed-dependent”.

Volatility is still high against the backdrop of the war in Ukraine and fundamentally sound investments may have already suffered more than implied by their intrinsic value due to broad-based risk reductions. Investment opportunities should however arise over time.

The commodities bull market continues to rage with oil prices already supported by low inventories. Oil and gas prices are also expected to remain elevated on account of the potential disruption to supplies from Russia and the sanctions-related imponderables.

Negative real yields and gold’s function as a crisis hedge keep it relevant. We remain constructive on real estate with the stage set for residential and industrial property to provide relatively attractive returns.

Foreign exchange markets are now increasingly responsive to geopolitics, while monetary factors may regain more relevance over time.

Strategic asset allocation remains the foundation of our investment approach. In these unprecedented times where high levels of uncertainty are attached to any and every forecast, the importance of risk management and diversification cannot be overstated. As we argued in our annual outlook, we believe that geopolitical issues are set to remain a defining feature of capital markets. Risk premia are here to stay and must be factored into investment strategies.

In a nutshell, investors should strive for an appropriate strategic asset allocation, not allowing themselves to be swayed by the storms that may disrupt markets but resolutely retaining their longer-term focus.

Christian Nolting

Christian Nolting  
Global CIO



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# Macroeconomic and asset class update

01



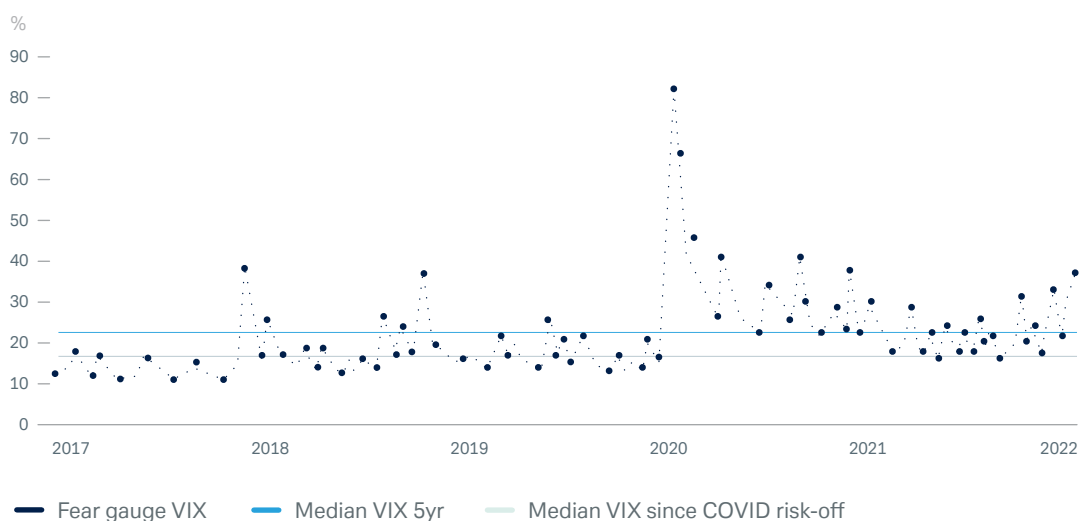
## Politics: sharing pains

The competition between different social and economic systems for resources, trade, technological leadership and geopolitical influence – in which the U.S. and China had been the main protagonists over recent years – has now seen Russia and Europe take centre stage.

The recent escalation in the Russia-Ukraine conflict, when Russia launched a full-scale invasion of Ukraine, has seen extensive sanctions imposed by the international community. Following the decisions made at the government level, businesses started to sever their ties with Russia. Corporate-level exposures to Russia and Russian assets are under review and in several cases are due to be divested. The financing of Russian commodities is often subject to restrictions as there are often uncertainties around their consequences. The scale of further sanctions is expected to depend on how the war develops. Prices of Russian and Ukrainian export goods like energy, metals and wheat have been rising in recent months, pushing inflationary pressures even higher and prompting additional fiscal measures.

Figure 1: The “Fear Gauge” (the VIX index)

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of March 2022.



Meanwhile, the competition between the U.S. and China continues with the U.S. administration currently reviewing the results of its Phase One deal with China. Although Chinese purchases did not meet the agreed targets, a new round of tariffs appears unlikely as U.S. demand is high and additional sanctions or tariffs would increase inflationary pressures in the U.S. Nevertheless, additional entities have been added to U.S. blacklists recently.

One difference between the two systems is their way of dealing with coronavirus. China is still sticking to its zero-Covid strategy, contributing to the slow recovery seen in global supply chains. In the U.S. and in most European countries the loosening of Covid restrictions has already started to affect corporate sentiment. Covid policies, fighting inflationary pressures and the public debt situation will be important topics in the upcoming presidential elections in France in April, the French parliamentary elections in June, and the U.S. midterm elections in November.

In the event of a Republican majority in the U.S. midterms, decisions to impose additional or stricter regulation, especially in the financial and technology sector, might also become more difficult. In the EU, climate change-driven initiatives and regulation concerning market dominance, antitrust measures and data privacy are under discussion. For China, there is the expectation that market stress induced by regulatory activities, including those aimed at promoting its “Common Prosperity” development objective, could ease towards the end of the year.

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## Russia's invasion of Ukraine has prompted extensive government-level sanctions and corporates severing business ties with Russia.

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### Politics: sharing pains

#### Market and portfolio implications:

- Geopolitics currently taking centre stage in financial markets, pushing volatility higher
- Dealing with the aftermath of Covid, inequality, climate change and digital transformation remain priorities
- Important elections on the agenda, especially the U.S. midterms in November

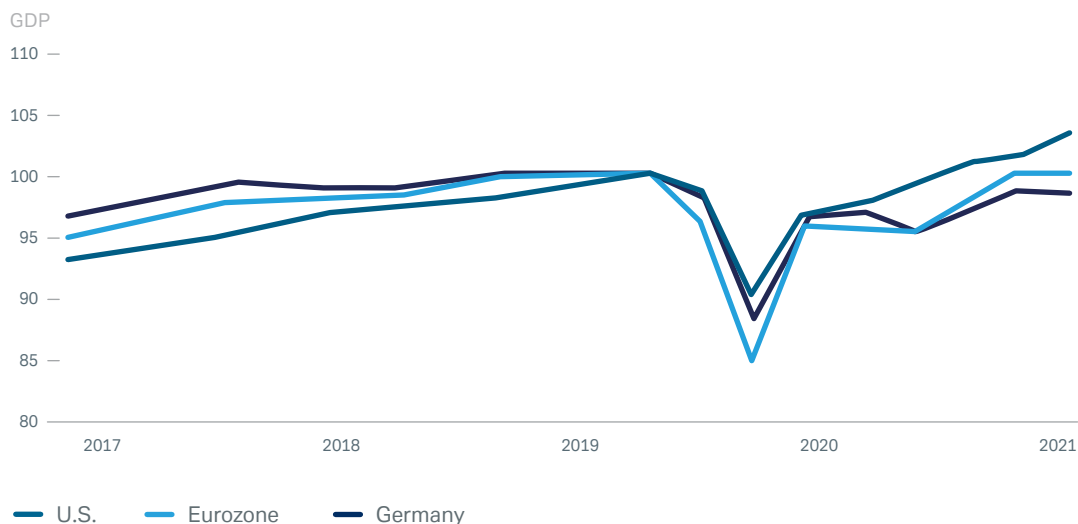
# 02



## Economy: running hot

Figure 2: Real GDP indexed

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of March 2022.



While U.S. growth has long since returned to its pre-crisis trend, many Eurozone countries still have lower GDP than at the end of 2019. Eurozone growth rates should therefore pick up relatively sharply when economic activity returns to normal. However, the escalating conflict in Ukraine could delay the recovery as higher energy prices are weighing heavily on the purchasing power of households, dampening consumption growth. At the same time the European economy is set to benefit from the fiscal stimulus supplied by the Next Generation EU fund, from which the first sizeable disbursements have already been made to promote digitalisation and climate protection projects. In the U.S. by contrast, there is growing uncertainty as to whether the Biden Administration's planned infrastructure programme will be passed by Congress, which means that appreciable fiscal stimulus could be a non-starter in 2022. As European economies are more affected by the Ukraine crisis, GDP growth in the Eurozone will likely slow down more sharply than in the U.S. compared to last year. Although several emerging market countries may also experience a slowdown, the level of growth is likely to remain decent on a long-term comparison. In China, the still uncompromising zero-Covid measures and the downturn in the real estate sector will probably hold back near-term growth in 2022, although the government and the central bank have already approved stimulus measures.

Given still relatively strong global growth and ongoing supply shortages in several sectors, the risks of overheating with hefty price rises in individual sectors have not been eradicated. In fairly tight labour markets, the shortages could continue to intensify and send wages rising faster.

In a high-risk scenario, in which fossil fuel trade between Russia and Europe comes to a standstill and energy prices spike, our economists would expect the European economy to fall into a technical recession, e.g. two consecutive quarters of negative GDP growth, due to unavoidable outage of industrial production, a deterioration in consumer and corporate sentiment, and negative knock-on effects for other sectors. Central and Eastern European countries and Germany would be hit hardest in this scenario due to their high dependency on energy supplies from Russia.

Should risks abate, the macro environment for benchmark government bonds would probably become difficult again, as robust growth rates make rising interest rates and yields more likely.

Figure 3: GDP growth forecasts (% YoY)

Source: Deutsche Bank AG. Forecasts as of March 3, 2022.

	2022	2023
 India	7.0	6.0
 China	4.5	4.8
 UK	2.8	1.5
 France	3.0	1.7
 Italy	3.2	1.7
 World	3.5	3.3
 U.S.	3.4	2.4
 Brazil	0.0	1.5
 Eurozone	2.8	2.2
 Spain	3.8	1.9
 Russia	-8.0	0.0
 Germany	3.0	3.2
 Japan	2.4	1.4

## Economy: running hot

### Market and portfolio implications:

- Economic recovery likely to be slowed by impact of war in Ukraine
- U.S. to outpace the Eurozone on the growth front
- Macro environment for bonds likely to remain difficult as interest rates and yields set to rise

# 03



## Asia: the eye of the tiger

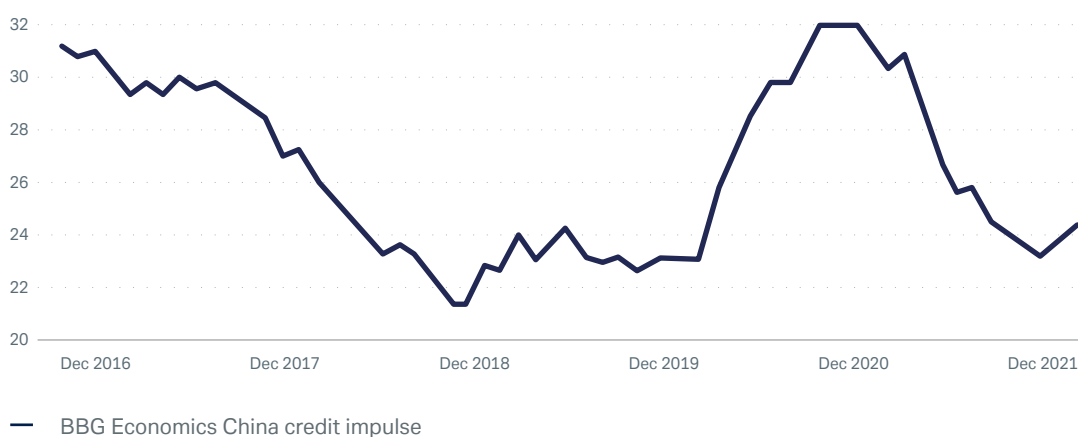
Asia's export-oriented economies were expected to be – and should still be – the main beneficiaries of the expected recovery in global trade. However, the war in Ukraine as well as higher energy prices clearly represent downside risks to these growth expectations. The potential impact on GDP growth and inflation is expected to vary across Asian economies – mainly depending on the export share of GDP and dependence on energy imports of each economy. Less strained supply chains and deeper negative output gaps in response to stricter containment measures for Covid have left the region less vulnerable to inflation pressures than elsewhere. However, since U.S. rates and bond yields have always been important determinants of Asian currency values and interest rates, Asia's central banks will not stand still over the course of the year, but move progressively onto their respective normalisation paths. But unlike at the dawn of past U.S. hiking cycles, central banks in the region – excluding China – seem this time to have more room for manoeuvre, and will not necessarily need to be ahead of or in lockstep with the Fed. The Bank of Korea, for example, has already hiked rates three times since October 2021 and South Korea is likely to be among the first Asian economies to finish its hiking cycle this time.

In China, a strict zero-Covid strategy has led to renewed restrictions on movement, and private consumption is weaker than anticipated. The Ukraine conflict creates additional downside risks for China's growth prospects – mainly as a result of a higher energy import bill. Accordingly, we have revised down our GDP forecast for China's growth in 2022 from 5.3% to 4.5%. Recently, the Chinese government delivered its work report to the National People's Congress (NPC), setting the annual growth target at "around 5.5%", which implies that average sequential growth will need to recover to an above-trend 6.5% QoQ seasonally adjusted annual average (SAAR), which would be challenging.

Average new home prices in China's 70 major cities rose slightly in January, but in the near future lower investment and declining sales in the real estate sector cannot be ruled out. While the tense liquidity situation in the property development sector might persist for the time being, we do not expect Beijing to be directly involved in potential settlements of payment defaults. Hence, the market shakeout is likely to take place at a local level, with usually better capitalised state-owned enterprise (SOE) developers taking over projects from their troubled private competitors. We anticipate that the People's Bank of China (PBoC) will implement further liquidity easing for China's banks and additional rate cuts to stimulate consumer demand as well as to strengthen capital investment. However, with some service sectors currently under pressure from Covid and renewed scrutiny of the tech sector, a still cautious short-term approach seems to be warranted.

Figure 4: China – credit impulse improving

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of March 2022.



Given India's large exposure to crude oil imports – accounting for 28% of total imports in 2020 – negative impacts on GDP growth are to be expected if oil prices remain at current levels or rise even further.

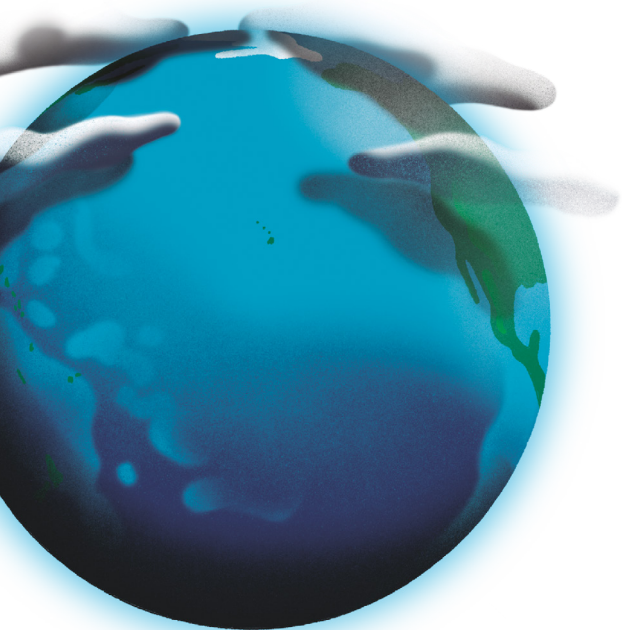
Higher oil prices are bound to have an adverse impact on India's inflation, fiscal and current account dynamics, which should ideally make Reserve Bank of India (RBI) more proactive regarding monetary policy normalisation. However, given RBI's dovish bias, the central bank may very well perceive the current oil price increase as a bigger risk to growth, thereby delaying the normalisation process further.

According to the recently published FY2022/23 budget plan, the Indian central government aims to support the ongoing economic recovery by increasing its investment framework by 35% compared to the current budget plan. The roughly USD100bn public investment package is to be used for measures such as road and rail network expansion and solar energy projects.

## Asia: the eye of the tiger

### Market and portfolio implications:

- Heterogeneous growth impacts of Russia-Ukraine conflict on EM Asia
- Growth challenges lead us to downgrade our Chinese GDP forecast
- High oil prices weigh on India's growth prospects – RBI could provide support



# 04



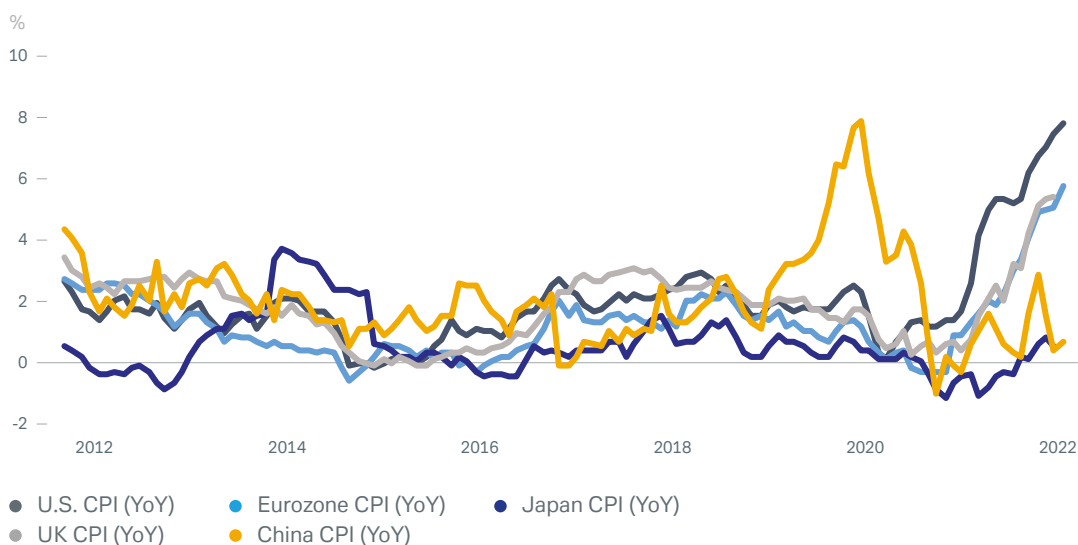
## Inflation: the rhino in the room

Rising energy prices, labour shortages and disruptions to supply chains and container shipping have sent inflation rates soaring to levels not seen for several decades. Consumer price inflation in the U.S. breached the 7% threshold and the Eurozone has seen levels of 5%. The rhino in the room has been unleashed and may now prove difficult to stop.

Economic recovery has caused surges in demand for goods and services. At the same time, the post-Covid world has brought some supply constraints – and supply is very difficult to control for central banks. Sanctions as well as businesses halting their operations in Russia are exacerbating supply chain problems. Furthermore, shortages in platinum, palladium and even neon are hampering the manufacturing of intermediate products. Service inflation is picking up too, and here we see one deep impact of the Covid crisis – labour shortages. The labour force participation rate in the U.S. has not reached pre-crisis levels, and in Europe unemployment has dropped below its pre-pandemic level and 25% of companies are reporting that scarcity of labour is limiting their production. Low unemployment supports the bargaining power of unions. Much will depend on whether employers and employees are more concerned about economic uncertainty or the inflation outlook. And while we expect some inflation drivers to recede (energy price rises should slow over the medium term), longer-term issues such as the shrinking workforce and the growing share of GDP generated by labour-intensive services are likely to remain, and inflation is therefore unlikely to return to pre-pandemic levels in the years to come.

Figure 5: Consumer price indices (YoY)

Source: Deutsche Bank AG, Refinitiv Datastream. Data as of February 28, 2022.



Supply shortages – of materials and labour – are likely to keep inflation levels elevated.

Inflation has multiple impacts on asset classes. For real returns it remains a challenge for nominal bond investments – in particular where a rise in yields is a headwind as well. Companies are trying to pass on their higher costs and those with pricing power should be able to protect their margins, but rising inflation is often accompanied by yield increases – a challenge for earnings multiples. The decarbonisation of the economy has an inflation impact too, at least in the short term via carbon pricing on the one hand and underinvestment in traditional energy sources on the other. In the longer run it could be deflationary, however, when the economies of scale of renewable energies prevail.

## Inflation: the rhino in the room

### Market and portfolio implications:

- Continued high inflation rates are driving yields higher and companies are trying to pass on cost increases
- Inflation having varied impacts on asset classes
- Greenflation contributing to longer-term inflation outlook



05



## Monetary policy: twilight fears

In our annual outlook we argued that the prospect of higher inflation posed a challenge for central banks which would be faced with a risk of being more reactive than proactive. With the resurgence of inflation central banks – most prominently the Fed – have in recent months moved away from the narrative that spikes in inflation were transitory. Multi-decade inflation highs made them rethink their monetary stance despite new approaches like average inflation targeting. The conflict in Ukraine presents an additional challenge for central banks, as spikes in inflation driven by supply shocks are largely beyond their control.

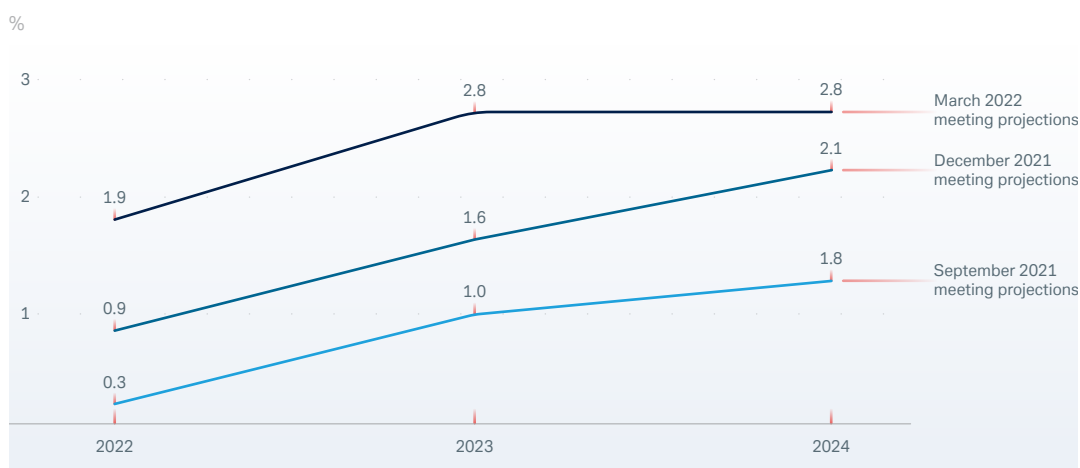
The Fed is expected to generally continue along its chosen path, though, as the U.S. is less directly affected by the war in Ukraine.

The ECB, however, is in a more challenging position as in addition to soaring inflation it also has to deal with an economic slowdown and seek to ensure financial stability. In general it will stick to its sequencing approach, i.e. ending asset purchases first (it has recently announced plans for a faster winding down of its asset purchase programme) and then hiking interest rates.

The Fed is likely to raise its Fed funds rate four more times by 25bp each in 2022 while a certain level of data dependency remains. Three further hikes are likely to follow in 2023. Fading economic momentum and lower inflation could stop the rate hike cycle, but higher inflation expectations could also call for even higher rates. In addition, the Fed will likely start to reduce its balance sheet later in the year 2022. Central banks are in uncharted territory here, as they disembark from an ultra-expansionary monetary policy that led them to expand their balance sheets, while government debt has increased as well. The last time U.S. inflation rates were at today's levels, the U.S. government debt-to-GDP ratio was much lower. Advocates of Modern Monetary Theory might face difficult times now.

Figure 6: Federal Reserve Board officials' projections for the Fed funds rate

Source: Federal Open Market Committee, Deutsche Bank AG. Data as of March 16, 2022.



The expectation of interest rate hikes and the move from quantitative easing to quantitative tightening have triggered a rise in yields, which is forecast to continue. Spreads have, however, also widened and a style rotation from long-duration, i.e. growth, stocks into value has become apparent – interrupted by the recent decline in yields. The shift in monetary policy may bring twilight to some long-lasting investment narratives as the hunt for yield becomes slightly less intense.

## Monetary policy: twilight fears

### Market and portfolio implications:

- More persistent inflation has triggered a central bank policy shift
- From quantitative easing to quantitative tightening
- Change in monetary policy narrative has impacted equity styles and fixed income

# 06



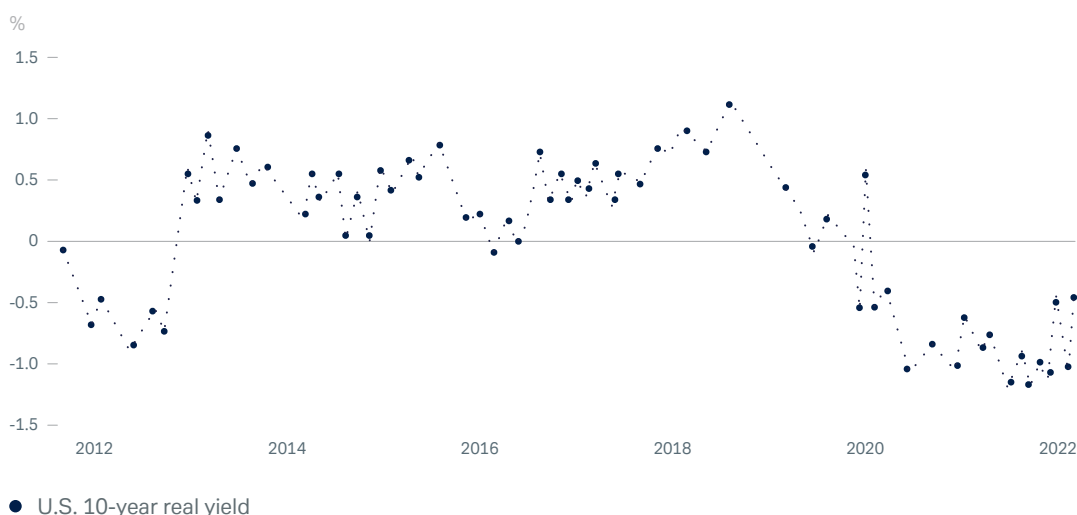
## Fixed income: shifting sands

2022 has been a challenging year for fixed income so far. The shifting sands we forecast within the fixed income asset class have led to increased volatility and yields initially trending higher in the U.S. and Europe.

Ultimately, however, yields are likely to be driven by the normalisation of monetary policy going forward, especially as central banks begin a cycle of rate hikes and balance sheet reductions. While yields on shorter maturities will be influenced by expectations of near-term changes in policy rates, longer-term government bonds will respond to changes in the expected terminal policy rates and the pace of quantitative tightening, i.e. the expected balance sheet reductions. An important assumption for all asset classes is that real yields are likely to remain negative over a twelve-month horizon.

Figure 7: Real yields expected to stay slightly negative

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of March 29, 2022.



Less accommodative monetary policy will have an impact on the interest rate structure. We expect the yield curve to flatten, with yields on short-term government bonds rising more sharply than their longer-term counterparts.

The outlook for peripheral spreads in the Eurozone is somewhat mixed. Growth and expansionary fiscal policy including the Next Generation EU (NGEU) recovery fund should remain supportive for the next twelve months. On the other hand, the prospect of rising policy rates and reduced monetary policy support due to the expiry of net asset purchase programmes could lead to widening spreads between the core and the periphery. Central bank asset purchase reinvestments and the ECB's commitment to averting fragmentation should prevent a significant widening of those spreads, but we do not expect a return to last year's lows in spreads.

Fundamentally, the balance sheet cash of USD investment grade (IG) remains elevated, which should limit borrowing needs. However, a strong number of rising stars would bring in additional supply to the market, technically weakening the case for this segment. For EUR IG, the invaluable support provided by the ECB via its corporate sector purchase programme (CSPP) is virtually certain to come to an end this year. But the decline in negative-yielding debt in the segment is likely to bring more inflows from institutional investors and we see spreads narrowing over the next twelve months.

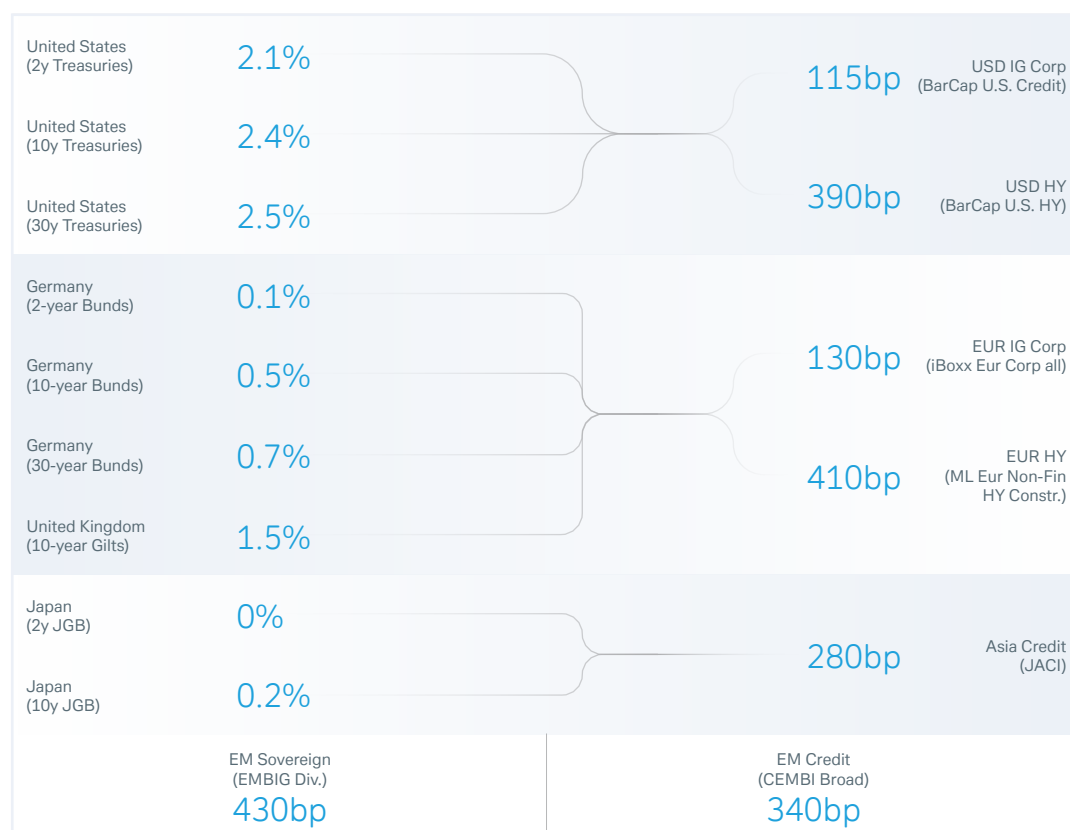
The high yield (HY) segment in both the USD and EUR markets is fundamentally in a very strong position at present. Default rates for 2021 in both markets were at record lows with USD HY at 0.5% and EUR HY at 0.7%. Although these are expected to rise to close to 1% in both regions, the fact that they are coming off such a low base means that they should not be viewed negatively. Nevertheless, in line with our expectations, the hawkish tilt by both the central banks pushed interest rate volatility higher and, consequently, spreads wider. As this seems to have been overdone, we expect the spreads to tighten from the current levels.

We believe the outlook for emerging market (EM) bonds is attractive in the medium term, while the near-term outlook is clouded by high inflation rates and uncertainties due to geopolitical tensions. Emerging market sovereign bonds should benefit from solid GDP growth – high commodity prices and a recovery in tourism should also be supportive.

Although geopolitical issues are likely to be a continuing theme for the sector, the lack of a dominant individual country weight should keep these idiosyncratic risks in check and push overall spreads lower.

Figure 8: Fixed income forecasts for end-March 2023

Source: Deutsche Bank AG. Forecasts as of March 3, 2022.



## Fixed income: shifting sands

### Market and portfolio implications:

- Real yields likely to remain negative over a 12-month horizon
- IG spreads to decline on a 12-month view
- Flatter yield curve expected as monetary policy tightens

# 07



## Equities: real(istic) returns

In the light of recent developments, we have lowered our forecasts for equity markets broadly. We still see decent upside for most stock markets, though. While we note that in the short term stock market performance hinges largely on the development of the Ukraine conflict as well as the impact of sanctions and potential Russian retaliation, we remain cautiously constructive on this asset class in the longer term for two reasons:

- 01 Our yield forecasts imply real yields will stay in negative territory for the foreseeable future, i.e. the TINA theme should remain valid. Nevertheless, we think that multiples have likely peaked for the cycle.
- 02 We feel comfortable with our single-digit earnings per share (EPS) growth assumptions for 2022, as companies have so far demonstrated the ability to sustain high earnings margins by passing on cost inflation to customers. We note that despite the market turmoil, bottom-up analysts have raised earnings expectations broadly for the full year 2022 this year, as direct earnings exposure to Russia and Ukraine is limited and concentrated in European companies.

Figure 9: Equity index forecasts for end-March 2023

Source: Deutsche Bank AG. Forecasts as of March 3, 2022.

### Equity index forecasts

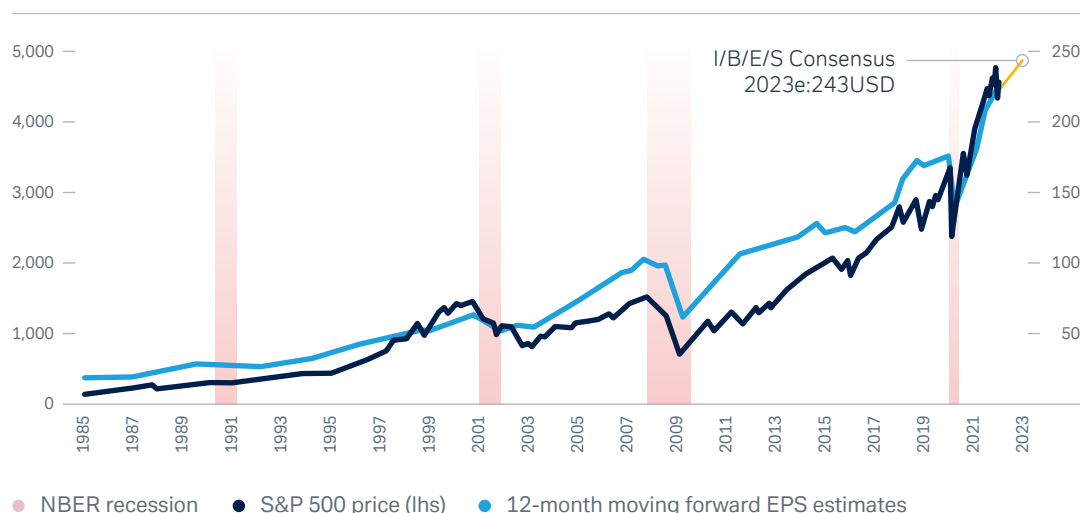
 S&P 500	4,600
 DAX	14,600
 EuroStoxx 50	3,900
 Stoxx Europe 600	460
 MSCI Japan	1,200
 SMI	12,000
 FTSE 100	7,500
 MSCI EM	1,220
 MSCI Asia ex Japan	780
 MSCI Australia	1,450

We stick to our neutral rating across equity regions. After being hit relatively harder by the swift increase in real yields, U.S. stocks have held up comparatively well in the wake of the invasion of Ukraine due to the limited business exposure of U.S. companies and a reversal of the previous move in real yields. We see single-digit upside from current levels, supported by a rebound in economic indicators once supply chain bottlenecks ease and the economy reopens after the Omicron wave.

Although S&P 500 EPS growth normalised compared to previous quarters, Q4 index quarterly EPS were still more than 20% above trend level. Reassurance about the ability of U.S. heavyweight companies to generate stellar earnings in uncertain times should help the S&P 500 to regain traction.

Figure 10: Earnings cycles determine S&P 500

Source: Deutsche Bank AG, Refinitiv Datastream, National Bureau of Economic Research. Data as of February 25, 2022.



European equity markets are likely to stay under pressure for longer, given Europe's close proximity to the conflict, its higher level of energy dependence and its vulnerability to sanctions and potential retaliation by Russia.

However, with financial conditions to remain accommodative and fiscal spending to be ramped up, we still see upside for European stock markets. However, we expect market volatility to remain elevated given the uncertainties around the war in Ukraine.

Eastern European emerging markets are suffering from both their high dependency on Russian energy and their proximity to the conflict. Hence valuations are likely to remain under pressure with a potential for further deratings. Asia Pacific stocks have proved relatively stable, seeing only minor increases in risk premiums. Latin America has emerged as the best performing region due to its weak linkage to Russia and the high weight of its commodity sector. While contagion effects might also drag on emerging markets, comparatively high interest rates offer a margin of safety for combating diminishing economic growth.

## Equities: real(istic) returns

### Market and portfolio implications:

- Despite lowering our forecasts we still see decent upside for most equity markets
- Risk management will be key to navigating high stock market volatilities that are unlikely to abate anytime soon
- Real yields to remain negative, so TINA theme should remain valid and – together with earnings – drive stock markets higher over 12 months

08



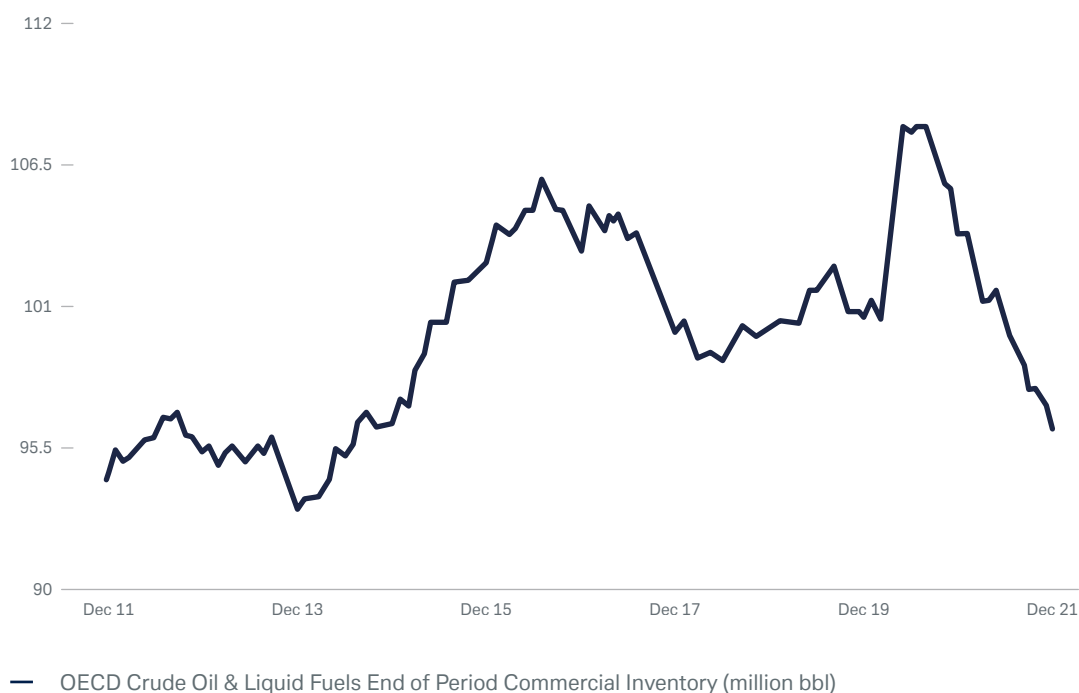
## Commodities: green growth

**Oil:** In early March, the U.S. announced a ban on oil, natural gas and other energy imports from Russia. The UK will phase out imports of Russian oil and oil products by the end of 2022. It is currently unclear to what extent other countries will follow suit. However, both the EU and the UK do not want to stop natural gas supplies from Russia for the time being.

The release of oil from the strategic government reserves could not stop commercial inventory drawdowns. On the supply side, OPEC+ continued to underproduce relative to its targets, and we remain sceptical about OPEC+ reaching its announced baseline production levels. A deal with Iran could, however, bring more capacity to the market, and producers in the U.S. are likely to start cashing in on price strength with the rig count gradually ticking up. This should result in supply potentially outpacing demand in the coming quarters. However, OECD commercial inventories are at their tightest levels in more than seven years and roughly 8.5% below the previous five-year seasonal average. The fact that rebuilding these inventories to pre-Covid levels will be a lengthy process should cushion the price impact of a surplus market.

Figure 11: Energy inventory situation

Source: Energy Information Administration, Deutsche Bank AG. Data as of March 1, 2022.



Level of dependence on Russian oil and gas is determining respective government policies on sanctions.

The situation in Ukraine is likely to remain in focus for the foreseeable future. Western demand for oil from outside Russia should provide a sustained tailwind for prices. We therefore expect a WTI price of USD 110/b by the end of March 2023.

Prices of industrial metals such as copper, nickel and aluminum have also increased significantly due to the conflict in Ukraine. Industrial metals should also support the transition to green energy sources.

**Gold:** Both expectations of rising inflation expectations triggered by the sharp increase in the price of energy commodities and the status ascribed to gold as a "safe haven" are currently causing prices to test new highs. The precious metal is riding its hedging characteristic for the time being given high inflation and geopolitical tensions. Were it not for the war in Ukraine, gold may well have come under pressure due to the expected Fed rate hikes. With central banks possibly acting more cautiously and inflation expectations rising at the same time, real interest rates in many industrialised countries are likely to remain deeply negative for quite some time. Inflation and geopolitical risks will keep attracting investors to gold. This should support the gold price, which we forecast at USD 2,100/oz at end-March 2023.

Figure 12: Commodity forecasts for end-March 2023

Source: Deutsche Bank AG. Forecasts as of March 3, 2022.



## Commodities: green growth

### Market and portfolio implications:

- The geopolitical situation will keep oil prices at elevated levels
- Rising inflation expectations and geopolitics will attract further investors to gold
- Industrial metals such as copper, nickel and aluminium should also remain in demand

# 09



## Real estate: still building

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Following a boom year in 2021, the overall real estate outlook for 2022 remains positive. With the anticipated continuation of the global economic recovery and real global property yields above their long-term averages, property prices could prove resilient even within the current environment of tightening monetary policy and geopolitical uncertainty. However, the Russia-Ukraine war is currently an incalculable risk. Extensive sanctions and further increases in energy prices could stall the European economy in particular, and depress the real estate market.

Of all the sectors, the outlook for offices is the most unclear. Accordingly, office price growth in the U.S. was the most sluggish of the sectors covered below in 2021 (c.14% YoY). Vacancy rates remained high at almost 17% by the end of 2021, 5pp above pre-crisis-levels. Looking ahead, employment growth and an abating pandemic could buoy the market. However, with more people likely to work from home in future, pre-crisis vacancy rates seem a long way away, especially in some European countries where remote working has historically been less common (e.g. Spain, Germany, Italy). In view of tight labour markets, tenants may favour high-quality spaces in order to attract and retain employees.

Sentiment around retail space varies across the globe. In 2021, the average retail property price in the U.S. increased 21.5% YoY due to low supply and robust absorptions. European retail property performance is likely to be more fragmented and less dynamic. Urban prime high street stores could benefit from a recovery in tourism, while the structural shift towards remote working and e-commerce are likely to weigh on city-centre retailing.

In the U.S. and in Europe industrial was the best performing property sector in 2021. This outperformance could very well continue despite rising supply in 2022. U.S. prices were up by 29% YoY in 2021, boosted by e-commerce and industrial activity growth. Demand comfortably outpaced supply, leading to a record low vacancy rate of 3.2% at the end of last year. Rents rose 11% YoY to their highest on record. As absorption rates are expected to remain elevated, rising construction costs could translate into another year of double-digit rent growth in 2021. Similarly, European industrial rents are expected to continue growing at a steady pace alongside further yield compression. With expected returns of slightly above 10%, prime industrial properties could lead the European ranks in 2022. However, their margin of outperformance is set to decline compared to 2021.

U.S. residential properties appreciated by 23.6% YoY with the net effective rent rising 13.4% in 2021. The vacancy rate in the sector declined by 2.2pp to 2.5%, its lowest on record. Yet affordability among households remains solid, as the NAR's Affordability Index finished at around 148 points last year. Despite rising mortgage rates, strong employment and wage dynamics as well as structural factors around household formation and housing shortages might boost returns in 2022 to above 10%. Similarly, as well as structural housing shortages in Europe and institutional investor-driven demand could drive up prices and dampen already low yields.

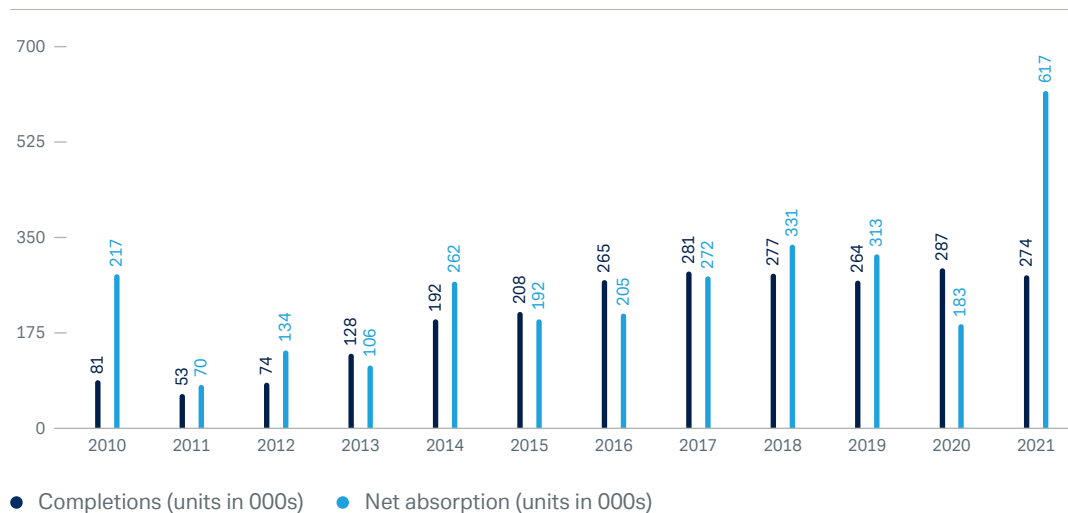
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Overall real estate outlook for 2022 remains positive, although the impact of the war in Ukraine represents an incalculable risk.

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Figure 13: U.S. multifamily completions and net absorptions

Source: CBRE, Deutsche Bank AG. Data as of January 2022.



## Real estate: still building

### Market and portfolio implications:

- Visibility for office space remains low as the pandemic and structural changes cloud the outlook
- U.S. retail could perform well considering favourable demand-supply dynamics. In Europe, a more selective approach might pay off
- Industrials and residentials in sweet spot of structural changes. Yields could compress further despite monetary tightening and adverse effects of the conflict in Ukraine

# 10

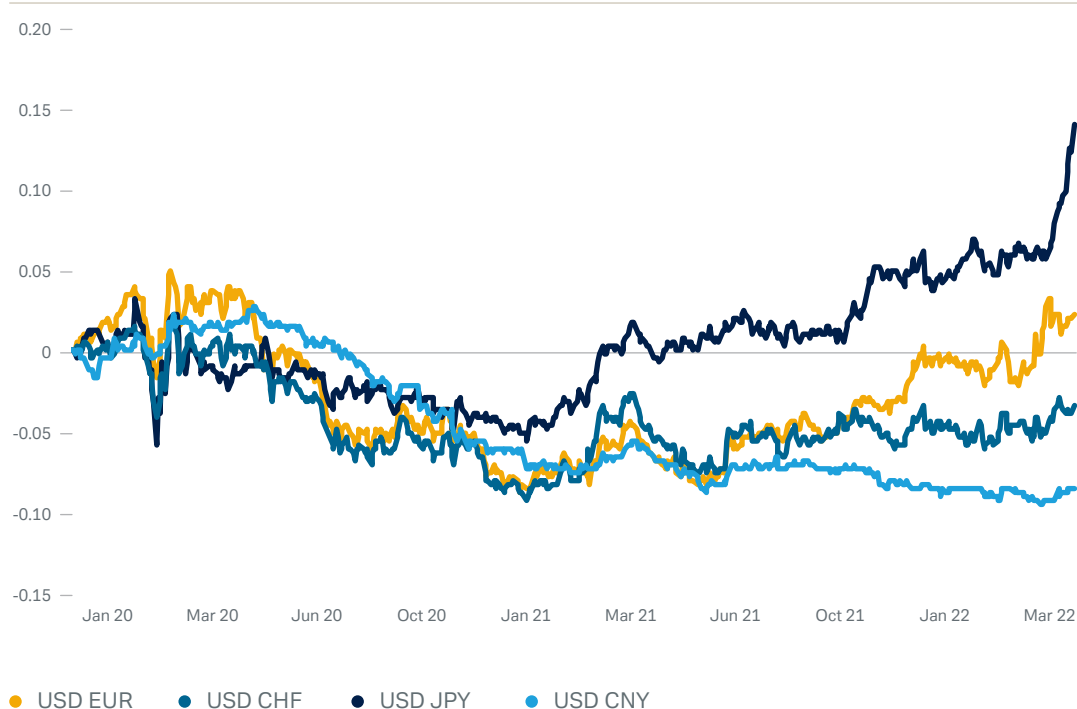


## FX: macro matters

Until mid-February, both the U.S. dollar (USD) and the euro (EUR) had benefited one after the other from increasing expectations of more restrictive monetary policy by the respective central banks. Overall, however, this ensured that the currency pair traded in a very narrow range. This all changed with the invasion of Ukraine which put the supposed currency “safe havens” in focus. First and foremost, was the U.S. dollar, since the U.S. economy is likely to be affected to a much lesser extent by the conflict in Ukraine. The Swiss franc (CHF) and the Chinese renminbi (CNY) were also in demand on the foreign exchange markets. Commodity currencies benefited from the rally in prices.

Figure 14: Currency development 2020-2022

Source: Refinitiv Datastream. Data as of March 29, 2022.



The USD is likely to remain supported in the short term due to safe-haven demand. While we now expect the ECB to hike less than initially thought as it tries to maintain favourable financing conditions in the region, the risk premia that have been baked into the EUR recently should reverse at least partially over the coming twelve months. In addition, the safe-haven flows into the USD are likely to moderate.

Thus, we think that the EUR will strengthen especially in the second half of the year; however, it may not be able to reach our pre-conflict forecast of 1.20. We now expect the EUR to trade vs. USD at 1.15 by end-March 2023. Our forecasts for USD/JPY and GBP/USD remain largely unchanged from those we made for the end of 2022. Monetary policy in China is expected to be loosened, in contrast to the U.S. We therefore see the balance tilted slightly in favour of the USD, pushing the USD/CNY to 6.45 by the end of March 2023.

Figure 15: FX forecasts for end-March 2023

Source: Deutsche Bank AG. Forecasts as of March 3, 2022.

EUR vs. USD	1.15
USD vs. JPY	115
EUR vs. JPY	132
EUR vs. GBP	0.82
GBP vs. USD	1.40
USD vs. CNY	6.45

Strong commodity prices are likely to continue supporting the Australian dollar (AUD), New Zealand dollar (NZD), Canadian dollar (CAD) and Norwegian krone (NOK) – however, higher commodity prices could dampen the global economy in the medium term, allowing tailwinds to turn into headwinds. As in 2021, many EM currencies are still being supported by high commodity prices and central bank rate hikes (e.g. Brazilian Real (BRL), South African Rand (ZAR), and Mexican dollar (MXN)). Latin American currencies in particular have even appreciated significantly against the USD dollar since the beginning of the year. In early March, the renminbi rose to its highest level against the USD dollar in almost four years. China's current account remains impressively strong, its consumer price inflation impressively low, and PBoC monetary policy remains supportive. In general, the availability of carry will offer continued support for emerging market currencies.

The invasion of Ukraine has shifted the focus of market participants to safe-haven currencies such as the U.S. dollar and the Swiss franc, with the Chinese renminbi also in demand.

## FX: macro matters

### Market and portfolio implications

- Strong commodity prices continue to bolster commodity currencies but could dampen medium-term global growth
- Despite initial rate cuts by the PBoC, the CNY continues to trade relatively firmly
- Latin American currencies have appreciated significantly against the USD dollar since the start of the year

# Key investment themes



## ESG

As re-openings, resurgent economic growth, geopolitical tensions, and green transition commitments sent carbon prices soaring while global energy-related CO<sub>2</sub> emissions increased by 4.8% in 2021, company carbon reduction targets and their interplay with biodiversity measures will be in the spotlight to slow the process of climate change and biodiversity loss. Regulation (MiFID II), taxonomy (ESMA), and disclosures (TNFD) aim to increase transparency, provide guidelines for sustainable investing, classify impactful structured products and promote a sustainable transformation. However, while ESG is becoming more nuanced and complex, we have to differentiate more clearly between the many sides to sustainability by considering the positive contribution, the overall net impact on sustainability goals (and of products/services) by applying a forward-looking approach. This also includes promoting the use of natural resources ("natural capital") and prioritising social and economic considerations. With labour shortages set to continue, increasing numbers of employees at large companies are joining unions and forcing their employers to address their demands for better pay and conditions.



## Blue economy

We expect further pushes towards sustainability from established blue economy sectors like maritime transport to be paired with substantial attention on innovative and emerging sectors like marine renewable energy and blue bioeconomy. Yet it remains important to develop frameworks for public-private partnerships to address projects with uncertain risk profiles. This is the direction taken by the EU with the EGD Investment Plan, aimed at channelling at least EUR1tn of investments during the period 2021-2027, via a combination of EU and national budget financing, along with public and private investments. Discussions at this year's UN Ocean Conference in Lisbon (June 2022) and COP27 in Egypt will centre on these partnerships, a framework for a global ocean governance and innovative technological solutions. As regards investment criteria, attempts such as the UNEP Finance Initiative's Sustainable Blue Economy Finance Principles for lenders investing in the blue economy, the UN Global Compact's Sustainable Ocean Principles, and the EU taxonomy for sustainable activities will be important in bringing greater clarity around blue economy topics.



## Hydrogen

Environmental concerns and 'strategic commitments to global net-zero path will keep the focus on promoting alternative energy sources. Clean hydrogen is expected to play a key role in reducing greenhouse gas emissions and will be used mainly in the future to hard-to-decarbonise industries (chemicals, steel), long-haul transport and electricity storage. However, clean hydrogen remains very expensive to produce and is unlikely to become an economically viable solution for several more years, implying that we are still some way from clean hydrogen replacing fossil fuels on a wide scale.



## Resource stewardship

The United Nations Environment Programme (UNEP) defines natural resources as “basic inputs for goods, services and infrastructure”, including everything from plants and plant-based materials to metals, minerals, fossil fuels, land and water. In the course of an unprecedented transformation of our entire economic system, we will have to fundamentally reconsider the way we have used these resources. With sustainability the objective, product life cycles and value chains will shift towards a more circular economy, which will have implications for investors. As natural resources are either directly or indirectly linked to almost every one of the United Nations Sustainable Development Goals (SDG), it is safe to expect that resource stewardship will become an increasingly important investment theme.



## Water

The main driver for investing in water is the structural imbalance between supply and demand globally. Fresh water is scarce and climate change is exacerbating supply problems, while population growth, urbanisation and higher living standards in emerging countries are translating into increased demand. The water sector offers both defensive and growth characteristics and many companies have good pricing power. Investment needs are huge, government policies are supportive, public-private partnerships are being encouraged to help finance efforts to meet increasingly stringent environmental targets, and growth prospects across the sector remain promising.



## Artificial intelligence (AI)

In 2021, global investment into AI companies increased by 115% vs. 2020 and we expect the growth in funding to remain robust in 2022. In terms of areas for industry application, the technologies necessary for large-scale surveillance are amongst those expected to develop further in 2022. AI is also increasingly combining with blockchain technology to upgrade everything from supply chains, healthcare record sharing and media royalties to financial security. AI is expected to play a leading role in powering the evolution to Web 3.0 where ultimately the line between virtual and real becomes blurred. In the Metaverse AI will be used extensively, whether for accurate 3D avatar creation, multilingual accessibility or eventual expansion by creating self-learning structures. However, numerous challenges also remain around AI in areas of ownership, legality/ morality and accountability. In May 2021, the EU became the first governmental body in the world to issue a comprehensive regulatory document and in October 2021 China published a six-point code of ethics for AI. With the UN also having formed an AI ethics committee recently, we expect more countries will announce a regulatory framework for AI in 2022. Some of the topics could be: creating greater transparency for consumers, common product liability rules, limiting the use of personal information, and federal AI regulation in the US.



## Cyber security

Cyber security is of direct relevance for the trends that have emerged during the pandemic – specifically the growing use of technology, smart working and the increase in online interactions. As the world continues becoming increasingly connected via digital infrastructure, artificial intelligence and 5G there will be greater demand for investments and rules to protect data and increase the security of all online interactions. Cyber security is linked to topics ranging from technology and laws, new rules of collaboration, critical infrastructure protection, cyber privacy, “security of things”, cyber war, IT systems resilience and cybercrime.



## Healthcare and MedTech

The COVID-19 pandemic has accelerated the transition towards care delivery outside the traditional health system framework, with both patients and providers increasingly demanding a more seamless healthcare experience supplied when and where it is needed or wanted. And we believe that the medical technology (MedTech) space is set to make an important contribution when it comes to the creation of a holistic as well as human-centred approach to care. The level of R&D spending, vigorous M&A activity as well as unprecedented Venture Capital investment underline the confidence investors have in the innovation ecosystem that is associated with MedTech.



## Industry X.0 (including 5G)

As a result of the recent rise in interest rates due to the expected turnaround in monetary policy in the U.S. and other countries, shares in companies from the robotics and automation sector also came under pressure. Due to the high profit expectations in the future, these companies are suffering from a further increase in interest rates. Nevertheless, the long-term outlook remains positive in general. In addition, a return to pre-pandemic employment levels can already be seen in some countries. The shortage of skilled workers has thus come to the fore again, it being seen as a key driver for further automation of the economy.



## Infrastructure

In a world in which inflationary pressures are rising, infrastructure assets can offer a hedge against rising inflation levels, since the fees paid by users are often contractually linked to inflation. In the year to date, infrastructure has markedly outperformed global equities.

The re-opening of world economies may benefit more traditional infrastructure assets (railways, airports, ports, highways), while long-term technological trends brought into sharper focus by the pandemic will maintain their relevance in the future: adapting economies to these changes will require time and capital, coming from both the private sector and public entities.

Infrastructure expansion is the backbone of a number of our other long-term themes (for example, there is no digitalization without improvements to cloud storage facilities, there is no green energy without a newly configured electricity grid and there is no smart mobility without improved roads).

Finally, the fallout from the war in Ukraine prompted the EU to re-think its strategy around energy independence, which will be tackled in part via more infrastructure improvements.



## Millennials and Generation Z

Indices with a focus on millennials show a strong tilt towards the information technology and communication services sector. These sectors tend to include companies that can be categorised as "growth" stocks, meaning that investors expect them to grow and generate higher returns in the future. Currently, these stocks are displaying increased volatility in anticipation of the upcoming interest rate hike cycle. Increased volatility is thus also to be expected in the short term. However, millennials and Generation Z remain important in terms of numbers and political power. Strategies focused on millennials' consumption patterns (e.g. technology, entertainment) should therefore benefit in the long term.



## Smart Mobility

The strong rally in energy prices has accelerated in the wake of Russia's invasion of Ukraine. Europe's dependence on Russian oil and gas has prompted further revisions of measures to encourage investment in renewables and the electrification of transport. The cost of manufacturing electric engines is constantly falling and is already lower than the cost of building internal combustion engines.

The other two main themes underpinning Smart Mobility – connectivity and autonomous and shared driving – are making rapid advances in developed and emerging markets. The 5G footprint is increasing at a faster rate than expected and advances in software and technology are breathtaking, bringing us closer to the completely autonomous vehicle.

# Glossary

The [Bank of England \(BoE\)](#) is the UK central bank.

The [Bank of Japan \(BoJ\)](#) is the central bank of Japan.

The [Bank of Korea](#) is the central bank of South Korea.

[Bunds](#) are longer-term bonds issued by the German government.

[CBRE](#) is a provider of commercial real estate services and a publisher of related research.

The “[Common Prosperity](#)” concept of the Chinese government shifts the country’s focus/strategic direction away from “growth first” to balancing growth and stability.

[COP27](#) is the 27th United Nations Climate Change Conference, scheduled to be held in Egypt in November 2022.

The [DAX](#) is a blue-chip stock-market index consisting of the 40 major German companies trading on the Frankfurt Stock Exchange; other DAX indices include a wider range of firms.

[Earnings per share \(EPS\)](#) are calculated as a companies' net income minus dividends of preferred stock, divided by the total number of shares outstanding.

The [European Green Deal](#) is aimed at transforming the EU into a modern, resource-efficient and competitive economy and overcoming the challenges of climate change and environmental degradation.

The [European Central Bank \(ECB\)](#) is the central bank for the Eurozone.

An [emerging market \(EM\)](#) is a country that has some characteristics of a developed market in terms of market efficiency, liquidity and other factors, but does not meet all developed market criteria.

[European Securities and Markets Authority \(ESMA\)](#) is the European Union’s securities markets regulator.

[EUR](#) is the currency code for the euro, the currency of the Eurozone.

The [EuroStoxx 50](#) Index tracks the performance of blue-chip stocks in the Eurozone and includes the super-sector leaders in terms of market capitalisation.

The [Eurozone](#) is comprised of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

The [Fed funds rate](#) is the interest rate at which depository institutions lend overnight to other depository institutions.

The [Federal Reserve \(Fed\)](#) is the central bank of the United States. Its [Federal Open Market Committee \(FOMC\)](#) meets to determine interest rate policy.

The [FTSE 100](#) index tracks the performance of the 100 major companies trading on the London Stock Exchange.

[GBP](#) is the currency code for the British pound/sterling.

[High yield \(HY\)](#) bonds are higher-yielding bonds with a lower credit rating than investment-grade corporate bonds, Treasury bonds and municipal bonds.

The [International Energy Agency \(IEA\)](#) is an intergovernmental agency studying energy-related issues.

# Glossary

An [investment grade \(IG\)](#) rating by a rating agency such as Standard & Poor's indicates that a bond is seen as having a relatively low risk of default.

[JPY](#) is the currency code for the Japanese yen, the Japanese currency.

[MiFID II](#) is the generic term for the revision of the [Markets in Financial Instruments Directive](#), a legislative framework instituted by the European Union (EU) to regulate financial markets in the bloc via measures such as strengthening pan-European regulatory supervision and cooperation between national competent authorities, enhancing investor protection, facilitating access to capital and boosting trading transparency.

[Modern Monetary Theory \(MMT\)](#) asserts in its pure form that monetarily sovereign countries do not have to rely only on tax revenues or borrowing to finance their public expenditures; money can be safely created instead.

The [MSCI Asia ex Japan Index](#) captures large- and mid-cap representation across 2 of 3 developed-market countries (excluding Japan) and 8 emerging-market countries in Asia.

The [MSCI Australia Index](#) measures the performance of 60 large and mid-cap stocks that constitute approximately 85% of the free float-adjusted market capitalisation in Australia.

The [MSCI EM Index](#) captures large and mid cap representation across 23 emerging markets countries.

The [MSCI Japan Index](#) measures the performance of 259 large and mid-cap stocks that account for about 85% of Japanese market capitalisation.

The [NASDAQ index](#) is a market-capitalisation weighted index of around 3,000 equities listed on the Nasdaq exchange.

The [National People's Congress \(NPC\)](#) is China's legislative assembly which holds annual sessions every spring.

The [National Bureau of Economic Research](#) founded in 1920 in the U.S. conducts and disseminates non-partisan economic research.

[NextGenerationEU \(NGEU\)](#) is a major EU recovery plan, based around grants and funds, running from 2021-2023.

The [Organisation for Economic Co-operation and Development \(OECD\)](#) has 35 member countries and has the objective of encouraging economic progress and world trade.

The [Organization of the Petroleum Exporting Countries \(OPEC\)](#) is an international organization with the mandate to "coordinate and unify the petroleum policies" of its 12 members. The so-called "OPEC+" brings in Russia and other producers.

The [People's Bank of China \(PBoC\)](#) is the central bank of the People's Republic of China.

The [Phase One deal](#) is a trade agreement signed by the U.S. and China on January 15, 2020.

[Price/earnings \(P/E\)](#) ratios measure a company's current share price relative to its earnings per share.

[Real rates](#) adjust changes of values for factors such as inflation.

[Republican](#) refers to the Republican Party, one of the two major political parties in the U.S

[Reserve Bank of India \(RBI\)](#) is the central bank of India.

[Risk premia](#) refer to the return in excess of the risk-free rate of return that an investment is expected to yield. It is a form of compensation to investors for tolerating the extra risk.

# Glossary

The **S&P 500 Index** includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

**Sustainable Development Goals (SDGs)** were set by the United Nations General Assembly in 2015 and are intended to be achieved by the year 2030. They are a collection of 17 interlinked global goals designed to be a blueprint for achieving a better and more sustainable future for all.

**Stagflation** refers to an economy that experiences a stagnation in economic output at the same time as an increase in inflation.

The **Stoxx Europe 600** is a broad-based index that tracks the performance of 600 companies of various sizes from 17 European countries.

The **Swiss Market Index (SMI)** includes 20 large and mid-cap stocks.

A **spread** is the difference in the quoted return on two investments, most commonly used in comparing bond yields.

A **strategic asset allocation** process involves setting preferred allocations for asset classes on a medium to long-term time horizon.

**Taskforce on Nature-related Financial Disclosures (TNFD)** aims to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

**Treasuries** are bonds issued by the U.S. government.

The **United Nations Environment Programme** established in 1972 seeks to promote international cooperation and spur collective action programmes to address the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste.

**USD** is the currency code for the U.S. Dollar.

**Volatility** is the degree of variation of a trading-price series over time.

**West Texas Intermediate (WTI)** is a grade of crude oil used as a benchmark in oil pricing.

**Yield** is the income return on an investment referring to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value.

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