



July 2021

# CIO Insights



Growth challenges  
Economic and investment update





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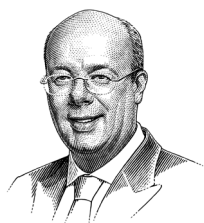
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## Letter to Investors



Christian Nolting  
Global CIO

# Growth challenges

Many economies are now regaining economic momentum, helped by the continuing success of coronavirus vaccination campaigns. Headline growth numbers will recover quickly. However, we should not equate economic recovery with a return to the pre-pandemic status quo. We called our 2021 annual outlook "[Tectonic shifts](#)" and there will be changes both to the structure of the global economy and to economic policy. Many of these changes will not be easy: we will see some growth challenges.

The current debate around inflation is an indication of what may lie ahead. High rates of inflation are both a symptom of underlying changes and a cause of market uncertainty about the implications of these changes. Inflation may have many causes, including higher demand as the pandemic is tamed and supply disruptions and shortages as economies readjust to new realities. It is therefore to some extent a predictable symptom of reopening. But, whatever its causes, and whether or not it proves transitory, it is clear that inflation can knock through into a broader debate about policy change and prompt market volatility.

There will be other concerns in coming years. The ongoing discussion about a possible new global multinational corporate taxation regime is a symptom of broader concerns about economic inequalities and the relationship between corporates and governments. This will also have implications for other challenges faced by governments, for example the need to raise revenue to pay for infrastructure improvements and service much higher levels of debt (especially if they need to refinance at higher yields).

What is also important to understand about the current situation is that we are experiencing a period of very strong growth at a time when both monetary and fiscal policy settings are very loose and look set to remain so – even assuming some tapering (i.e. reduction in central bank asset purchases) and a fall in the fiscal impulse. Financial repression (i.e. artificially-low real interest rates) will continue to create a range of challenges for investors, including those who are looking for predictable sources of income.

I think that we can take three points from this unusual mixture of economic change and still broadly-accommodative economic policy.

First, this is a situation that will create important and new investment opportunities but also a number of risks. Stresses around growth are a normal part of any recovery but portfolios need to be resilient to them. The dangers around "market exuberance" and potential asset class bubbles further strengthen the case for sophisticated risk management in portfolios.

Second, that while some growth challenges will be temporary, other structural economic changes will be long-lasting. Many of these changes pre-date the pandemic (e.g. digitalisation, rising debt levels) but have been accelerated; others (e.g. demographics) have different drivers. Investment strategies need to address such changes. Our key investment themes (summarised on page 14) focus on ten areas of change visualised within a triangle of technology, demographics and sustainability.

Third, that as investors we need to remain innovative and open to new approaches. The growing interest in ESG investment has led to changing evaluations of investment potential and risks. Infrastructure investment, for example, is increasingly assessed in an ESG life-cycle context. Carbon pricing is now having much broader investment implications as countries face up to net zero emissions targets. All this will have continuing implications for how we all assess and respond to the investment environment ahead, even when current growth challenges subside.

"Some growth challenges will be temporary but other structural changes will be longer-lasting. This will be a situation which will create important and new investment opportunities, but also risks: as investors we need to stay innovative and open to new approaches."

Christian Nolting

Christian Nolting  
Global CIO

#### Instant Insights

### 2021 in a nutshell

- Economies are regaining momentum, but this does not mean a return to the pre-pandemic status quo in all areas.
- Investors will face a situation where strong economic growth co-exists with loose monetary and fiscal policy settings, despite "taper talk".
- This situation will create important and new investment opportunities but also risks. Investors should pay particular attention to portfolio risk management.



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# Macroeconomic and asset class outlook

Macroeconomic and asset class forecasts are tabulated on pages 16 and 17.

## Headline numbers do not tell the whole story

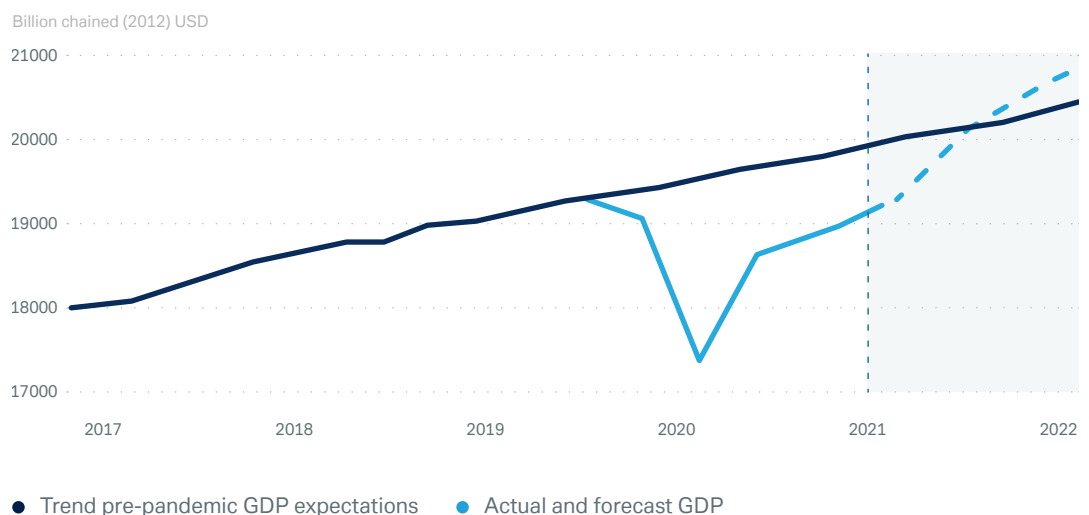
GDP growth is already picking up. Very high YoY headline growth rates will not be maintained (as comparators change) but annual average rates for 2021 will be high, with only a slight fall-off in 2022.

Relative growth rates may also be largely due to timing. U.S. GDP growth is likely to be close to China's in 2021 – the last time it was higher was back in 1976. But this statistical anomaly largely reflects simply how the coronavirus pandemic played out – China dealt with the first coronavirus wave quickly, with quarter-on-quarter growth turning positive from Q2 2020 onwards; U.S. growth is now playing a strong catch-up. But regional differences remain. Despite current coronavirus problems, most obviously in India, and some likely deliberate structural slowdown in Chinese expansion, the Asian growth story is far from over and regional GDP data will soon start to reflect this. Conversely, Europe's likely rapid recovery in coming quarters does not mean that questions around its sluggish long-term growth are resolved.

In output terms, some parts of the world are also making quick progress back to their pre-pandemic growth path. Figure 1 shows how U.S. GDP is expected to return to its pre-pandemic levels in Q2 2021 and then re-join its pre-pandemic growth path in Q4 2021 or Q1 2022. But the impact of the pandemic on the structure of economies will be longer-lasting.

Figure 1: U.S. forecast GDP vs. pre-pandemic expectations

Source: Deutsche Bank AG. Data as of May 27, 2021.



"Relative growth rates in 2021 may be largely due to pandemic timing. The Asian growth story is far from over."



## Inflation will not automatically revert to very low levels

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Inflation forecasts also need to be treated with care. Overall annual average headline rates of inflation are likely to be slightly higher in many major markets in 2021 and 2022 than in 2020 (see page 17). But relatively small changes in these annual average numbers will mask much bigger underlying moves. We have seen already in 2021 how rising demand can combine with supply disruption (of goods, services or labour) to push up both producer price and consumer price inflation sharply. Year-on-year measures of producer price inflation have been nudging up towards 10% in China and the U.S. and have gone above 5% in Germany – all levels that would have been unimaginable a few years ago. Markets are still trying to assess what these upward blips imply for policy and corporate earnings. We continue to think, as do the Fed and ECB, that very high rates of inflation will be only temporary and will subside later this year. But we don't think that – during a time of strong growth and a rapidly changing economic environment – it is sensible to expect inflation to return automatically to the abnormally low levels experienced over the past decade. Other factors – for example carbon pricing, a slowdown in globalisation and higher corporate taxation – could also work against inflation returning to previous low levels.

Central banks will see some advantages in letting inflation and real interest rates (still largely negative) creep higher. One advantage is that higher levels of inflation may help reduce debt burdens over time. U.S. Treasury Secretary Yellen has already started preparing the ground here, arguing that inflation can be managed and that slightly higher interest rates would be positive for the U.S. economy. Note also the upward revisions in the Fed's inflation forecasts in June. However, central banks know from experience that policy changes have to be handled carefully: in the Fed's case, this may mean using the August 2021 Jackson Hole meeting to announce a schedule for tapering talks, and perhaps then not starting to taper in earnest until early 2022 – although the risk of the Fed acting sooner rather than later seems to be increasing. In the ECB's case, this may mean moving away from the existing Pandemic Emergency Purchase Programme (PEPP) and relying more on the pre-coronavirus Asset Purchase Programme (APP) – while reducing overall support, probably within a transition period.

## Fiscal policy could prove a hostage to fortune

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Progress on fiscal policy may be more uneven. Many governments do not have strong incentives to reduce spending quickly and may rely on economic growth to boost revenue (perhaps in conjunction with higher tax rates) and thus rein in budget deficits. Primary deficits have been a long-standing problem for many countries since the start of the global financial crisis, so cannot be blamed entirely on the coronavirus pandemic. Market discipline – unless a country really jacks up current spending without justification – looks likely to be limited. What this means is that budget deficits may be reduced only slowly (Figure 2).

This could create a situation where disagreements over fiscal policy (for example, over infrastructure spending plans in the U.S.) start to create a distraction for markets and exacerbate domestic or international political stresses. Fiscal policy fears will increase the focus on two issues we highlighted in our 2021 annual outlook: the growing role of the state, and inequality within economies. It is also worth remembering that even if the absolute amount of fiscal spending remains high, the fiscal impulse (change in spending) is likely to be declining or turning negative – creating some difficult spending choices when parts of some economies will still need support.

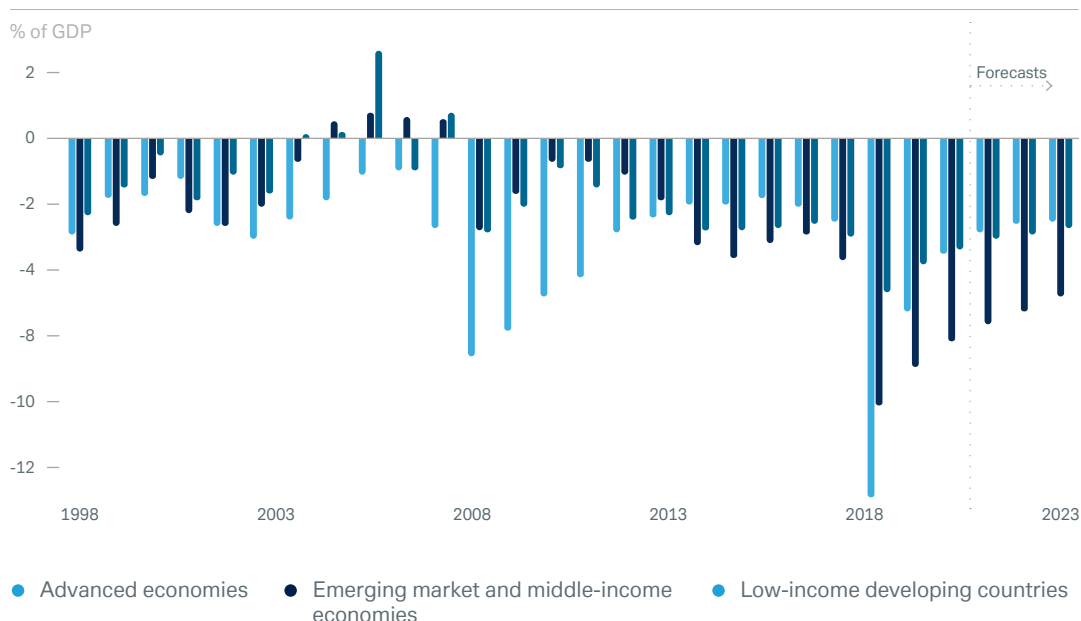
It is remarkable how markets have accepted a rapid escalation in debt as a fait accompli. However, rising interest rates may eventually encourage a reassessment of borrowing costs and affordability, and greater market selectivity between countries. When this happens, sentiment could change quickly.

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"Central banks will see some advantages in letting inflation and real interest rates creep higher. Fiscal policy disagreements could, however, create a distraction for markets and exacerbate stresses."

Figure 2: Cyclically-adjusted primary balances will improve only slowly

Source: IMF, Deutsche Bank AG. Forecasts from 2020 onwards. Data as of May 27, 2021.

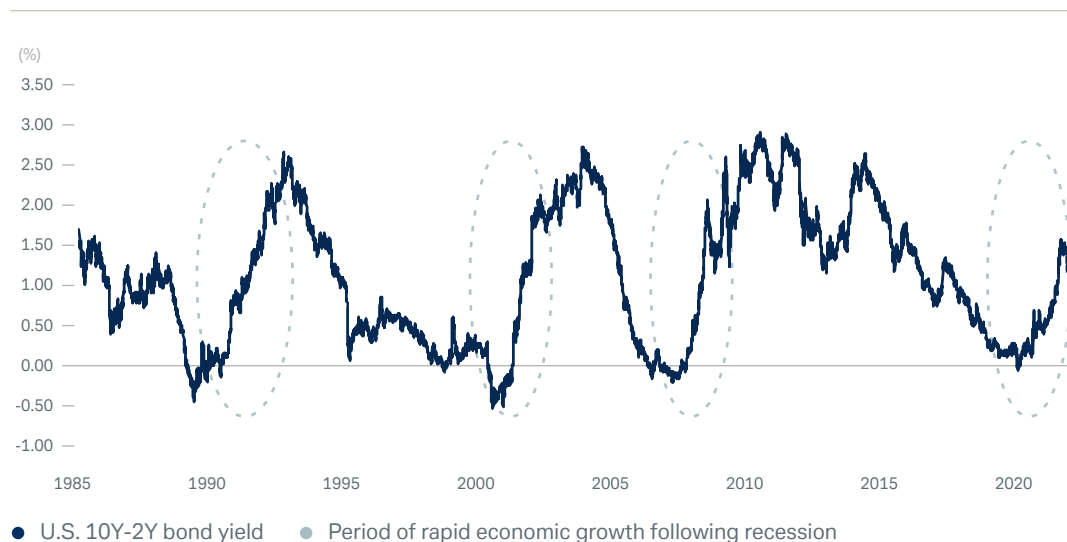


## Market exuberance cannot last for ever

Over the next few months, market enthusiasm may persist on the back of continued stimulus. However, we could start to enter a rather cooler period later in 2021 and into 2022 when the potential stresses around growth become more obvious and markets increasingly anticipate market tightening. In its recent Financial Stability Review, the ECB warned of "market exuberance" and the (theoretical) dangers of a 10% fall in the S&P 500: periods of volatility are likely, particularly around major policy announcements, in our view. As we noted above, the Fed may well use the August Jackson Hole meeting to make an announcement on a tapering talks timeline (if it does not do so earlier) and this could be a trigger for readjustment. History also suggests that market conditions can change quickly at times of economic turnaround: Figure 3 shows how the U.S. bond yield curve tends to steepen sharply during economic turnarounds, as we are currently experiencing.

Figure 3: U.S. bond yield curve can steepen at times of economic turnaround

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of June 22, 2021.





## Fixed income: more spread tightening possible

We stay cautious on core developed market government bonds, given the risks around rising interest rates. Forecast rises in core government bond yields are relatively modest (see page 18) but would still affect the value of existing holdings.

Elsewhere in the fixed income space there are opportunities, but very low yields will continue to require taking on a degree of risk to get a meaningful positive nominal return. Spreads in individual fixed income areas will depend on both market supply/demand characteristics and real-world corporate developments. The speed and extent of future rises in rates will also be important. Investment grade may gain from declines in supply from previous very high levels and increasing credit discipline by U.S. issuers. High yield debt, both in the U.S. and Europe, has so far been underpinned by a further decline in corporate default rates and temporary future volatility looks manageable. There appears likely to be some further spread tightening in emerging markets debt, both corporate and sovereign, given some positive fundamentals, but potential U.S. policy tightening will cast a slight shadow. Even so, emerging markets debt is likely to remain an attractive source of carry in a low yields environment.

Investors looking for sources of income in portfolios may need to try a diversified approach (see box).

### Box

#### Managing income sources in a portfolio: living with “financial repression”

Investors focused on income will face continued challenges. We expect nominal yields to rise slightly over the next twelve months but inflation means that real interest rates will stay low or negative. Global growth will therefore not mean an end to “financial repression” (the deliberate repression of real rates) and this will continue to dominate economic policy and the investment environment. Finding reliable sources of income that deliver meaningful returns will therefore remain difficult.

Bond markets obviously offer a variety of ways to generate income. [Bond coupons](#) can be paid at different frequencies (e.g. annual, semi-annual) over the term or maturity of the bond. There are a number of possible permutations – for example step-up bonds (where the coupon payment increases over time) and floating rate notes (where the payment is linked to a money market rate). Corporate bonds may pay a higher coupon, but this is a reflection of greater credit risk.

Investors may also look to generate income from [equity dividends](#). Dividends will however depend on companies’ earnings and decisions made by the company management. There may also be different dividends depending on owner/debtor rights and the position in the balance sheet, e.g. preferential dividends. Another, quite different, approach to generating income from equity markets is to [monetize volatility](#), for example via taking positions on the VIX volatility index, although this does have risks.

As regards alternative investments, a well-established source of income for investors has been rental from [real estate](#). Getting income from commodities investments is more difficult, but if the futures curve of a commodity is in “backwardation” (i.e. the current price of a commodity is higher than the futures market price), you can earn income by rolling contracts forward. Investors could also look to a [funds-based approach](#): distributive funds and ETFs can also disburse coupon payments and dividends. Using a “funds of funds” approach by investing in a range of ETFs – for example, across real estate, infrastructure and regular dividend-paying stocks – diversifies income sources in an attempt to make future income flows more predictable.

## Equities: caught between TINA and rising yields

After the strong rallies earlier this year, the going for equities is now likely to start getting tougher. There will be some catch-up potential in Europe and in certain emerging markets (particularly in Asia) as vaccination campaigns accelerate. But, looking forward over a 12-month horizon, it is difficult to see equities making major further gains. Equities are likely find themselves caught between a lingering belief in TINA ("there is no alternative" for investors seeking decent returns) and growing worries about the implications of rising real interest rates. (Figure 4 shows the link between real U.S. yields and S&P 500 12-month forward price/earnings multiples.) Increasing commodity and other input prices will hit firms' profit margins, if they are not able to pass them on fully to consumers. Underlying all this, there will be a sense that we are moving beyond a range of "peaks" (e.g. in economic momentum, fiscal stimulus and liquidity) and into a rather less policy-supported investment landscape. As we have seen, a really rather good Q1 2021 earnings season only just about kept markets happy: we need more reassurance from Q2 and Q3 earnings.

Figure 4: The link between negative real U.S. yields and S&P 500 P/E multiples

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of June 22, 2021.



At a style and sectoral level, market preferences are shifting back and forth as uncertainty continues. At this point, a barbell approach including both growth and selected cyclical stocks looks appropriate. Rising interest rates may dent the relative appeal of tech stocks – due to discounted future earnings – but their long-term importance remains.

"Over a 12-month period, it is difficult to see equities making major further gains. We may be moving beyond a range of "peaks" and into a rather less policy-supported investment landscape."

## Commodities: not yet on a new super-cycle

Commodities have seen strong and very visible price gains on the back of economic reopening and some supply constraints. For example, the United Nations Food and Agricultural Organisation (FAO) Food Price index was up by almost 40% in May on a year before. The Chinese authorities have also announced new measures to monitor commodity prices, following the recent rise in Chinese producer price inflation.

However, talk of a new commodities super-cycle seems premature. Many different factors have driven the recent rise in commodity prices and some of these may not be sustainable. Copper prices, for example, have been driven up by a belief that decarbonisation will continue to boost demand via electricity grid improvements, renewables, electric vehicles and so on. This is a credible long-term argument but copper prices in the medium term could be volatile, with slower Chinese economic growth a potential negative.

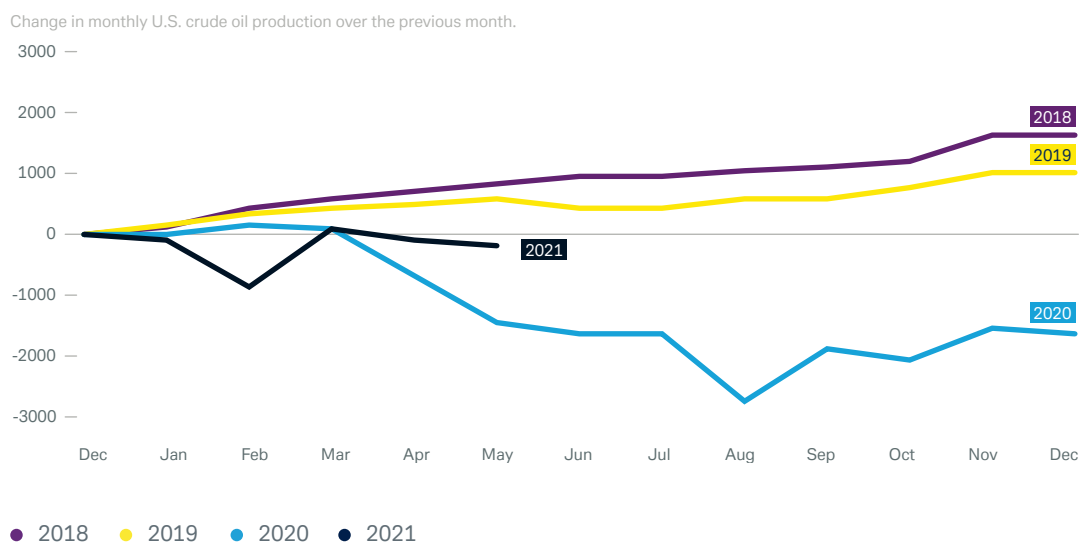
On a 12-month horizon, we do also not expect major further oil price gains, given the continued threat of increases in supply if prices rise fast. OPEC+ has managed so far to limit increases in its own output, but there are a number of tensions (e.g. around Iranian production), and demand recovery will be dependent on continued coronavirus control. U.S. oil production may also not remain quiescent forever (Figure 5).

Gold prices seem likely to be spooked by fears around rising interest rates, assuming that the inflation genie is kept (more or less) in the bottle. This may limit investor interest and keep a lid on price rises.

"Some factors driving recent commodity price increases may not be sustainable. In the case of oil, the threat of further increases in supply is likely to limit further gains."

Figure 5: U.S. oil producers remain disciplined

Source: U.S. Energy Information Administration, Deutsche Bank AG. Data as of May 28, 2021.

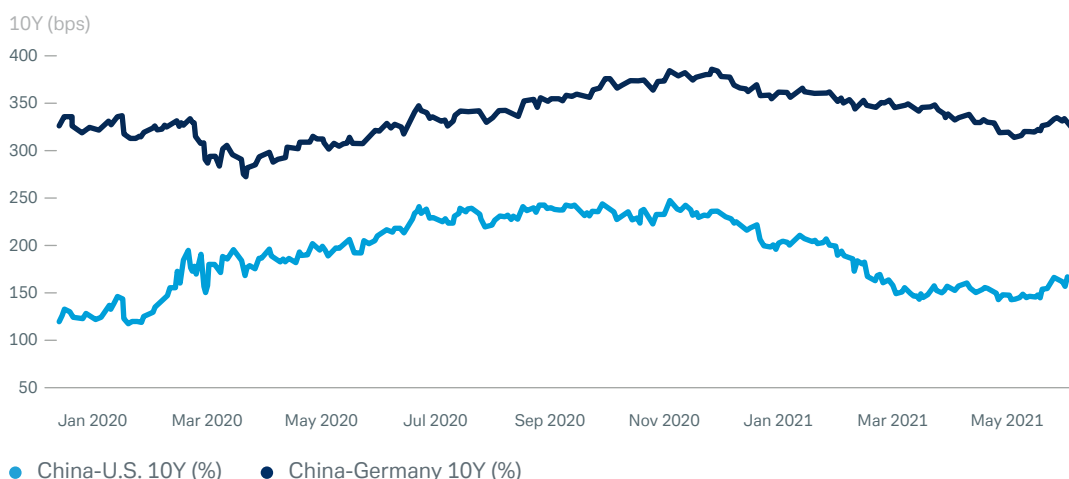


## FX: drivers in a state of transition

Over the past year, major currency pairs have been driven by changes in "risk on"/"risk off" sentiment more than by economic or policy divergences and other fundamentals. But while the U.S. dollar is still a risk proxy (benefiting from "risk off" sentiment), tapering and rates discussions are already starting to have more of an impact. With FX drivers in a state of transition, we may see no strong trends in the next few months and on a 12-month horizon we see EUR/USD at 1.20. USD/JPY has rallied on rising U.S. yields with Japanese investors still finding hedged foreign currency bonds attractive, but this situation needs to be monitored as the U.S. rates cycle turns. Other currencies (such as GBP) have already been directly affected by tapering action but lot of optimism appears to be already priced into GBP. With Chinese financial markets continuing to attract foreign capital (due in part to yield advantages – Figure 6), the CNY should remain well supported, but the Chinese authorities may not countenance rapid further CNY gains in future, given that U.S./China differences are still far from resolved.

Figure 6: CNY may be assisted by a continuing Chinese yield advantage

Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of June 22, 2021.



Two other issues are likely to become important FX drivers. Firstly, ESG may affect exchange rates through its impact on cross-border investment flows: this could be particularly the case for those economies facing big ESG challenges and which also have a high dependence on external financing. Second, monetary authorities may speed up their own central bank digital currencies (CBDC) given concerns about the implications of growing retail and institutional interest in private sector digital offerings.

"Over the past year, major currency pairs have been largely driven by risk sentiment. But other FX drivers are now starting to assert themselves."



# Asset classes in summary



**Core government bonds:** Yields fluctuating but tending to move upwards, with U.S. tapering discussions gaining momentum in H2 2021. Moderate tapering is possible in H1 2022 but rate rises are still some way off and U.S. 10-year real yields will remain negative. 10-year Bund yields may reach zero on a 12-month horizon with 10-year JGBs mildly positive. Such bonds' role as portfolio diversifier remains at the mercy of markets' inflation and policy expectations. **End-June 2022 forecasts: 10-year U.S. Treasuries 2.00%; 10-year JGBs 0.20%; 10-year Bunds 0.00%.**



**Investment grade:** Rate rises are manageable if they are not too large or abrupt. U.S. supply is likely to fall while demand remains strong but only limited returns are on offer. European fundamentals are also supportive with reduced supply but the ECB must manage communication around end of PEPP purchases effectively. Greater credit discipline by U.S. issuers should help support valuations and the negative rating cycle in Europe will start to bottom out. **End-June 2022 forecast spreads: U.S. IG (BarCap U.S. Credit) 75bp, EUR IG (iBoxx EUR Corp) 75bp.**



**High yield:** U.S. issuance remains strong but default rates have continued to decline. Spread tightening has continued but its pace is moderating. European issuance is also strong with default rates falling. We remain constructive on both markets as economies turn up and temporary volatility patches (due to issuance, inflation or supply-chain issues) could create investment opportunities. We would be cautious on duration-sensitive bonds. **End-June 2022 forecast spreads. U.S. HY (Barclays U.S. HY) 290bp, EUR HY (ML EUR Non-Financials) 300bp.**



**Emerging markets hard currency debt:** Continued potential for spread tightening. Most sovereign issuers have solid solvency and refinancing ability is still good. Markets may be too cautious with support likely to be forthcoming and positive recovery stories likely. For corporates, issuer fundamentals are already recovering in this core credit market, with only moderate duration exposure, but over-rapid U.S. policy tightening would also pose a risk here. **End-June 2022 forecast spreads. EM Sovereign (EMBIG Div) 300bp, EM (Credit CEMBI Broad) 270bp.**



**U.S. equities:** Earnings estimates have been revised up on the back of Q1 2021 gains and valuations look sustainable as long as real yields remain negative. But economic recovery looks already largely priced in and rates rises will cap future valuations gains. The prospect of rising interest rates is also leading to a reassessment of sector preferences. **End-June 2022 S&P 500 forecast 4,200.**



**European equities:** Economic recovery hopes have underpinned the recent rally and the earnings outlook remains constructive after strong Q1 2021 growth. Eurozone monetary and fiscal stimulus also remain supportive. Earnings should be back to 2019 levels by 2023. Elections provide political focus points but may have a limited direct impact on equities markets. **End-June 2022 Euro Stoxx 50 forecast: 4,000; Stoxx Europe 600 forecast: 440.**



**Japanese equities:** Global (and in particular Chinese) recovery should provide a helping hand via exports despite domestic coronavirus lockdown problems. JPY weakness would also help. Existing virtues of solid balance sheets, low leverage and improving corporate governance remain. Bank of Japan policy remains accommodative but its market presence is becoming an issue in terms of market demand/supply balances. Valuation discount to S&P 500 now seems to have settled in the 15-25% range. **End-June 2022 MSCI Japan forecast: 1,200.**

# Asset classes in summary



**Emerging market equities:** Recent performance has been dampened down by worries around U.S. inflation and the implications for the USD, as well as by the resurgence of coronavirus in Asia and policy tightening in China. But economic growth looks likely to pick up in H2 2021, particularly in Asia, where strong earnings growth is expected too. Valuations still look reasonable (including on some technology stocks) with strong domestic investor participation and ESG reforms longer-term positives. **End-June 2022 MSCI Emerging Markets forecast: 1,400.**



**Gold:** Inflation worries have not shifted market dynamics greatly. Recent gold price rises have been modest and improving economic growth rates and rising nominal yields will likely discourage any further major gains. Tapering would be a further headwind. Recent signs of renewed inflows into ETFs need to be confirmed and retail and speculative investor positions remain down. DXY expectations will remain important, but coronavirus and other setbacks may provide only a temporary lift. **End-June 2022 gold price forecast: USD1,850/oz.**



**Oil:** Expectations of global continued demand growth have pulled oil prices up further in recent months. OPEC+ production discipline and reductions in global oil inventories have also helped, while U.S. output is only increasing very slowly. Concern about the implications of coronavirus for Asian demand may hold back price rises in the short term but higher OECD travel demand should offset slight rises in global supply. **End-June 2022 WTI forecast (12-month forward): USD63/bbl.**



# Long-term capital market assumptions

Strategic asset allocation (SAA) accounts for the bulk of portfolio returns and provides a more sustainable source of returns than market timing or security selection. Long-term asset return forecasts provide one input into our SAA approach. We create such forecasts for a wide range of asset class indices, measured across a range of currencies. We set out a small selection of these asset class return assumptions in Figure 7 below.

It is worth stressing that long-term asset class returns are only one of three necessary inputs for effective SAA. Returns forecasts need to be accompanied by estimates for volatility (i.e. the degree of variation of asset prices) and likely correlations (the relationships between the prices of different assets).

Forecasts for different asset class returns will always have varying degrees of uncertainty. Portfolios have to be designed around these varying degrees of uncertainty and a high expected return will not therefore necessarily translate into a high portfolio allocation. We are continuously learning about the impact of uncertainty on asset classes and continue to refine these three components of our SAA process.

Figure 7: Selected 10-year average annual return forecasts

Source: DWS, Deutsche Bank AG. Data as of December 31, 2020.

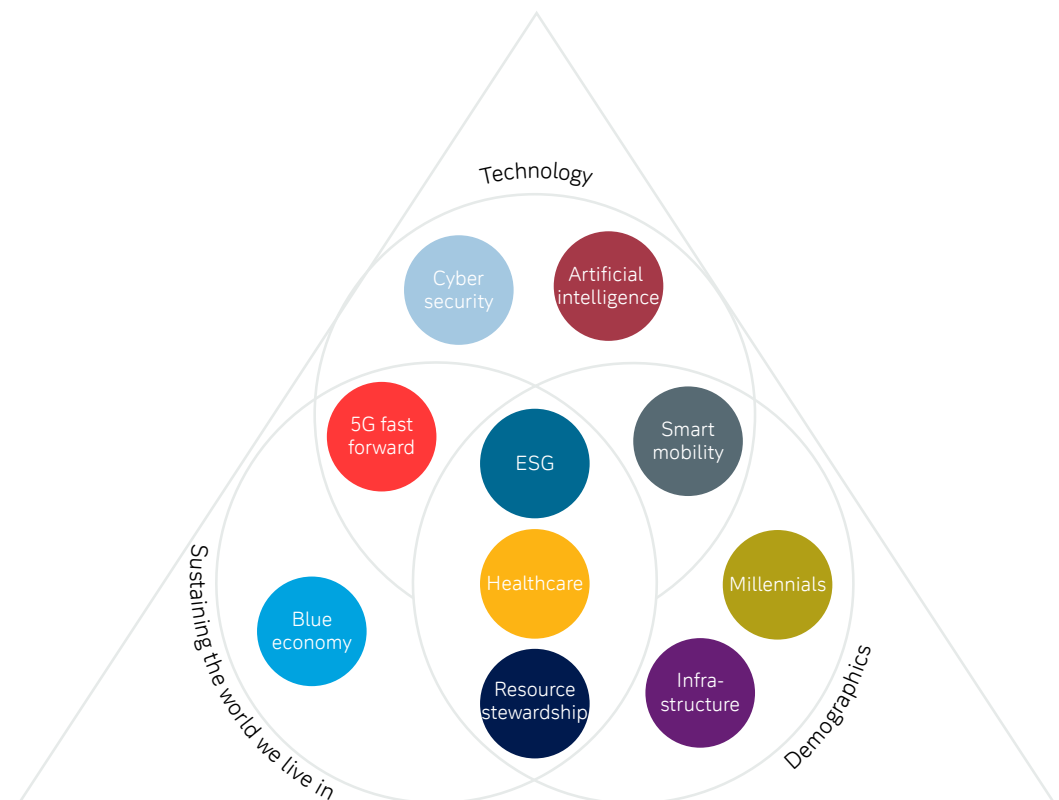
	Local currency	EUR	USD
S&P 500	5.4%	4.6%	5.4%
MSCI Europe	4.5%	4.4%	5.2%
FTSE 100	6.5%	6.3%	7.1%
Japan TOPIX	3.0%	2.5%	3.3%
U.S. Treasuries	0.8%	0.0%	0.8%
Euro agg. Treasuries	-0.5%	-0.5%	0.3%
U.S. Corporates	1.2%	0.4%	1.2%
U.S. High Yield	2.3%	1.6%	2.3%
Pan Euro High Yield	1.5%	1.5%	2.3%
EM Sovereigns	3.8%	3.0%	3.8%
Bloomberg Commodities ex-Agriculture & Livestock	0.3%	-0.5%	0.3%


# Key investment themes

We currently have 10 key investment themes, designed to have long-term relevance and to provide continuing investment opportunities. The 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 8)


Figure 8: The TEDS triangle

Source: Deutsche Bank AG. Data as of June 1, 2021.



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## Cybersecurity

Starting at the top end of the triangle, the need for cybersecurity is prompted by the centrality of the digital economy and the cost and frequency of cyber attacks. 5G technology (see below) may add to the need for cybersecurity, as could increasing interactions with physical devices. Societies and governments are affected, as well as corporates.
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## Artificial intelligence (AI)

AI has relevance for multiple areas, including cybersecurity. The coronavirus has encouraged more use of AI in multiple aspects of healthcare, with the financial sector also a key user. We may be close to a tipping point here, given increases in computation power and data generation storage. Political risk in AI exists at multiple levels.





## 5G

5G has implications for many tech sectors and may also facilitate AI. Building the 5G network involves a full spectrum of economic activity, from demand for semiconductors and raw materials through to infrastructure provision of data centres and cell towers. Such demands will create both opportunities and economic and political stresses, for example around China's role in emerging markets and as a technology provider.



## ESG

ESG lies at the centre of the triangle and will continue to do so. The coronavirus pandemic appears to have underlined the importance of risk management via environmental, social or governance-focused investments. The Biden administration has put a bigger focus on environmental issues, with more broad commitments likely during the course of 2021 and beyond. Coordinating public and private sector financial responses is likely to become increasingly important.



## Smart mobility

The interaction of sustainability and technology is evident in smart mobility. This seeks to reconcile the need for major emissions reductions with a desire for cost-efficient transportation. Lower electric vehicle manufacturing costs (despite some resource input concerns), more efficient power grid management and the boost given to ride-sharing and other capabilities by connectivity and automation should reduce pollution and congestion.



## Healthcare

Moving further down the triangle, healthcare involves an obvious intersection between demographics and technology. Ageing populations and the increasing affluence of emerging markets are driving demand. Technology, meanwhile, is helping 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.



## Millennials

Millennials also show the power of demographic trends, being the first generation to face the full consequences of climate change. This group may in addition have to support ageing populations through working longer, but may benefit financially from shrinking labour forces. Millennials will use their increasing importance to push for change in many areas – from provision of government services through to corporate and investment priorities.



## Infrastructure investment

Infrastructure investment must also think long-term, given major existing shortfalls in developed and emerging markets. At the same time, innovation (e.g. via data, interconnection and automation) is already forcing rapid change. Traditional infrastructure is likely to be augmented by spending on transport decarbonisation, renewable energies and digitalisation. Lifecycle assessments of infrastructure projects, particularly in relation to climate change, may lead to changing priorities and financial approaches.



## Resource stewardship

At the bottom of the triangle, sustainability themes are prominent. 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 resources it needs: waste management is closely interlinked with economic cycles.



## Blue economy

The blue economy is becoming increasingly important in discussions about biodiversity, resource management and economic growth. Oceans (the world's eighth largest economy) are under great pressure from over-fishing and environmental destruction. Environmental awareness is increasing (e.g. in the shipping sector) and technology and more data should help us understand underlying issues better, creating opportunities in both existing and new industries.



## Appendix 1

# Macroeconomic forecasts

	2021 Forecast	2022 Forecast
GDP growth rate (%)		
U.S.*	6.7	5.2
Eurozone (of which)	4.2	4.6
Germany	3.3	4.5
France	6.0	4.3
Italy	4.5	4.7
Spain	5.5	5.7
UK	6.5	5.7
Japan	2.7	2.6
China	8.7	5.5
India	10.0	6.5
Russia	3.3	2.5
Brazil	3.0	2.4
World	5.8	4.6
Consumer price inflation (%)		
U.S.*	2.8	2.5
Eurozone	2.0	1.6
Germany	2.2	1.8
Japan	0.1	0.5
China	1.7	2.4

\*For the U.S., GDP growth Q4/Q4 is 7.2% in 2021 and 4.0% in 2022.

\*For CPI, measure is core PCE Dec to Dec – average is 2.6% in 2021 and 2.5% in 2022; headline PCE (Dec/Dec) is 3.1% in 2021 and 2.3% in 2022 – average is 3.0% in 2021 and 2.4% in 2022. Forecasts as of May 27, 2021.

## Appendix 2

# Asset class forecasts

### Bond yield and spread forecasts for end-June 2022

United States (2-year Treasuries)	0.50%
United States (10-year Treasuries)	2.00%
United States (30-year Treasuries)	2.60%
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)	0.95%
EUR IG Corp (iBox Eur Corp all)	75bp
EUR HY (ML Eur Non-Fin HY Constr.)	300bp
Japan (2-year JGB)	0.00%
Japan (10-year JGB)	0.20%
Asia Credit (JACI)	240bp
EM Sovereign (EMBIG Div.)	300bp
EM Credit (CEMBI Broad)	270bp

### FX forecasts for end-June 2022

EUR vs. USD	1.20
USD vs. JPY	105
EUR vs. JPY	126
EUR vs. GBP	0.89
GBP vs. USD	1.35
USD vs. CNY	6.65

### Equity index forecasts for end-June 2022

United States (S&P 500)	4,200
Germany (DAX)	15,700
Eurozone (Euro Stoxx 50)	4,000
Europe (Stoxx 600)	440
Japan (MSCI Japan)	1,200
Switzerland (SMI)	11,150
United Kingdom (FTSE 100)	7,100
Emerging Markets (MSCI EM)	1,400
Asia ex Japan (MSCI Asia ex Japan)	940
Australia (MSCI Australia)	1,400

### Commodity forecasts for end-June 2022

Gold (USD/oz)	1,850
Oil (WTI 12-month Forward, USD/b)	63

Forecasts as of May 27, 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.

**Jackson Hole** is the location (and common name) of an annual economic symposium of the Kansas City Fed.

**Large cap**, **mid cap** and **small cap** are terms used to differentiate shares on the basis of the size of a firm's total market capitalization - exact definitions vary.

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

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.

**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.

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

**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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