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Chief Investment Office



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CIO Insights



Changing gear

Economic and investment update



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Letter to Investors



Christian Nolting
Global CIO

Changing gear

Global economic recovery is not proving completely straightforward. With different countries pursuing very different approaches to the coronavirus (from “zero tolerance” to “vaccinated co-existence”), economies are reopening at different speeds and temporary shutdowns continue. But, despite this, economic growth is back to stay.

One focus remains on monetary policy, with central banks increasingly talking about when they might shift stimulus down a gear, if the need for it declines. But policy tightening here is not the game changer it might seem. Even after promised tapering (and subsequent rate rises) there should still be continued financial repression – i.e. negative real rates (nominal rates adjusted for inflation). Government bond yields will remain far below levels normally associated with rapid growth. This remains an atypical economic recovery.

Focusing just on monetary policy also brings with it the risk of missing other major economic and social developments. The global economy will be changing gear in many different ways, as governments, firms and individuals try to adjust to new realities. We can already see much short-term evidence of this – for example the problems in global supply chains (evident, for example, in high shipping rates and disrupted integrated circuit supply).

"The global economy is changing gear in many ways and the process of adjustment will continue. This will remain a supportive environment for risky assets, but it is important not to become euphoric or complacent."

There is more adjustment to come. We titled our annual outlook for this year “[Tectonic shifts](#)” and pointed out that many structural tensions in the global economy pre-dated the coronavirus pandemic. Imbalances are relatively easy to measure in areas such as the labour market and increased public borrowing, but less quantifiable effects may be more important over the long term – for example, the implications of European stimulus plans for regional integration. Disruption from the pandemic is also providing the pretext for some fundamental and deliberate changes of gear on social issues – for example, China’s prioritisation of “common prosperity” over very rapid growth. China’s new priorities, manifest through regulatory change and the reining in of some sectors (e.g. technology and real estate) already have wide-ranging investment implications. The need for tougher global action on environmental issues will also likely drive major change: we are only at the start of this particular road.

Where does this leave investors? Although the investment environment is complex, two things are particularly worth remembering: most economies are growing strongly and policy (both fiscal and monetary) will remain generally supportive. So even though many “peaks” (for example in economic and earnings growth) will soon be behind us, this should remain a supportive environment for risky assets such as equities, even if one with less dramatic gains than in recent months. As a consequence, alternative approaches to investing in such “real assets”, including illiquids (e.g. via private equity or venture capital), may well grow in importance.

In a situation where many issues (social, economic and corporate) remain in flux, it remains important not to become euphoric or complacent. Central bank and other actions will have an impact on markets and the potential for policy tensions on monetary policy remains. Geopolitical risks (for example within Asia, or around U.S./China relations) are also evident. As the global economy changes gear – in multiple ways – there will be many opportunities but the investment rules remain the same: stay innovative and open to new approaches, differentiate between temporary and structural change – and manage risk in portfolios.

Christian Nolting

Christian Nolting
Global CIO

Instant Insights

Outlook in a nutshell

- Economic growth continues to pick up but economies and policymakers still have to readjust in multiple ways to new realities.
- The investment environment is supportive but, with many issues still in flux, investors should not become euphoric or complacent.
- Investors need to differentiate between temporary and structural change, evaluate new investment approaches and focus on risk management.



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Macroeconomic and asset class outlook

Macroeconomic and asset class forecasts are tabulated on pages 18 and 19.

Growth: recovery running at different speeds

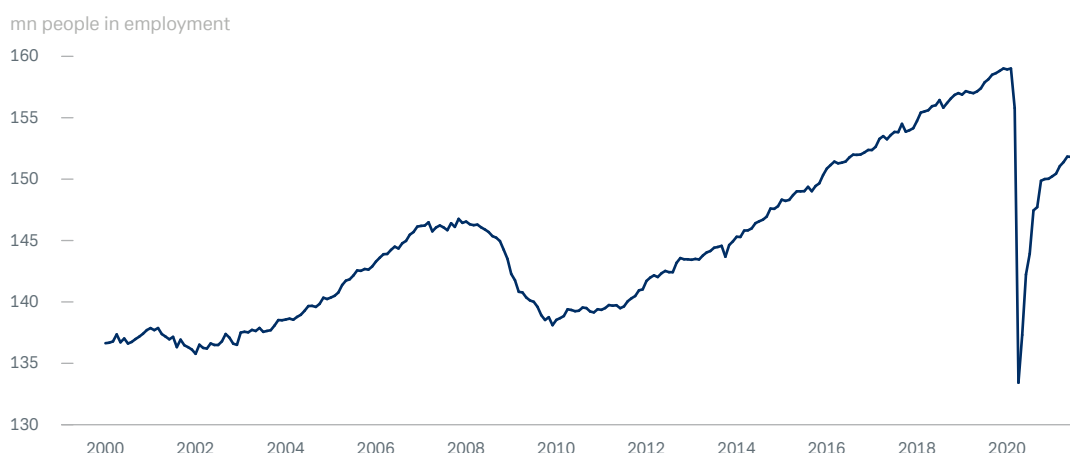
Economic growth rates in 2021 will generally be high, despite continuing problems with the coronavirus. Strong growth looks likely to continue into 2022 but will shift down a gear in regions such as the U.S. and many emerging markets. Economies will however follow different recovery paths, largely due to their differing management (in health and economic terms) of the pandemic.

For the U.S., despite continuing high coronavirus infection rates in some states, we are forecasting GDP growth of 6.2% in 2021 – the highest since 1984. Consumption remains the main driver of growth, and with economic re-opening the balance is now shifting from goods to services. Our U.S. growth forecast for 2022 (4.7%) reflects expectations of higher spending on infrastructure – which, depending on political agreement, might add as much as 80bp to U.S. GDP growth next year and have a substantial impact on subsequent years.

The U.S. policy response will come soon. Tapering (defined as the reduction of net monthly asset purchases by the Fed, so moving down a gear the speed of balance sheet increase) could start later this year and be over by September 2022. (The process of reducing the size of the Fed's balance sheet would be the next step and will obviously take longer.) The end of tapering and a reduction in the U.S. unemployment rate (with 3.8% reached by late 2022 or early 2023) will set the stage for two or maybe three rate hikes in 2023. But expect some market uncertainty en-route – for example, the market could be underestimating the size of initial reductions of Fed purchases of mortgage-backed securities (MBS) and Treasuries.

Figure 1: U.S. labour market recovery is rapid but incomplete

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of September 10, 2021.

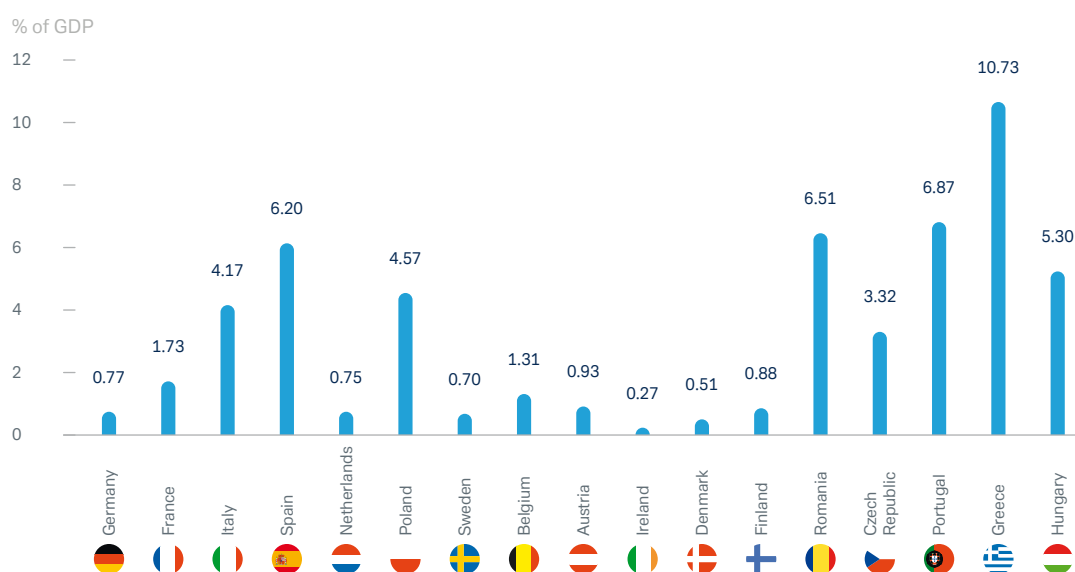


Europe will lag behind both in terms of growth and policy response. Even so, our forecast of 4.5% Eurozone growth in 2021 will bring overall Eurozone GDP back to pre-crisis levels by Q4 of this year. German growth (3.0%) will be below the Eurozone average this year, due in part to shortages of intermediate goods limiting industrial production increases. But in 2022 German growth will pick up, helping keep overall Eurozone growth close to this year's level, although some countries (e.g. Spain) will lag behind the average. As a consequence the growth gap between the U.S. and the Eurozone is shrinking.

Interest rate rises are still a long way off in the Eurozone. We expect the pandemic emergency purchase programme (PEPP) to be wound up at the end of Q1 2022, as scheduled. The ECB has already announced a moderately slower pace of purchases under the PEPP in Q4 2021. The expiry of the PEPP next year could also be followed by a scaling-up of purchases under the older asset purchase programme (APP). Meanwhile, of course, Eurozone economies will receive fiscal support from the Next Generation EU (NGEU) fund. This should boost both investment and growth (in some countries by large amounts, Figure 2) – but may also conceal vulnerabilities in Eurozone economies.

Figure 2: Planned European Union NGEU grants (excluding loans) relative to GDP

Source: EU Commission, Deutsche Bank AG. Data as of April 30, 2021.



Japan and the UK will demonstrate two different coronavirus recovery paths. Japan will record relatively modest rates of GDP growth this year and next (of just over 2.5%). Major changes in inflation rates are unlikely and the Bank of Japan seems likely to persevere with its current monetary policy. The UK, by contrast, is already staging a (rather uneven) recovery. Despite some other non-coronavirus problems with the UK economy, we think that the Bank of England could raise interest rates at the end of 2022 – in other words, ahead of the Fed.

In emerging markets, we have downgraded our Asian growth forecasts for 2021 and upgraded Latin America – which has gained from higher commodity prices and strong U.S. growth. But from 2022, Asia is likely to return to solid growth while Latin America's fortunes wane. Brazil's recovery will be muted in 2021 and will slow in 2022.

Within Asia, China and India will follow quite different recovery paths. In India's case, severe coronavirus outbreaks have hit growth in 2021, but the Indian economy has proved increasingly resilient to second and subsequent waves and the Reserve Bank has continued monetary policy support – despite long-standing inflation concerns. Indian growth could climb above 9% this year before returning to more normal levels next year.

By contrast, China's growth slowdown has been exacerbated by continuing attempts to control local coronavirus outbreaks. The Chinese authorities appear increasingly willing to accept slower economic growth as a route towards longer-term social objectives, given also a desire to reduce financial and other sources of risk. But the Chinese growth slowdown will not be dramatic and many sources of economic support remain, either via consumption, fiscal support or accommodative monetary policy – a further cut to banks' reserve requirement ratios or other measures are possible. China's recent experience reminds us that political issues remain key – despite coronavirus.

Inflation: no return to ultra-low rates

Hopes of growth “normalisation” have been accompanied by a belief that inflation will “normalise” too, encouraged by the continued Fed line that inflation is “transitory”. As with growth, different countries are running on different inflationary paths – year on year inflation rates may already be peaking in the U.S., but could keep rising in the Eurozone until early next year.

However, while average annual rates of inflation will likely be lower in 2022 than in 2021, we don’t expect inflation to go back to historically-low pre-pandemic levels. Economies’ supply curves will eventually move closer to demand – so recent high year-on-year rates in U.S. specific goods or wage inflation (e.g. U.S. used car prices and travel and hospitality wages) are unlikely to be sustained.

Some supply chain disruptions (e.g. around integrated circuits) will however take time to fix. Pressures around supply chains existed before the coronavirus (e.g. due to U.S./China trade tariffs and restrictions, and local events such as Brexit) but the pandemic may have accelerated a trend towards shorter, more localised chains – potentially pushing up costs.

Debate continues on the circumstances in which higher government spending in general will push up inflation. But it is also possible to identify a specific area of government policy with direct implications for prices – environmental policy. Becoming carbon neutral will have a cost. Implementation of a new carbon pricing system could add 106bp to German inflation this year. Implementation of the EU’s Emissions Trading Scheme (ETS) adds 200bp to inflation levels just through direct effects – although this impact could take time.

It is also important to expect volatility in those assets linked to climate change. Around 130 countries around the world are committed to decarbonisation by 2050 – but, given current predictions around temperature rises, policy seems likely to need ratcheting up a stage further.

Carbon pricing is well advanced in the EU, but less so elsewhere. China launched a national carbon market in July and significant further changes to the international carbon market are possible, perhaps involving taxing carbon at the source of consumption, rather than production, an international carbon price floor, or an agreement setting lower carbon prices for emerging markets. All these alternatives would have implications not only for price levels, but also for both economic activity and asset classes.

Bonds: financial repression will continue

Financial repression will remain the name of game. Government bond yields will increase modestly, but real rates of interest (i.e. adjusted for inflation) will remain low or negative. As noted above, U.S. official rate rises are not expected until 2023.

However, while the 12-month asset class forecasts (see page 19) generally look benign, there are questions about how exactly we get through the next few months. This could add risk from a capital markets perspective. There is an assumption that tapering (i.e. scaled back monetary policy support) is largely priced into markets, but there may be little pricing yet for the proper hiking cycle (likely to start in 2023). Disentangling the coronavirus cycle and the normal economic cycle remains difficult, just as both policymakers and markets are uncertain about the lagged effects of existing fiscal and monetary policy or how consumers will react to higher prices. Markets as a result may already be pricing in coronavirus recovery – but not the hiking cycle.

Government bond yields are likely to rise towards levels more compatible with strong growth – but the process will be partial and take time. Our 12-month forecast (end-September 2022) is for 10-year U.S. Treasury yields at 2.0% and 10-year Bunds of 0.0% although the path to these levels is unlikely to be smooth. Recent recoveries in yields have quickly run out of steam.

Different parts of the Treasuries yield curve will also be affected by different factors. At one end of the curve (e.g. 2-year), expectations of rate rises will be the key driver; at the other end (30-year), long-term inflation expectations may be the main issue. The steepness of the curve will depend on the relationship between the two.

Credit: meaningful yield will require risk

We forecast a slight tightening in corporate credit spreads over a 12-month horizon, but yields across much of this asset class will remain negative in real terms. There are also risks here from the speed of Treasuries yield development: too strong or erratic a Treasuries yield move could disrupt corporate spreads.

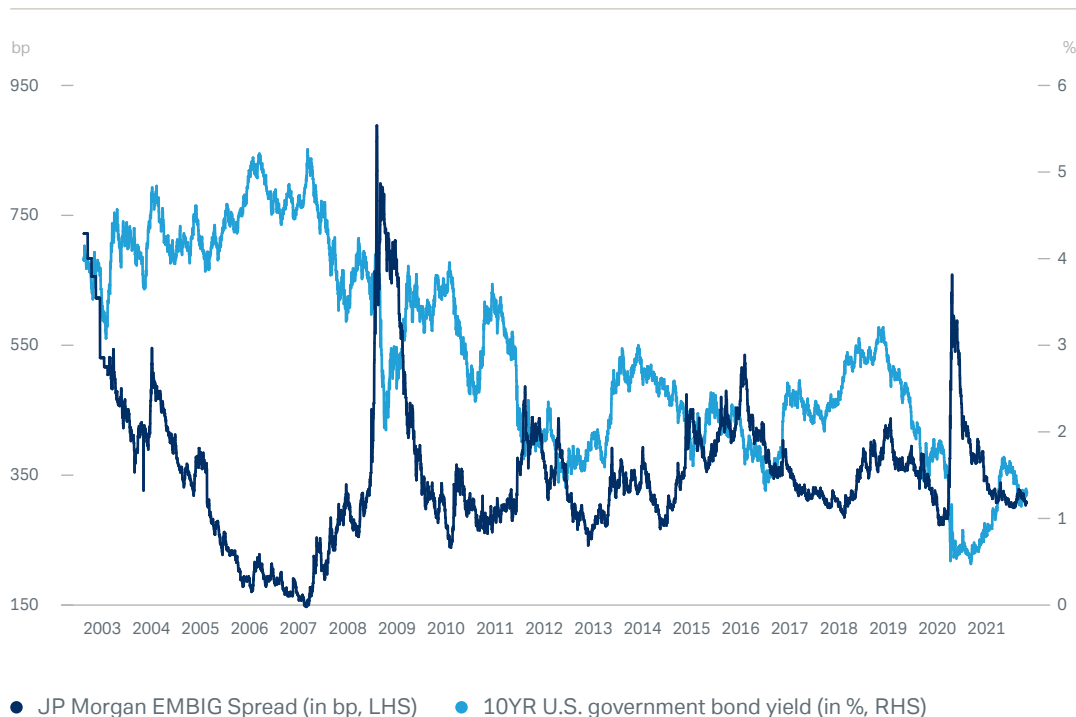
This leaves us cautious on [investment grade](#) bonds, despite underlying decent market fundamentals. In USD investment grade, demand continues to surprise on the upside, e.g. from pension funds seeking duration. In Europe, too, investment grade is being chased for regulatory purposes and official buying will continue via the ECB's APP – the ECB owns 27% of the eligible corporate universe. But set against this remains the fundamental problem that valuations are high on most measures and potential returns low.

USD [high yield](#) benefits from low default expectations (current rates 1.5%) and the growing share of the market accounted for by "rising stars". However, even though the fundamentals are constructive, there are risks here – particularly if rates go up quickly, something that might hurt high yield bonds and favour loans. USD high yield, along with EUR high yield, is similarly unlikely to gain from another big move in spreads but they are a source of carry. EUR high yield is also benefiting from reduced dispersion and low default rates – although there must be questions around the extent to which existing corporate earnings margins are maintainable into 2022.

Chinese bonds have cast a shadow over [emerging market corporate credits](#). Perceptions around the willingness of central or local governments to bail out failing firms have been challenged, with investors exiting sectors seen as particularly problematic (e.g. property). Overall spread forecasts mask a considerable divergence in investor appeal between attractive areas and those at risk of large-scale unloading.

Figure 3: Rising U.S. yields have a limited impact on EM spreads over time

Source: Bloomberg Finance L.P., JPMorgan. Data as of September 10, 2021.



Outside of Asia, corporate credit has seen strong development – with, for example, Latin America’s main export names often benefiting from U.S. recovery and perhaps some room for catch-up by domestically focused firms. At a global level, we see some tightening potential.

We stay generally positive on emerging markets sovereigns. There are continued risks around geopolitics and growth but also supportive fundamentals (e.g. external balances and the use of IMF money to boost forex reserves) although investor focus may be differentiated on areas such as fiscal policy. Figure 3 also suggests that the impact of rising U.S. Treasury spreads on EM spreads is relatively limited on a long-term horizon.

Equities: tapering is not a game changer

Equities have delivered good returns this year, although there have been disappointments around emerging markets (including China) and, at least until recently, Japan. Growth stocks have done well, but with some intervening rallies in value stocks as yield expectations have fluctuated.

Tapering is unlikely to be a game changer for equities. With financial repression still a fact of life, even after tapering and subsequent rate rises, negative real rates will maintain equities’ appeal. In other words, the “TINA” argument (“there is no alternative”) still holds true.

On a 12-month horizon, we expect positive returns from equities – although gains will likely be smaller than over the past year. Strong earnings momentum will mean that markets can now rise without increases in price/earnings (P/E) valuations – unlike in previous years (Figure 4). However, we may eventually see a more sustained shift into value and cyclical stocks – and away from highly-valued growth stocks.

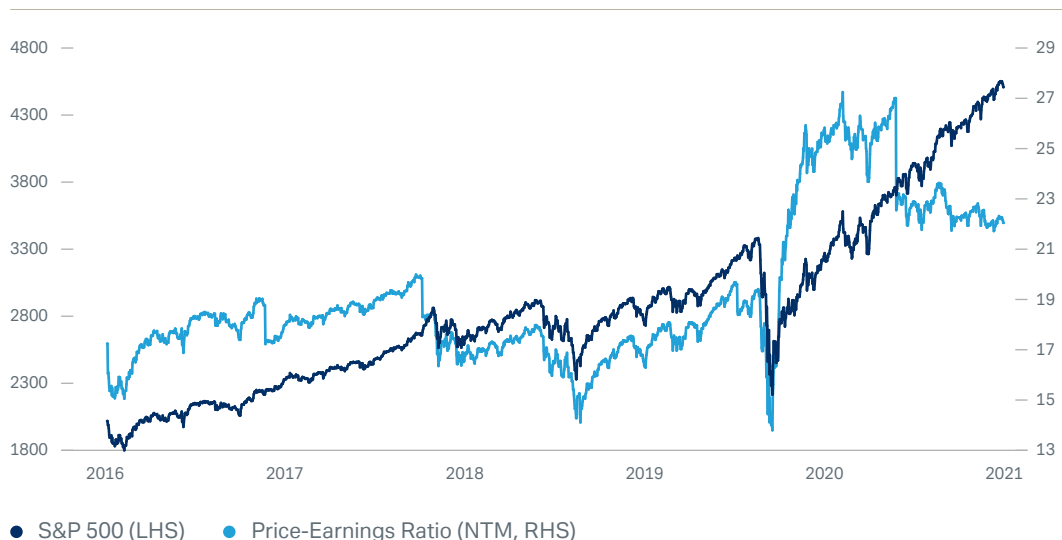
In the U.S., Q2 earnings were well above expectations – there were big earnings “beats”, particularly around most things digital. We are forecasting average S&P 500 earnings of USD200 dollars in 2021. But the speed of earnings growth will shift down a gear. We are forecasting 5% S&P 500 earnings growth in 2022, rather than the 10-15% that might normally be expected in such a strong growth environment. A planned corporate tax hike is one reason to be cautious. It would likely hit domestically focused businesses disproportionately – although the current proposed rate may be reduced in the legislative process. There are also questions about who really has pricing power in a situation of semiconductor shortages and other supply chain issues. Finally, will the digital rush continue? We can see some maturation in social media, but enterprise software and cloud activities look likely to remain growth areas.

Europe has enjoyed even stronger upward earnings revisions, with cyclicals (particularly important for this market) delivering strong earnings “beats”. With much of Europe only now emerging from lockdowns, some demand (e.g. for automotive) may be pushed into 2022, which should be supportive of earnings. Inflation, as suggested above, may start to ease back in 2022 and further good PMI data may encourage upward earnings revisions. Earnings will likely become more top-line (i.e. revenue) driven, but as the European equities market remains dominated by cyclicals, overall gains will need improvements in this area.

"With financial repression still a fact of life, negative real rates will maintain equities' appeal - despite disappointment around some emerging markets this year."

Figure 4: Earnings, not multiples, are now the main market driver

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of September 10, 2021.



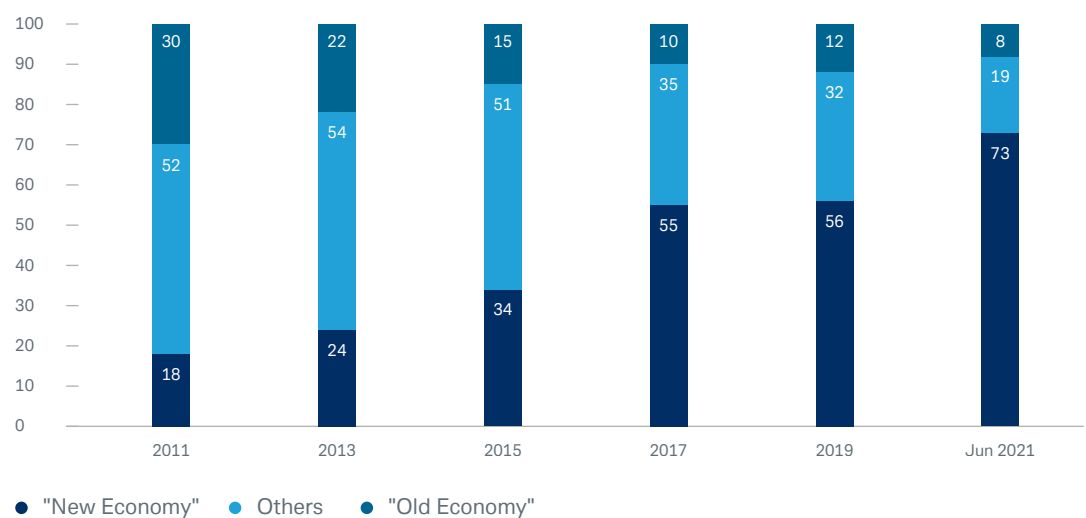
Japan has underperformed for much of this year despite strong earnings although there have been some recent signs of recovery. Interest in this market is still generally low despite good fundamentals. In theory, a catch-up is possible but it is difficult to identify a trigger. Usually strong seasonality may not be enough. Recent gains have followed Prime Minister Suga's recent decision to (in effect) resign and it is possible that his successor will have different policy priorities.

Emerging markets equities have also had a difficult 2021. A good start to the year has been followed by underperformance since mid-February. The reasons are not difficult to identify. The impact of relatively tight Chinese policy, with an increasing emphasis on regulation, has been exacerbated by economic reopening difficulties, with the country's "zero COVID" approach challenged by continued regional coronavirus outbreaks.

Chinese stocks have underperformed notably as a result, with tech-heavy indices (e.g. MSCI China, Figure 5) faring particularly poorly. (A-shares have been more resilient.) At present, there is little visibility on what will happen next and underlying policy intentions towards the private sector. Opportunities will still exist but there is no convincing catalyst yet to re-rate. The "common prosperity" goal could help consumption in the longer term but in the short term will continue to create uncertainty.

Figure 5: The changing composition of the MSCI China index

Source: MSCI, Deutsche Bank AG. Data as of September 10, 2021.



Notes: "New Economy" sectors are defined in this context as Consumer Discretionary, Consumer Staples, Healthcare, IT, Media & Entertainment; "Old Economy" sectors are Materials, Energy and Industrials; Others are Real Estate, Utilities, Financials and Telecom.

Outside of China, most of the rest of Asia looks reasonably valued and earnings growth will pick up but, again, there is no catalyst for rerating. We remain positive on Asia over the longer term but over the next six months or so would remain cautious.

Venture Capital – potential rewards but also risks.

Publicly traded equities are of course not the only way to invest in firms. Private equity investments remain an alternative for some investors, with a continuing interest in Venture Capital. These are inherently risky investments but offer some potential advantages, aside from a chance to gain from the illiquidity premium – higher returns paid to compensate for relatively illiquid investments. The Venture Capital asset class has continued to expand during the pandemic, helped by its strong tech component, although it remains relatively under-developed in Europe. Venture Capital can allow investors to diversify a portfolio into a wide range of innovative firms, with low correlation with other asset classes. Set against this, the risks around individual investments are high, a long-term commitment is usually necessary and the involvement of top managers may be necessary to get decent performance.

Commodities: oil gains but gold loses out

Global economic recovery has been accompanied by sharp price gains for some commodities. The Bloomberg Commodity Price Index has risen by about 50% since the start of the year.

Oil prices have moved up strongly, based on a belief that global demand will continue to pick up and that global supply growth will be constrained – either by political will (e.g. OPEC+ production agreement) or by economic factors (e.g. production capacity investment). Both of these factors may be challenged in coming months, e.g. with the possibility of Iran returning to the market. But we think that although capital investment is bottoming out, it will continue to put a brake on output growth and we expect OPEC+ unity to hold up. Our 12-month forecast (WTI 12-month Forward) is USD68/b. In the medium term, there may be some temporary upside from ESG developments – the build-up of new alternative energy infrastructure will be energy-intensive.

Wholesale energy prices in Europe have increased sharply. The European emission allowance price (for carbon trading) has increased by more than 80% YTD. There are also worries about gas storage levels: with winter around the corner, European gas storage facilities are only 70% full compared to a past five-year average of 86% for this time of the year. A meaningful decline in gas prices looks unlikely in the near term. The situation will eventually normalise, but the timeline for this may be subject to various factors (e.g. the length and severity of the European winter).

Gold, by contrast, has not benefited from the current environment. Gold prices have fallen back in 2021 and we do not expect a sustained recovery. Negative real interest rates will of course provide some support for gold. But we expect the combination of rising nominal rates, a generally improving macroeconomic climate and the start of the Fed's tapering process to hurt investor allocations to gold over the next 12 months. Our end-September 2022 forecast is USD1,750/oz.

FX: macro factors back in the driving seat

Major currency pairs continue to evolve from being largely driven by risk on/risk off sentiment to becoming more responsive to macro factors. One way of looking at this is to examine how individual G10 currency pairs respond to daily movements in the S&P 500 index. An increasing number of currency pairs appear uncorrelated to this simple indicator of risk sentiment. However, it is important to identify which macro factors are driving currencies instead. At present, FX cross rates are not tracking short-term rate differentials: instead the focus is on 10-year swaps. In other words, markets are more concerned with long-term growth prospects.

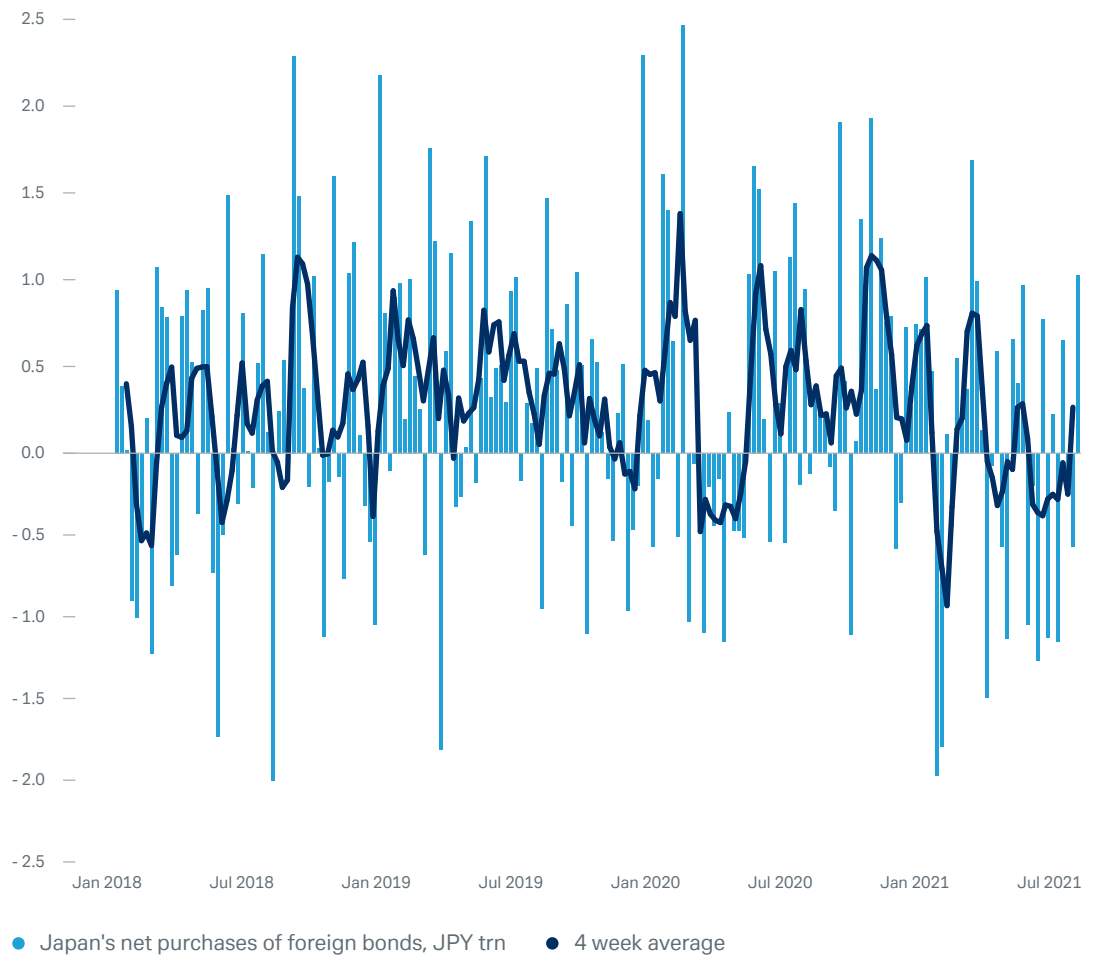
Our end-September 2022 EUR vs. USD forecast of 1.20 implies a slight depreciation in the USD from current levels. GDP growth differentials between the U.S. and the Eurozone are likely to narrow next year and there may be recurring worries about the U.S. "twin deficits" (budget and current account). This would make any interim appreciation in the USD difficult to sustain, unless there is a marked deterioration in global geopolitics or the coronavirus situation.

Investor behaviour in response to the U.S. rates cycle will also be important in determining other currency pairs. For example, Japanese investors (Figure 6) are likely to start positioning in 2022 for the start of Fed rate rises in 2023. With the costs of hedging likely to rise, they could buy USD bonds unhedged and unwind hedges on current holdings. We have therefore changed our 12-month USD vs. JPY forecast to 108.

"Major currency pairs are becoming more responsive to macro factors again – but it remains important to identify the key drivers."

Figure 6: Japan's net purchases of foreign bonds (JPY trillion)

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of September 10, 2021.



The renminbi will be worth watching, and is a reminder that views on EM currencies need to be differentiated. We envisage a guided gentle downward trajectory of the currency vs. the USD but this trend will not be extended indefinitely. A weaker currency may help China through a period of slower growth but the Chinese monetary authorities' underlying objective (establishing a level playing field with the USD) remains, keeping us long-term positive on the CNY as allocations will still need to be made into the currency.

Asset classes in summary



Core government bonds: Yields moving upwards on a 12-month horizon, but with reversals possible. U.S. tapering to start later this year and the process is likely to be completed in 2022 – before the Fed starts sequential interest rate rises in 2023. U.S. 10-year real yields will remain negative; 10-year Bund yields even more so. Nominal JGB yields may struggle above zero. Excess bond holdings in a portfolio could add to risk. **End-September 2022 forecasts:** 10-year U.S. Treasuries 2.00%; 10-year JGBs 0.20%; 10-year Bunds 0.00%.



Investment grade: Demand likely to remain strong for USD and EUR IG from various sources, with supply remaining relatively tight. A positive ratings drift is also evident in both USD and EUR and this is likely to continue. But valuations are high on most measures while spreads are low and are forecast to tighten only slightly. EUR IG should be resilient to higher rates (if the move is not too sharp) and the end of the PEPP in Europe (with APP purchases possibly increasing). But limited potential returns should be set against risk. **End-September 2022 forecast spreads:** U.S. IG (BarCap U.S. Credit) 75bp, EUR IG (iBoxx EUR Corp) 75bp.



High yield: Default rates in USD and EUR continue to decline to well below historical averages, with economic recovery and good corporate earnings likely to maintain a tailwind for the asset class. Ratings upgrades continue too. USD HY issuance is largely being used for refinancing, which is a positive, while strong central bank support is a tailwind for EUR HY. In the U.S. one focus could be on firms with rising star potential. In EUR we would be cautious around longer-term bonds with high interest rate sensitivity. **End-September 2022 forecast spreads:** U.S. HY (Barclays U.S. HY) 290bp, EUR HY (ML EUR Non-Financials) 280bp.



Emerging markets hard currency debt: Global developments remain generally supportive for sovereigns. Global economic recovery, high commodity prices and strong external accounts are positives for many, as is additional IMF support. Markets also seem relaxed about the implications of future rises in U.S. rates. Increased differentiation on fiscal performance is possible, however. In the corporate space, uncertainty around China continues but global fundamentals are good and this remains a rapidly growing asset class. **End-September 2022 forecast spreads:** EM Sovereigns (EMBIG Div) 300bp, EM Credit (CEMBI Broad) 290bp.



U.S. equities: The Q2 earnings season beat expectations and negative real yields are also likely to push the S&P 500 higher – the TINA (“there is no alternative”) argument remains. Our price/earnings valuation remains unchanged at 22.0 for 2022. Fed tapering appears priced in but watch for any issues around digital large-caps and the eventual extent of promised tax reforms. **End-September 2022 S&P 500 forecast:** 4,600.



European equities: The earnings outlook remains positive after a strong Q2 despite some doubts about European economic reopening. Eurozone monetary and fiscal stimulus also stays supportive with the ECB likely to proceed cautiously. Our forecasts assume a continuing P/E discount of around 25% for the Stoxx Europe 600 vs. the S&P 500. The European market seems unlikely to outperform the U.S. unless we have a decisive shift in preference to value or cyclical stocks. Elections in some European countries seem likely to have only a small impact on European equities markets. **End-September 2022 Euro Stoxx 50 forecast:** 4,250; Stoxx Europe 600 forecast: 480.

Asset classes in summary



Japanese equities: Strong recent earnings performance has not translated into appreciable equity market gains. Japanese firms have strong fundamentals (e.g. balance sheets) and the Bank of Japan (BoJ) will remain supportive but it is difficult to predict a trigger to allow Japan to catch up with other developed markets. Chinese recovery would help but questions remain about the impact of coronavirus on Japan. Market supply/demand dynamics have also been discouraging foreign buyers with the BoJ a major presence and the government pension fund forced to sell due to reaching its equity limits. **End-September 2022 MSCI Japan forecast: 1,200.**



Emerging market equities: Underperformance against developed markets this year has been worsened by growing concerns around Chinese regulation. The medium-term case for emerging market equities remains, but such policy uncertainties may remain for some time. Within China, we would focus on A-shares and more policy-friendly sectors (e.g. solar, semiconductors, industrial automation). Asia ex-China may present buying opportunities if the region reopens more in the coming months. Ex-Asia, commodity-linked firms or those exposed to U.S. reopening may be attractive. **End-September 2022 MSCI Emerging Markets forecast: 1,310.**



Gold: Inflation concerns did not provoke a sustained rise in gold earlier this year, with prices falling back to around USD1,750. Investor interest (e.g. via ETFs) remains subdued and speculative positions are down. Prices could rally temporarily on bad news around inflation, coronavirus or other geopolitical developments but we do not see sustained gains. The start of the Fed's tapering process is likely to be a negative, as will be rising nominal rates (although real rates will remain strongly negative). **End-September 2022 gold price forecast: USD1,750/oz.**



Oil: Continued (if patchy) global economic recovery from coronavirus has helped lift prices from under USD50/b (WTI) at the start of the year to around USD70/b. Continued OPEC+ production discipline has helped as has limited investment by other producers (e.g. the U.S.). Investment may now be bottoming out but we do not expect a surge in output. Global demand will continue to increase, particularly given expectations of further Asian reopening. **End-September 2022 WTI forecast (12-month forward): USD68/b.**

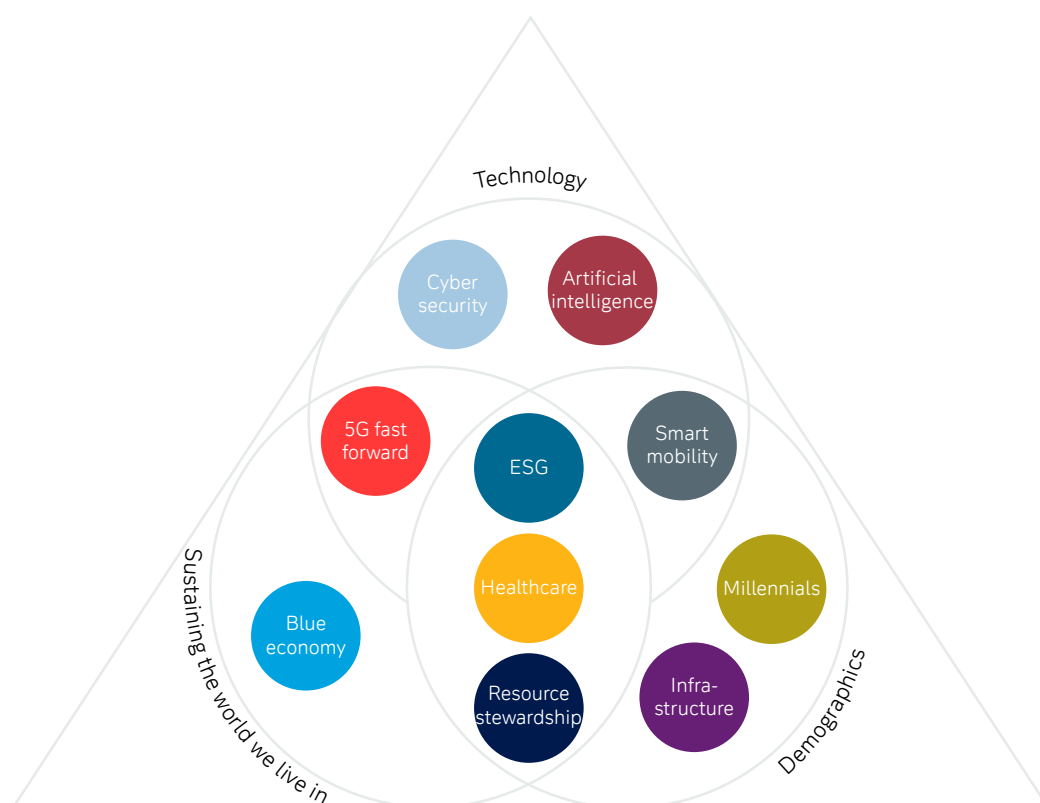


Key investment themes

We have been developing our key investment themes for five years. They are designed to have long-term relevance and to identify continuing investment opportunities. The ten existing themes can be visualised as sitting within a triangle bounded by the three dimensions of technology, demographics and sustaining the world we live in – or TEDS for short (Figure 7).

Figure 7: Key investment themes – the TEDS triangle

Source: Deutsche Bank AG. Data as of September 10, 2021.



Artificial intelligence (AI)

The coronavirus pandemic has encouraged more use of AI in multiple aspects of healthcare, e.g. disease and illness screening and diagnosis. AI also seems likely to play an increasing role in understanding climate change as well as having immediate application in mitigating it, e.g. through more efficient energy use. Financial sector use is also important. Increased computing power and storage will hasten its adoption, but there are multiple political risks.



Blue economy

Ocean health is critical to biodiversity, the natural capital provided by our oceans and the preservation of socio-economic systems. The blue economy is threatened both by climate change and by other man-made problems such as overfishing but it also offers new and emerging investment opportunities. More investment is needed and will require new financing mechanisms and good governance to ensure a positive impact.

-  **Cybersecurity**

Continued attacks at both a corporate and government level remind us of the need for cybersecurity, particularly given the centrality of digitalisation to both economies and critical infrastructure. The U.S. administration is pushing firms to step up cybersecurity efforts but some areas appear weak (e.g. the internet of things) and leading tech firms have recently pledged to increase spending.
-  **ESG**

ESG lies at the centre of our key investment themes. The importance of risk management via environmental, social or governance-focused investments has been underlined by the coronavirus pandemic. More government commitments on environmental targets look likely as the scale of the problem is understood, with sectors such as biodiversity increasingly in the spotlight. The role of private sector investment is likely to increase.
-  **5G**

5G (and increasing talk around 6G) has implications for many sectors and may also facilitate AI. Building the 5G network involves a wide spectrum of economic activity, from demand for semiconductors and raw materials through to infrastructure provision of data centres and cell towers and effective cybersecurity. Political risks have been highlighted recently with some countries not keen to rely on China as a technology provider.
-  **Healthcare**

Healthcare has been given even greater prominence by the pandemic but long-term drivers such as ageing populations and the increasing affluence of emerging markets are driving demand too. Technology continues to help drive transformation across care service provision, medical devices, pharmaceuticals and healthcare finance. Healthcare may be transforming into a life-long process of managing and maintaining individuals' health.
-  **Infrastructure investment**

Infrastructure needs are massive across both developed and developing economies. Traditional physical infrastructure is only one component of this: technological and other infrastructure is also key. We are likely to see further development of the public/private investment intersection, a greater focus on ESG in terms of project appraisal and also more creative use of technology at all levels.
-  **Millennials**

Millennials are an increasingly important group in many economies in both economic and political terms. Investing here can most obviously focus on millennials' consumption habits (e.g. on technology and entertainment). However, it is also important to consider the underlying issues that will define millennials' working lives (e.g. demographics and debt) and which will have broad investment implications.



Resource stewardship

Resource stewardship focuses (but not exclusively) on waste management, where technology is both a problem (through e-waste) and a potential deliverer of solutions. Familiar themes (e.g. alternative energy) pop up here too. But with government finances stretched, resource stewardship may need to battle for the financial commitments it needs: spending here is usually closely interlinked with economic cycles.



Smart mobility

Smart mobility will involve progressive change across the whole of the transportation sector. At present, most attention is focused on the automotive sector and the four trends of electrification, connectivity, autonomous driving and on-demand or shared vehicles – although the concept is broader. Advances here will create investment opportunities around multiple sectors – from electricity provision to mineral resources.



Appendix 1

Macroeconomic forecasts

	2021 Forecast	2022 Forecast
GDP growth rate (%)		
U.S.*	6.2	4.7
Eurozone (of which)	4.5	4.6
Germany	3.0	4.5
France	6.0	4.3
Italy	6.0	4.7
Spain	6.0	5.7
UK	6.8	5.3
Japan	2.7	2.6
China	8.2	5.6
India	9.3	6.5
Russia	3.8	2.5
Brazil	5.3	2.0
World	5.8	4.5
Consumer price inflation (%)		
U.S.**	3.0	2.5
Eurozone	2.1	1.6
Germany	3.1	2.6
Japan	0.1	0.6
China	1.2	2.4

*For the U.S., GDP growth Q4/Q4 is 6.2% in 2021 and 4.0% in 2022.

**For CPI, measure is core PCE Dec to Dec – average is 2.9% in 2021 and 2.5% in 2022; headline PCE (Dec/Dec) is 3.1% in 2021 and 2.3% in 2022 – average is 3.1% in 2021 and 2.4% in 2022. Forecasts as of August 26, 2021.

Appendix 2

Asset class forecasts

Bond yield and spread forecasts for end-September 2022

United States (2-year Treasuries)	0.80%
United States (10-year Treasuries)	2.00%
United States (30-year Treasuries)	2.50%
USD IG Corp (BarCap U.S. Credit)	75bp
USD HY (Barclays U.S. HY)	290bp
Germany (2-year Schatz)	-0.60%
Germany (10-year Bunds)	0.00%
Germany (30-year Bunds)	0.60%
United Kingdom (10-year Gilts)	1.00%
EUR IG Corp (iBoxx Eur Corp all)	75bp
EUR HY (ML Eur Non-Fin HY Constr.)	280bp
Japan (2-year JGB)	0.00%
Japan (10-year JGB)	0.20%
Asia Credit (JACI)	275bp
EM Sovereign (EMBIG Div.)	300bp
EM Credit (CEMBI Broad)	290bp

FX forecasts for end-September 2022

EUR vs. USD	1.20
USD vs. JPY	108
EUR vs. JPY	129
EUR vs. GBP	0.87
GBP vs. USD	1.37
USD vs. CNY	6.65

Equity index forecasts for end-September 2022

United States (S&P 500)	4,600
Germany (DAX)	16,700
Eurozone (Euro Stoxx 50)	4,250
Europe (Stoxx 600)	480
Japan (MSCI Japan)	1,200
Switzerland (SMI)	12,250
United Kingdom (FTSE 100)	7,000
Emerging Markets (MSCI EM)	1,310
Asia ex Japan (MSCI Asia ex Japan)	840
Australia (MSCI Australia)	1,450

Commodity forecasts for end-September 2022

Gold (USD/oz)	1,750
Oil (WTI 12-month Forward, USD/b)	68

Forecasts as of August 26, 2021.

Glossary

Bunds are longer-term bonds issued by the German government.

Carry investments are intended to deliver higher returns, perhaps accessed (as in currencies) through borrowing in a lower-yielding environment.

CNY is the currency code for the Chinese yuan.

Correlation is a statistical measure of how two securities (or other variables) move in relation to each other.

Cyclical stocks are affected by the business cycle, typically including goods and services for which purchases are discretionary.

The **DAX** is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange; other DAX indices include a wider range of firms.

ESG investing pursues environmental, social and corporate governance goals.

The **EuroStoxx 50** Index tracks the performance of blue-chip stocks in the Eurozone and includes the super-sector leaders in terms of market capitalization.

The **Stoxx Europe 600** includes 600 companies across 18 European Union countries.

The **European Central Bank (ECB)** is the central bank for the Eurozone.

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.

The **Global Financial Crisis (GFC)** refers to the crisis of 2007-2008.

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

Millennials is a term used to refer to people born in the 1980s and 1990s, although this definition can vary.

Mortgage-backed securities (MBS) are financial instruments secured on a collection of mortgages.

Next Generation EU (NGEU) is a major but temporary stimulus plan launched by the European Union to deal with the impact of the coronavirus pandemic.

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

Price/earnings (P/E) ratios measure a company's current share price relative to its per-share earnings. In this context, NTM refers to next twelve months' earnings.

Purchasing manager indices (PMI) provide an indication of the economic health of the manufacturing sector and are typically based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. The composite PMI includes both manufacturing and services sectors. They can be published by public sector or private agencies (e.g. Markit, Caixin, Nikkei).

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

Glossary

Tapering, in a financial markets context, refers to the gradual reduction of asset purchases by central banks.

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

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



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