

December 2020

OUR 12-MONTH ECONOMIC & MARKET OUTLOOK



Content

Letter to Investors	
Surprisingly optimistic for 2021	4
Macro The beginning of the pandemic's end?	6
Fixed Income The case for credit remains strong	8
Equities 2021 looks pretty good for equities Valuations overview	
Alternatives A Washington punchline, no more?	15
Multi Asset Looking forward to a boring year	2 [~]
ESG The other sort of liquidity	24
Forecasts All our forecasts at a glance	26
Glossary Explanation of central terms	28





November 19, 2020

Surprisingly optimistic for 2021

As the year draws to a close, 2020's big risks start to look less bad, allowing investors to meet 2021 with optimism. We believe low interest rates will remain key.

The pandemic is likely to restrict consumers and companies for some months to come. But we expect investors to look beyond these difficulties and focus on profit growth and continuing loose monetary policy.

Stefan Kreuzkamp Chief Investment Officer and Head of Investment Division

ould our annual outlook for 2021 have looked different if we had written it in mid-October? Yes, but only in part. Little would have changed in our economic forecasts but our asset-class outlook would have been different. What has taken place macro-economically has been very much in line with our forecasts. But the markets had big risks on their mind. Now those risks have eased, and with them the fear of a major correction. We believe the new optimism should continue to sustain markets in the New Year.

It is news of the first Covid-19 vaccine, the outcome of the U.S. elections and quarterly economic and corporate figures that have changed the mood. The biggest market reaction was triggered by the news from Mainz, Germany, on the successful vaccine trial - and with good reason. Progress in the handling of Covid-19 was the basis of our 2021 outlook but confirmation that a vaccine is effective and will soon be available is transformative. For the first time, consumers and companies can see light at the end of the tunnel, and we expect the pandemic to be largely under control by the end of 2021. The U.S. elections, meanwhile, went smoothly overall and delivered a result that investors have been quick to welcome. America's trading partners are hoping for a more predictable trade policy under Joe Biden. America's companies, on the other hand, appear relieved that the Senate is likely to remain Republican and probably will not approve any major tax increases. A further boost for markets was that both macroeconomic data and corporate results in the third quarter were surprisingly positive. It has become apparent that many economies revived fairly quickly after the spring lockdown.

Other factors, too, have helped foment a far happier mood. The European Union (EU) is moving toward a 750 billion euro coronavirus rescue package, and the world's major central banks have committed themselves to not responding immediately to any rise in inflation. Last but not least, the chance of more constructive negotiations between the EU and the UK has probably increased, now that the domestic pressure on Prime Minister Boris Johnson has become more intense and his controversial chief advisor, Dominic Cummings, has departed.

What this means for individual asset classes can only be understood if we first consider the overall picture from an investor's perspective: It is only thanks to China that the global economy should be able to return to its 2019 output level in 2021. Nevertheless, the world's stock markets¹ are trading at record highs. How can this be explained? In our opinion, this is due to the expected strong recovery which, however, carries little risk of overheating and inflation as capacity remains very underutilized. The recession which has long been feared now seems off the table for some time – because it has already occurred

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¹ On November 16, the MSCI AC World Index, for example, was trading approx. five percent above its historic high in February 2020. Source: Bloomberg Finance L.P.



in 2020. And central banks have made policy even looser while strengthening their commitment to avoiding monetary tightening. This leads us to expect low interest rates even beyond our forecast horizon.

Earnings growth and a low interest-rate environment form the basis for our optimistic view on equities and allow us to reduce the risk premium and increase our target price-to-earnings ratio and. This results in further upside potential, in the higher single-digit percentage range, and for Asia even in the double-digit range. Asia has managed the pandemic significantly better, even avoiding sharply increasing debt. It also has leading companies in our favored technology and Internet sector. Technology is even more prevalent in the U.S. market, which we still like despite its above-average valuation. Europe's markets may look more favorably valued at first glance, but we think their cyclical, export-oriented profile won't inspire investors for long. We believe growth stocks are likely to remain structurally more attractive in the low-growth environment expected from 2022 onwards. We find sectors with a positive carbon balance, which are often identified by our ESG-led investment approach anyway, equally attractive. We believe they should receive a further boost from the focus of European – and we think soon American – policymakers on a "green deal²."

There has been little change in bonds, with riskier segments also benefiting from the low-interest-rate environment. Some corporate bond indices have not yet returned to their precrisis levels since the market panic early in 2020. We expect significantly lower issuance in 2021, with demand remaining

more or less unchanged and, in the Eurozone, still supported by the European Central Bank. In emerging markets, too, we continue to see good opportunities in selected regions and sectors, also against the background of stabilized raw-material prices and a generally sideways-trending dollar. We see U.S. 10-year government-bond yields trading at around one percent, and we also expect German government bonds to tend to move sideways, with only a slight upward trend.

We see further upside potential for gold, not least due to the ongoing fiscal and monetary support, rising to a price of up to \$2,100 an ounce. In the case of oil, we expect less upside in price than the economic recovery might suggest. Saudi Arabia and Russia in particular are in a position to expand their production immediately at any time.

Real-estate markets have diverged significantly in 2020. Housing has done well but retail, hotel and leisure has suffered. We remain cautious on the latter, and prefer industrial and residential real estate and select office properties.

An optimistic capital-market outlook may come as a surprise in the middle of a pandemic. And, of course, there is no end of risks – among them ones that are predictable now. Accidents around Brexit or in the wake of the U.S. elections as well as setbacks in the fight against the pandemic cannot be ruled out. Neither can further natural disasters nor geopolitical conflicts. But we expect the markets to continue to be driven primarily by profit growth and low interest rates. It's for this reason that we are quite optimistic for 2021.

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² Broad term for policies aimed at minimizing greenhouse-gas emissions as to minimize global warming and climate change overall





November 24, 2020

The beginning of the pandemic's end?

We are increasingly confident in our constructive base case for the world economy in 2021 and beyond, but plenty of question marks remain.

- _ Learning to cope with the virus was always likely to be an uneven process, but there are signs of progress.
- So far, there are few signs of permanent economic scarring one might expect from such a sharp contraction.
- _ The economic rebound of recent months hints at a bright future ahead, once lockdown measures are fully lifted.



Johannes Müller Head of Macro Research

e are increasingly confident in our constructive base case for the world economy in 2021 and beyond. In part, that reflects recent economic data. Around the world, the economic recovery after the collapse in spring has been quite impressive. This shows a few things, notably that at least so far, there are few signs of permanent economic scarring one might expect from such a sharp contraction. It is becoming increasingly clear that there are now several ways of how daily life might return to something close to the pre-pandemic normal. These paths are no longer just potentially feasible but also increasingly visible. That is more than could have been said with much confidence three months ago.

Based on the experience of coronaviruses causing the common cold, getting quickly towards first-generation vaccines that might work was not a given.¹ Given the vast resources deployed we hoped for as much, and had already included some relief over the course of 2021 into our forecasts. Set against this are the renewed, if somewhat more targeted, lockdown measures during the winter months in most of the Northern Hemisphere. Learning to cope with the virus was always likely to be an uneven process, but there are signs of progress. Alternative, quicker testing solutions have become

available. Trends for therapeutics appear encouraging. As with vaccines, there is, of course, still the potential for plenty of setbacks, not least in terms of how quickly policymakers will prove able to use them well.

Policymaking is one of the reasons why many question marks remain. With the U.S. elections finally behind us, the likely outcome of a Biden administration with a Republican Senate has not significantly changed our forecasts. While there is a risk of fiscal-policy paralysis, the downside risk to economic forecasts is partly offset by the evidence so far that the U.S. economy has proved flexible enough to bounce back even as infection rates continued to rise. The picture is murkier in Europe. Still, the two-stage recovery we forecast this spring has, if anything, underestimated the initial strength of economic momentum somewhat. From now onward, we have penciled in a softening of momentum. We expect many of the measures to contain the virus to remain for months, not weeks. That said, we do not expect a broad third or fourth wave of nationwide lockdowns. We believe this strengthens the prospects of a year 2021 with above-potential growth, and even growth in 2022 could be decent. In our view, inflation should not be an issue of 2020 nor 2021.

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¹ https://www.nature.com/articles/d41586-020-02400-7



With gloomy headlines on the rise again now, all this might sound a bit too good to be true, by the time you read this. We would certainly not wish to downplay the role of sentiment effects, merely suggest that in another three months, the headlines and the sentiment might already be very different. In his book "Narrative Economics," the economist Robert Shiller describes how perceptions and the stories we tell each other can drive economic events.² Some of his most striking and timely examples concern "the 1918 flu pandemic, often called the Spanish flu, [which] cost more lives than World War I" (p.108). Prior to Covid-19, the period from 1920 to 1921 was "the sharpest depression (meaning the fastest decline and recovery) in U.S. history since the advent of modern statistics," Shiller writes (p. 242). In marked contrast to perceptions of the Great Depression a decade later, this "Forgotten Depression" was swiftly followed by a sharp recovery, starting in 1921. It was seen as "a transitional phase back to normalcy after a war and an influenza epidemic," Shiller concludes (p. 252).

What to make of any such historic analogy? Clearly, not too much at the outset of a once-in-100-years crisis. As far as the U.S. is concerned, that "Forgotten Depression" of 1920 constituted a sample size of one – not enough, as any first-year undergraduate of statistics will know, to draw meaningful inferences from. The picture becomes quite bleak, once the experience of other industrialized countries during the 1920s is considered alongside the economic boom in the U.S. (where it soon came known as "The Roaring 20s," as chronicled by F. Scott Fitzgerald in "The Great Gatsby").

Clearly, a lot has changed since then but not, perhaps, the capacity of economic commentators to be led astray by the most recent data or the moment's most compelling narrative. The economic rebound of recent months hints at a bright

future ahead, once lockdown measures are fully lifted – "a transitional phase back to normalcy," to use Shiller's wording. Still, we would warn readers not to place too much reliance on any particular bit of news, whether it appears positive or negative. It is far too early to say whether any of the first generation of vaccines will offer sterilizing immunity – that is prevent those vaccinated not just from getting sick but also from spreading the virus.³ Worse still, as Nassim Taleb pointed out 15 years ago, investors are not the only ones to be frequently "Fooled by Randomness."⁴ When it comes to complicated scientific matters such as late-stage clinical trials, journalists and especially their headline writers may sometimes make pretty elementary mistakes. A perennial favorite is to confuse the absence of evidence with the evidence of absence.

Early results of the first large-scale vaccine trials were widely touted with eye-catching headlines. However, these were interim and partial results, released via press release. The data had been collected a mere seven days after the second dose was administered. It revealed 94 symptomatic cases, of which 86 appear to have been in the group that had been given the placebo instead of the vaccine.5 The next release suggested that effectiveness might be even higher than initially thought, as did data from a competing vaccine also under development.⁶ Rather than focusing on the specific percentages and small changes in how high effectiveness seem in any particular cohort, this should serve as a reminder of the role randomness necessarily plays in such trials. Pharmaceutical companies structure their trials so as to extract as much information as possible from early data. Still, we believe it will take guite a bit of time, and a lot more data, to see whether any one particular vaccine will prove both safe and "highly effective." Let alone mark a decisive turning point in the fight against Covid-19.7

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² Shiller, R. (2019) "Narrative Economics: How Stories Go Viral and Drive Major Economic," Princeton University Press

 $^{^{3}\} https://www.statnews.com/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/four-scenarios-on-how-we-might-develop-immunity-to-covid-19/2020/08/25/60/08/2020/08/2020/08/2020/08/2020/08/2020/08/2020/08/2020/08/2020/08/2020/08/200/08/2020/08/200/08/200/08/200/08/200/08/200/08/200/08/200/08/200/08/200/08/$

⁴ Nassim Nicholas Taleb (2004), "Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets," 2nd edition, Thomson Texere.

⁵ https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-announce-vaccine-candidate-against

⁶ https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine and https://investors.modernatx.com/news-releases/news-release-details/modernas-covid-19-vaccine-candidate-meets-its-primary-efficacy

⁷ See, for example, the overview of recent vaccine developments in: https://www.economist.com/briefing/2020/11/14/an-effective-covid-19-vaccine-is-a-turning-point-in-the-pandemic





November 27, 2020

The case for credit remains strong

A lot has changed, but readers familiar with our previous annual outlook might experience a strange sense of déjà vu.

- _ In our opinion, corporate bonds and other credit asset classes look set to offer an exceptional risk-reward profile as we head into 2021.
- _ Rates on government bonds are likely to remain low for even longer than we thought a year ago as central banks try to contain the damage of the Covid crisis.
- _ We expect little movement in currencies and think that it is still too early to count out the dollar just yet.



Jörn Wasmund Head of Fixed Income/Cash

hat a year it has been! Economies have coped surprisingly well with what will hopefully prove a once-in-a-century pandemic. In recent weeks, Covid-19 infection rates in the United States and Europe have increased once again, leading to partial lockdowns. As cynical as it sounds, this seems to be good news for asset prices as it forces central banks to continue with their bond-purchase programs for a very long time. Further support is provided by three factors: (1) Encouraging (but preliminary) data from late-stage vaccine trials. (2) The likely outcome of the U.S. election with chances of the incoming Biden administration enacting major changes to the corporate tax code having receded. (3) The pandemic recovery fund established by the European Union (EU) is finally paving the way towards more fiscal integration.

So, what to make of all this? Broadly, and to paraphrase the Italian novelist Giuseppe Tomasi di Lampedusa, a lot has had to change, only so that everything could stay the same, at least in terms of the implications for fixed-income asset classes. Readers familiar with our previous annual outlook might experience a strange sense of déjà vu: we still like credit, probably more than ever. This time around, we are even more convinced that

corporate bonds will offer an exceptional risk-reward profile as we head into 2021 – hopefully, without the roller coaster ride we saw in 2020.

With central banks likely keeping their foot on the gas pedal, we continue to expect interest rates to remain low for longer. Compared to the summer, our rates outlook is unchanged in Europe, the UK and Japan. For the U.S., we expect somewhat steeper yield curves at the long end (10- to 30-year bonds) as the very long end should return to more normal levels as news about the economic recovery arrive. Still, we think negative real interest rates will continue for pretty much all government bonds that can meaningfully be considered risk-free. In Japan and much of the Eurozone, even nominal interest rates have long been negative, and look set to remain so. For example, the European Central Bank (ECB) has clearly signaled that it remains vigilant and still targets additional quantitative easing (QE), leaving little if any upside potential in Eurozone yields. (Incidentally, the words "upside potential" are a bit of a misnomer. We see German Bunds a year from now at -0.5% for 10-year Bunds and -0.1% even for 30-year Bunds, so "rising" yields would mean them becoming less negative, thus inflicting capital losses on top of negative yields.).

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With such unappealing "risk-free" alternatives, it should not be a surprise that the hunt for yield continues. Within sovereign bonds in the Eurozone, we keep a close eye on the EU periphery. For example, due to the more constructive outlook on Italy by the major rating agencies, these bonds remain attractive on current spread levels, given roll-down and carry, even with limited further tightening potential.

This lack of alternatives has led to a bizarre situation in the euro-denominated investment-grade (IG) corporate-bond market. The share of IG bonds with negative nominal yields is back to a whopping 35%.¹ Increasingly, we are seeing highly rated IG bonds replacing sovereigns as the anchor asset class in various client asset allocations. On the high-yield (HY) side we have seen that even issuers badly hurt by the pandemic continue to get their refinancings done, which limits the likelihood of future defaults. We expect default rates to stay low in the Eurozone and probably decline in the U.S. because of fiscal support packages and the circumstance that jeopardized business models have already gone bankrupt. The positive news of vaccines has lifted the tide further; even high-yield laggards in Covid-hit sectors have lately recovered nicely on both sides of the Atlantic.

Meanwhile, Asia in general and China in particular appears well on its path towards recovery.

The China locomotive and the Asian free-trade agreement together with stable oil prices and a stable U.S. dollar should be highly supportive for our other preferred asset class – emerging-market (EM) and Asian bonds. We expect higher yielding names in particular to benefit from the reduced tail risk and the hunt for yield.

Could things still go wrong? Well, yes. Markets have taken the Covid vaccine news and the likely U.S. election results as a sign of reduced tail risk for credit. We will leave it to medical and public-health experts to assess the likelihood of negative,

or indeed further positive, surprises on vaccines, therapeutics and the impact of the increasingly wide-spread deployment of

quick Covid testing. On economic policy, though, a few words of caution are in order.

The run-off elections of two Georgia Senate seats on January 5th could yet deliver unified Democratic control in Washington. In any case, investors should be wary of extrapolating from electoral events to the likelihood of just the right mix of targeted fiscal stimulus in the short term and fiscal conservatism being delivered in the longer-term. Politics is a messy and unpredictable business. And, in U.S. economic history, the quick and effective fiscal response to the economic shutdown of 2020 was very much an outlier, probably owing to a fairly unique set of political circumstances. "Legislative responses to financial crises and economic downturns have generally been limited and delayed," three leading political scientists noted in an invaluable book published after the events of 2008 ²

Heading into 2021, Washington gridlock would only be good news for the markets in case there would be no need for legislative action. Sanguine market assessments are based on the idea that monetary and fiscal policy have effectively introduced a put onto bonds, and will swiftly come to the rescue if and when required. This idea of such an effective put might well be tested in the coming months, if, for example, more wide-spread virus containment measures were to squeeze corporates once again.

We would probably tend to see such bouts of nervousness as buying opportunities. Overall, we have never been as convinced that credit will work out as we are for 2021. Of course, there are always individual idiosyncrasies to consider, focusing on balance-sheet strength, as well as local monetary policies for bonds, for example by emerging-market issuers, denominated in local currency. On major currency pairs, we expect little movement. While we think that it is too early to count out the dollar just yet, steady policies on all sides appear more likely to deliver comparative tranquility, rather than big swings.

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¹ Bloomberg Finance L.P. as of 11/17/20

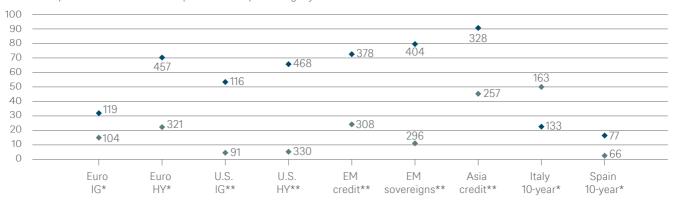
² McCarty, N., Poole, K.T. and Rosenthal, H., 2013. Political bubbles: Financial crises and the failure of American democracy. Princeton University Press. See esp. pp. 153-183.



CURRENT BOND SPREADS IN A HISTORICAL CONTEXT

For most fixed-income asset classes, current spreads remain higher than at the end of last year, putting bonds at the cheaper end of historical valuations during the last 5 years.

% of time spent at or below current spreads in the preceding 5 years



Current spread (11/17/20)

■ Spread percentile year-end 2019

Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 11/17/20

^{*} Data labels show spreads vs. German Bunds

^{**} Data labels show spreads vs. U.S. Treasuries





November 25, 2020

2021 looks pretty good for equities

Earnings growth and "low-for-even-longer" interest rates imply a lower risk premium and higher valuations for equities.

- Various risks that weighed on markets lost their bite at the end of 2020, emboldening investors.
- _ Vaccines that should bring the pandemic under control and a persistent low-interest-rate environment are the basis for our optimistic view on equities.
- Our preferred region is Asia, our preferred sector technology. We expect recent rallies in cyclical and value stocks to be short-lived.



Dr. Thomas Schüssler Co-Head of Equities



Andre Köttner Co-Head of Equities

s we shape our equity-market forecasts for 2021, we see a world plagued by the worst pandemic in a century, which has upended everybody's lives as well as entire business sectors and weighed heavily on consumer and corporate spending alike. And yet stock markets have reached new highs, on the basis of record-high valuations. It sounds like the perfect combination for a market correction, and therefore for skepticism. Yet we are not pessimistic. Why? The arrival of effective Covid-19 vaccines looks set to allow a return to a more "normal life" by the end of 2021. That, in turn, should support an economic recovery that we expect governments and central banks to also be eagerly nurturing. We therefore forecast a 25-30% earnings-per-share (EPS) recovery for most markets and "lowfor-even-longer" interest rates, with 10-year U.S. Treasury yields staying below or only slightly exceeding 1.0% by year-end 2021. Then a constellation of two factors, T(here) I(s) N(o) A(Iternative) and F(ear) O(f) M(issing) O(ut), in alignment with rebounding economic activity, should support further market upside for equities. Our December 2021 targets are 3,800 for the S&P 500 and 14,000 for the Dax.

To get there, we believe investors will have to accept even lower equity risk premiums and higher price-to-earnings (PE) ratios

than previously assumed. But a number of factors suggest equities can make the ascent into even thinner air. The likely gridlock in the newly-elected U.S. Congress could become a "goldilocks" environment. Inflationary pressure should remain limited as we believe the probable Republican Senate majority will accept only downsized fiscal stimulus and will prevent a sweeping reversal of tax reforms. We believe global trade prospects, too, should benefit from the new political set-up in Washington. However, we expect markets outside the U.S. to continue trading at above-average valuation discounts to the U.S., mainly due to their lower relative weight of high-growth stocks. Nevertheless, we have mid-single-digit total-return expectations for European and Japanese equities for 2021.

We forecast double-digit returns for emerging-market equities and upgrade both Asia (excluding Japan) and emerging marets as a whole to overweight. Asia is our preferred region for 2021. China has successfully handled the Covid challenges without amassing significant new government debt, which bodes well for long-term growth prospects. It is now the second time (the first time was the Global Financial Crisis) that China has led the world economy out of the slump. Rebounding European and Japanese exports to China are the proof

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of that now. We believe the geopolitical rise of China will become even more visible in the coming years. China remains on track to add technological leadership to its military- and economic-superpower position. We expect EPS levels for the MSCI AC Asia ex Japan Index to surpass pre-Covid levels already in 2021, well before the U.S. and Europe.

Making money by switching investment styles might be difficult in 2021. We expect several short-lived 'cyclical' and 'value' rallies as some institutional investors exit the herd of 'growth' investors and try out something supposedly new. However, we believe interest rates and economic growth prospects are likely to remain too low to make these rallies sustainable and we keep a modest preference for the 'growth' camp for the time being. Most value stocks are biased towards physical and financial balance-sheet assets. Growth stocks, on the other hand, remain beneficiaries of the global spread of digital technologies that are based on intangible assets. This sector, with many of its biggest members benefiting from positive network effects of their vast social platforms, has

proven even in 2020 that it can produce superior and growing free-cash-flow streams to shareholders. Therefore we stick to our overweight in the IT sector. In our view, the main operational risk for now remains more legal or governmental antitrust interventions. China has just recently taken its first measures against its own tech behemoths. It remains to be seen whether the new U.S. administration will follow suit or allow its own tech giants to grow further – partly in order to keep Chinese rivals at bay. Where real estate is concerned, working from home and the rising share of ecommerce in retail spending keeps us on the sidelines; we prefer an underweight in this sector.

We believe 2021 will see several new "green-deal" initiatives across the globe that should create thematic investment opportunities in climate technology in many sectors. We have therefore decided to upgrade utilities from underweight to neutral and focus on renewable energy within the sector. Our ESG team favors avoiding sectors with high environmental externalities, like oil, materials and airlines.

CLOSE CORRELATION BETWEEN VALUATION MULTIPLES AND (INVERTED) REAL INTEREST RATES.

Plenty of fundamental factors speak for equities in 2021 but their valuation hinges more than ever on the level of interest rates.



* Treasury inflation-protected securities Sources: FactSet Research Systems Inc., DWS Investment GmbH as of 11/12/20

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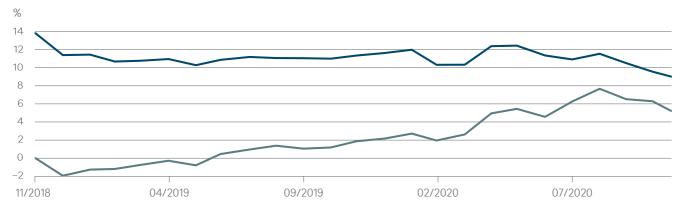
¹ Broad term for policies aimed at minimizing greenhouse-gas emissions as to minimize global warming and climate change overall

Valuations overview

UNITED STATES: NEUTRAL (NEUTRAL)*

If the economic recovery in the U.S. continues without being thrown off course again by the pandemic, we expect earnings per share in 2021 to exceed their level in 2019. We continue to prefer growth stocks, and especially technology, to value stocks.

However, growth stocks are unlikely to repeat their marked 2020 outperformance, not least because we expect short rallies in cyclical stocks. Negative real interest rates are an important driver, especially for U.S. equities.

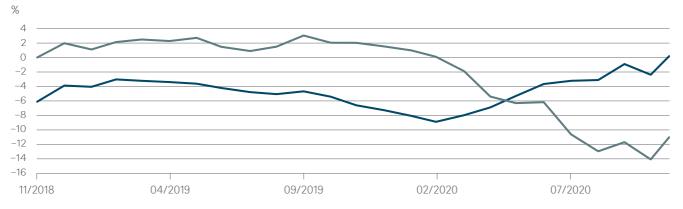


- Relative valuation (P/E ratio): S&P 500 vs. MSCI AC World Index
- Relative performance: S&P 500 (in dollars) vs. MSCI AC World Index (in local currency)

EUROPE: NEUTRAL (NEUTRAL)*

European equities should continue to benefit from the recovery in Asia and the U.S. due to their higher weighting of cyclical stocks and high proportion of export-oriented producers. Should Europe's economy accelerate as well, European stocks might even lead the global market in 2021. However, at the normal-

ized lackluster pace of growth we expect in Europe, the lack of major growth stocks could once again hamper European stock markets. We have more confidence in individual sectors, such as the beneficiaries of various "green deals."



- Relative valuation (P/E ratio): Stoxx Europe 600 vs. MSCI AC World Index
- Relative performance: Stoxx Europe 600 (in euros) vs. MSCI AC World Index (in local currency)
- * Our assessment is relative to the MSCI AC World Index, the last quarter's view is shown in parentheses. Sources: FactSet Research Systems Inc., DWS Investment GmbH; as of 11/20/20

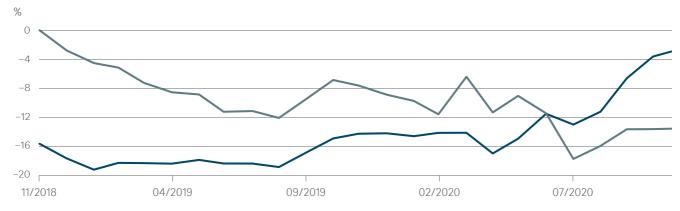
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Quarterly CIO View Equities / Valuations

JAPAN: NEUTRAL (NEUTRAL)*

Japanese stocks are well positioned for an economic recovery due to their high export ratio. In addition, most companies have solid balance sheets, are continuing to improve their corporate governance and should continue to benefit from a reli-

able political environment (the new Premier Yoshihide Suga is business-friendly) and good management of the pandemic. Japan's proximity to China and the remaining mainland of Asia is also a particular advantage at the moment.

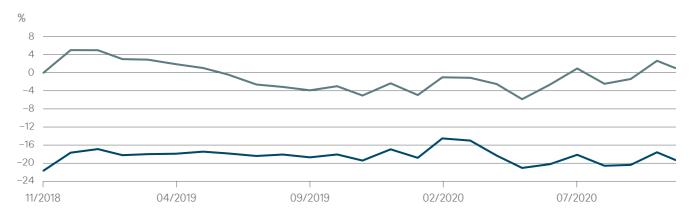


- Relative valuation (P/E ratio): MSCI Japan Index vs. MSCI AC World Index
- Relative performance: MSCI Japan Index (in yen) vs. MSCI AC World Index (in local currency)

EMERGING MARKETS: NEUTRAL (OVERWEIGHT)*

The emerging markets, and especially Asia, are our favorite pick for 2021. China, South Korea and Taiwan have on the whole come through the pandemic well without needing to ratchet up big increases in government debt. China's new 5-year plan is likely

to focus on efforts to become less dependent on imported technology and export markets. The region should also benefit from stabilized raw material prices, continuing low U.S. interest rates and a dollar that is unlikely to strengthen further.



- Relative valuation (P/E ratio): MSCI Emerging Markets Index vs. MSCI AC World Index
- Relative performance: MSCI Emerging Markets Index (in dollars) vs. MSCI AC World Index (in local currency)

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^{*} Our assessment is relative to the MSCI AC World Index, the last quarter's view is shown in parentheses. Sources: FactSet Research Systems Inc., DWS Investment GmbH; as of 11/20/20





December 8, 2020

A Washington punchline, no more?

For spending on U.S. infrastructure, the 2020 elections could mark a fairly decisive turning point.

- After decades of underinvestment, U.S. infrastructure remains in need of additional spending, creating potential opportunities for investors.
- Overall, we would expect strong cross-party support on infrastructure, with a narrowly divided Senate likely playing a key role.
- This highlights the complex interplay of economic and political considerations in determining the legislative details.



Hamish McKenzie Head of Infrastructure



Gianluca Minella Head of Infrastructure Research, Alternatives

hen it comes to U.S. politics, plenty remains uncertain. One area, where the 2020 elections look likely to mark a fairly decisive turning point concerns spending on U.S. infrastructure. Of course, hopes for bipartisan cooperation on infrastructure have failed to come to fruition before. In recent years, the very term "Infrastructure Week" became something of a long-running joke among Washington insiders.¹ Still, we are cautiously optimistic that things might be different in the next four years.

Most obviously, the world's leading economy may now support decarbonization, by re-joining the Paris agreement on climate change.² Under President-elect Joe Biden, the next administration is likely to bring a fresh focus to the energy transition and fostering renewable sources. As a result, we would expect more investment in grids, battery storage, and a stronger promotion of transport electrification. Attempts to reduce emissions, and support a nascent low-carbon economy will probably start in early 2021, in so far as they concern regulatory actions. However, most will only unfold over the medium term.

Already, there are strong underlying economic forces pushing towards decarbonization, such as electricity renewables reaching grid parity. Somewhat independently from policymaking, transport electrification has also continued to proceed during the Trump presidency, with the spread of recharging stations for electric vehicles. In our view, policy alignment at the federal level is likely to reinforce these trends.

That said, the barbed exchanges concerning oil and gas exploration during the final weeks of the presidential campaign serve as a reminder that the new administration may need to tread carefully. Fossil fuels in general and shale in particular remain important economic engines in key battleground states, as well as for the U.S. economy as a whole. Existing infrastructure remains pivotal in supporting the energy transition process over the coming years, in particular the role of gas. However, the bulk of the flow of new capital may gradually transition towards a greener infrastructure platform.

The picture is likely to be similarly nuanced in other areas, reflecting the interplay of economic and political considera-

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¹ https://www.nytimes.com/2019/05/22/us/politics/trump-infrastructure-week.html

² https://www.cnbc.com/2020/11/20/biden-to-rejoin-paris-climate-accord-heres-what-happens-next-.html

tions at state, local and national levels. For example, private capital is already flowing based on digitalization trends, with investment in fiber cables, datacenters and 5G mobile networks. Demand for connectivity and data volumes continues to accelerate, supporting the outlook for investment in fiber and datacenters. However, the private sector can only proceed on its own where the economics add up. For new investments, this still often means relatively dense, as well as wealthy parts of the country. As a result, rural broadband has emerged as a key topic in plenty of Congressional and Senate races. The Biden administration might be well advised to reach out to Republicans in Congress and at the state level, who ran on promises of making rural broadband a priority.

More traditional infrastructure, particularly transportation, roads, bridges, airports and water networks, already saw a strong push to accelerate spending during the outgoing administration, as part of President Trump's "Rebuild America" agenda. An area of focus at the state and local level has been social infrastructure, which can be broadly defined as the construction and maintenance of facilities that serve as the backbone for communities and societies. Examples include hospitals, education, from schools to universities, and public facilities, such as community housing and prisons.

As we previously explored in detail, much of that infrastructure remains in desperate need for maintenance, after decades of underinvestment.³ According to the American Society of Civil Engineers, U.S. transportation and social infrastructure currently see a 2 trillion dollar investment gap over the next decade; low public investment has led to deferred maintenance, with the conditions of U.S. infrastructure being "mostly below standard."⁴

To put this in perspective, infrastructure equity transactions worth some 53 billion dollars have reached financial close by

end of November in 2020, showing resilience despite Covid-19.5 Historically, the energy sector has represented the largest share of both projects and capital flow, with most transactions closing in the midstream⁶, liquefied natural gas, power, utilities and renewables sectors.

The municipal-bond market, as a competitive source of funding, has limited the involvement of private capital in transportation and social infrastructure, particularly compared to other developed markets, such as Europe. However, transportation and social infrastructure are gradually maturing, following the removal of barriers to private capital. In recent years, all U.S. states have developed legal frameworks for Public Private Partnerships (PPPs), cooperative arrangements between two or more public and private sectors, typically of a long-term nature. Given the deep damage the pandemic has done to finances at the state and local level, we may well see an acceleration in PPPs in the 2020s.

Overall, we see a decent chance for sufficient cross-party support for infrastructure spending, not least as a way to support the economy and employment, in line with President-elect Biden's "Build Back Better" agenda. Once again, however, changes will take some time, and the final outcome of any bill will be subject to compromise and negotiations.

That brings us to one key remaining area of uncertainty. Control of the Senate is still in balance until the two January 5 runoff elections in Georgia. Control of the Senate is likely to be closely divided whatever the outcome. The results may matter less for the broad policy direction than the specific legislative details in how it gets implemented. In particular, that comes down to what measures or mix of measures, from tax credits, public capital or guarantees, will be used to boost infrastructure investments. Needless to say that it is precisely such specifics that we believe determine the economics of emerging opportunities and that we will be watching closely.

- 3 For further details, see our October 2018 report, "Understanding U.S. Infrastructure Opportunities and Challenges for Private Investment Strategies"
- 4 ASCE, Infrastructure Report Card 2017
- ⁵ Infrastructure Journal database as of 12/1/20, includes only equity transactions, excludes projects exposed to the upstream or downstream Oil & Gas sector
- 6 Midstream is a term used to describe one of the three major stages of oil and gas industry operations. It includes the processing, storing, transporting and marketing of oil, natural gas, and natural gas liquids

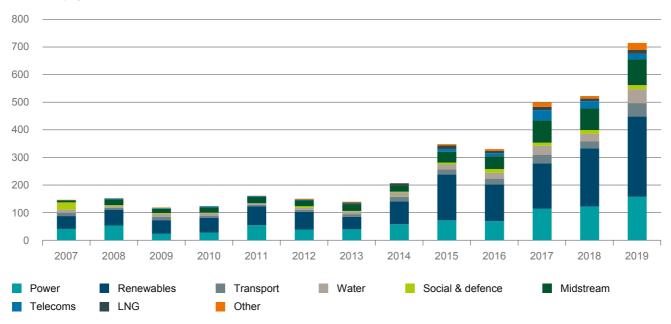
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HISTORICAL INFRASTRUCTURE TRANSACTIONS IN THE UNITED STATES BY SECTOR

Traditionally, the energy sector has represented the largest share of both projects and capital flow, while transportation and social infrastructure has been underdeveloped.





Source: Infrastructure Journal database as of 8/27/20

GLOSSARY

Municipal bonds (Munis) are debt securities issued by a state, municipality or country.

The Paris Agreement was reached after the 2016 United Nations Climate Change Conference in Paris. It sets goals on greenhouse-gas emissions mitigation, adaption and finance.

The Republican Party (Republicans), also referred to as Grand Old Party (GOP), is one of the two major political parties in the United States. It is generally to the right of its main rival, the Democratic Party.

The United States Congress is the legislature of the federal government. It is comprised of the Senate and the House of Representatives, consisting of 435 Representatives and 100 Senators.

The United States Senate is a legislative chamber consisting of 100 Senators, with each state being represented by two Senators. Senators are elected for six year, overlapping terms

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December 3, 2020

Looking forward to a boring year

After a rollercoaster 2020, chances for a more "normal" 2021 are good. Economic recovery and central-bank support can serve as a safety net.

- Thanks to good vaccine news, economic recovery seems probable in 2021.
- With central banks still offering plenty of support this results in a scenario much appreciated by investors.
- This situation has not gone unnoticed with investors well positioned for this risk-on environment. That is one of the reasons why we enter the year well diversified.



Global Head of Multi Asset

n 2020, finding the right balance between participating in the market rally and hedging for possible downturns was the challenge. Given the global pandemic and the hotly contested U.S. elections, markets always seemed vulnerable. In 2021, too, that balancing act could again be difficult. And there will be other challenges, such as figuring out which of the market patterns and cross-asset correlations that were prevalent in 2020 could persist in a year in which the grip of the pandemic should loosen and life become more normal. The U.S. dollar has been central to one typical pandemic market pattern: for the better part of 2020 it has reacted predominantly to changes in risk appetite and aversion. That might change, eventually. Another, more familiar challenge for 2021 will be to assess to what extent markets respond to the verbal reassurance offered by central banks or whether only perceived changes in the volume and pace of support (in the form of liquidity) affects them. Inflation expectations, too, and their impact on different asset classes will also have to be carefully monitored. And after the strong rally in almost all markets that we have seen in 2020, we are, from a multi-asset perspective, weighing carefully in which assets it still makes sense to chase a few extra points, and where it makes more sense to protect gains.

We have little doubt that in 2021 central banks will again stand ready to protect markets. But we believe there may be little reason for them to intervene massively again. The outlook seems much better now than it did only a few weeks ago. The basis for our investment strategy are the following assumptions: economic and market tail risks have diminished, given the results of the U.S. elections and recent progress with several effective coronavirus vaccines. Exceptionally high fiscal support and already ultra-accommodative central-bank policy provide a favorable economic-policy backdrop as 2021 begins. This should provide support for most areas of equity and fixed-income asset classes, even though some risks remain.

In equities we believe that emerging markets (EM) can maintain the strong relative performance they have displayed for some time. We particularly like Asian equities for a mix of short- and long-term factors. Short-term positives include the circumstance that many Asian EMs have recovered quickly from the pandemic. Longer-term positives include lower debt levels and the prevalence of high tech in some Asian EM equity indices.

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At a global level we still favor growth over cyclical and value stocks, although we believe that the current market rotation into value has not yet come to an end. We therefore prefer a more balanced allocation in terms of styles. Markets are positioning for an economic upturn but economic growth could wane again in the course of 2021, reinforcing the case for companies that have proven able to deliver growth even in a difficult, low-economic-growth environment. We are well aware that we are not alone in taking a positive view of equities and we are keeping a close eye on investor flows and positioning. Most investors are prepared to look through the current wave of Covid. But they might lose their nerve if the pace of recovery slows again because of negative health or economic developments.

Sovereign bonds, on the other hand, have lost most of their appeal, given that yields are more than likely to remain very low or even negative. Corporate-bond spreads have tightened so much since the initial Covid spike in March that the outlook for 2021 is much less promising. But corporate bonds will, we believe, be supported by lower supply and continued demand, not least from central banks. We continue to prefer euro over U.S. dollar investment-grade (IG) bonds given the European Central Bank's dominant role as a price-insen-

sitive buyer. Our preference for euro high yield (HY) remains marked, both over U.S. HY and euro IG, because we think it has the potential to catch up during the recovery. Meanwhile, although it lacks direct central-bank support, EM debt, both sovereign and corporate, looks most appealing to us now. It is benefiting from both the good news on vaccines and the U.S. election outcome, which we expect to have positive implications for liquidity in the coming year. Within the EM space, we prefer high-yield issuers over investment grade, given where valuations are.

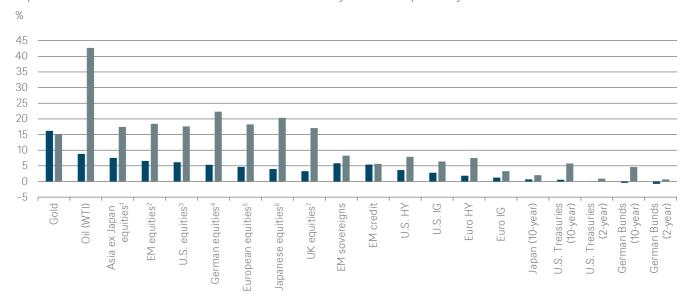
Although we do not expect consumer-price inflation to be a major issue in 2021 some industrial commodities might benefit further from the economic upswing, especially given reduced investment on the supply side this year. Among precious metals, gold could still appeal in a negative-rates environment, even though it is now struggling in the risk-on environment as economic sentiment improves. For currencies we have become more cautious on the U.S. dollar and prefer the Japanese yen. Since March 2020, many currencies have been driven more by overall changes in risk-on/risk-off market sentiment than by economic or policy fundamentals. Continued risk-on sentiment could temporarily weaken the U.S. dollar over the next few months, while the Japanese yen might act



as a shock absorber at times of unexpected market stress.

DWS RETURN EXPECTATIONS VS HISTORIC VOLATILITY, CROSS ASSET

Expected returns based on DWS's end-2021 forecasts. Volatility is based on past ten year's data.



Expected total return

Volatility

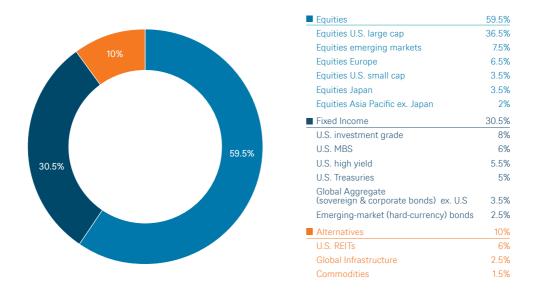
One cannot invest directly into an index

- ¹ MSCI AC Asia ex Japan Index
- ² MSCI Emerging Markets Index
- 3 S&P 500
- 4 Dax
- ⁵ Stoxx Europe 600
- ⁶ MSCI Japan Index
- 7 FTSE 100

Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 11/25/20 $\,$

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Multi-asset allocation for U.S. investors



The chart shows how we would currently design a balanced, dollar-denominated portfolio for a U.S. investor taking global exposure. This allocation may not be suitable for all investors and can be changed at any time without notice. Please access the DWS CIO View website for monthly updates. Alternative investments involve various risks and are not necessarily suitable for all clients or for every portfolio. Source: Multi Asset Group, DWS Investment Management Americas as of 11/25/20



Sunny outlook with just a few clouds emerging

Good mood despite near-term uncertainties

he markets' dominant topic in 2020 was, is and will probably remain Covid-19. Even the U.S. presidential election only temporarily dominated media attention. Even then, the capital markets remained more concerned with the pandemic. Optimism about the early availability of a vaccine, and in sufficiently large quantities, has become prevalent and the beginnings of an emerging V-shaped recovery have been visible in the DWS macro indicator for several months. After its low at the beginning of June, the indicator has rapidly moved into the clearly positive range, predicting a much improved macroeconomic environment.

The DWS risk indicator looks similar. When it first appeared, Covid-19 deeply unsettled market participants. Accordingly, the DWS risk indicator signaled a very high degree of risk aversion. Now that vaccines promise a remedy for the virus

and the U.S. presidential election is mostly behind us, risk appetite has turned around completely. As measured by the DWS risk indicator, optimism is at its highest level since 2007.

The DWS surprise indicator, however, signals that the prevailing optimism may be premature. The resurgence of new infections and associated reintroduction of lockdown measures are gradually showing their impact on parts of the economy. Analysts' expectations have not only been positively surprised recently.

Taken at current face value, all three DWS indicators signal an overall very positive economic environment. That being said, the economic effects of the recent lockdown measures can only be observed in the DWS macro and surprise indicators with a certain time lag.

MACRO INDICATOR / Condenses a wide range of economic data

The DWS macro indicator improved steadily in the middle of the year. At the beginning of August, the indicator climbed above the 0.5 level for the first time since mid-2018, but has lost some momentum since then. However, the effects of renewed Covid-19-related restrictions are still barely visible.



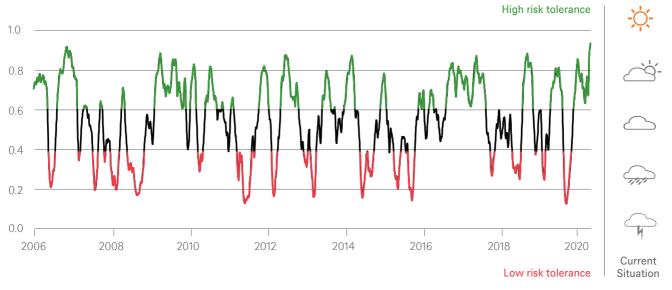
Source: DWS Investment GmbH as of 11/26/20

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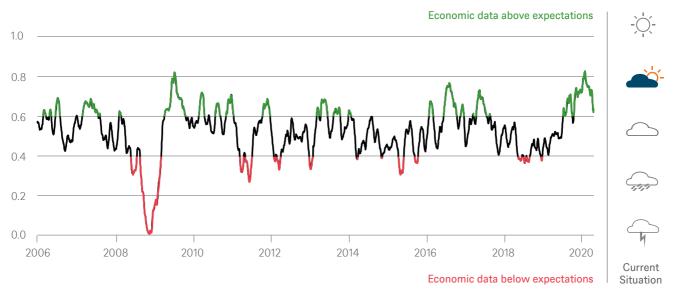
RISK INDICATOR / Reflects investors' current level of risk tolerance in the financial markets

After reaching a peak in mid-August, the DWS risk indicator has declined somewhat in the last months. Most recently, however, the index has benefited again from the elimination of uncertainties surrounding the U.S. elections and news about the effectiveness of various vaccines against Covid-19.



SURPRISE INDICATOR / Tracks economic data relative to consensus expectations

The DWS surprise indicator has corrected from a very high level reached in late summer, but remains positive. In the first half of the year, the three global regions had diverged significantly from each other but later converged. Recently, however, Europe recorded worse figures than Asia and the U.S., while still remaining in positive territory.



Source: DWS Investment GmbH as of 11/26/20

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December 7, 2020

The other sort of liquidity

Water has become an increasingly important factor for performance across sectors, sub-sectors and companies.

- From a sector perspective, energy and materials pose some of the highest water-based risks.
- _ We see comparatively lower water risks in the financial, healthcare and communication services sub-sectors, as well as among some industrial companies, such as transport.
- _ The integration of environmental, social, and corporate governance (ESG) criteria helps us identify potential investment opportunities and risks.



Petra Pflaum CIO for Responsible Investments

his article outlines how we think about water risks within an investment framework at DWS. Our new water-risk rating has now been integrated into our climate-and-transition-risk rating. First, though, a few words about water risks, and how and why we believe they are relevant for asset management.

Our fiduciary role is to take care of our clients' capital, to deploy it and aim to ensure sustainable returns. Water matters. Already, 25% of world economic growth is from countries facing chronic water shortages. That share is likely to rise in the coming decades. Water resources, in particular fresh water, barely represents 2.5% of all the world's water. A little under 1% is available to sustain all terrestrial life and ecosystems. To make matters worse, pollution, the loss of natural wetlands and the increasing likelihood of droughts coupled with drastic climate change are adding further strains on the availability and quality of water resources. Moreover, population growth, climate change and our inability to redress the damage created by past action have the potential to make a bad situation even worse.1

For example, the United Nations (UN) explains in detail how water may affect climate change in its comprehensive report, "Water and Climate Change." According to these researchers, climate change will probably result in more extreme events such as heavier precipitation, extreme heat and prolonged droughts. By contrast, there remains significant uncertainty in identifying a clear direction about annual precipitation totals and seasonal patterns.

No wonder then, that various groups such as the World Bank and the World Economic Forum see water as a key systemic risk facing our planet.³ Over the past two decades, a significant body of research has taken place to understand water risks, but progress on addressing them has been slow. These failures probably reflect (i) the fragmented nature of water regulation, (ii) the characteristics of water investments, and (iii) the misplaced belief of many decision-makers that water is plentiful and cheap.

So, what does all this mean at a practical level for asset management? One area of focus is on existing water-related infrastructure. Climate change and rising sea levels generate

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¹ FAO Water: A finite resource (1995) http://www.fao.org/3/u8480e/U8480E0c.htm

² https://www.unwater.org/publications/world-water-development-report-2020/

² See esp. World Bank (August 2019). Quality Unknown - The Invisible Water Crisis https://openknowledge.worldbank.org/handle/10986/32245



additional risks with most of the world population living in coastal areas. As a result, there is likely to be a growing need for adaptation measures by both the public and the private sector. Key concerns range from higher levels of erosion and the contamination of water-courses, to the creation of temporary ponds that can foster the growth of mosquito larvae which are vectors for diseases. New infrastructure may also be needed to reduce risks associated with extreme weather events. Without mitigation measures, water stress as a result of extreme events could put a stop to manufacturing and energy generation and even endanger food availability.

Based on this, we have identified a range of investment approaches. These include risk-control approaches that offer the potential to minimize exposure to companies and sectors with high water risks, but also looking at the topic from a thematic angle. Positive approaches seek to identify companies that drive innovation for the management of water risk or generate other positive changes in mitigating water risks. Finally, our traditional engagement and stewardship approach uses investor influence with companies to focus on real-world changes and/or improving financial risk management and disclosure.

We believe that tilting a portfolio away from companies with high carbon emissions or high water use/pollution can reduce financial risk as the profitability of such companies may be negatively impacted in the future. Risks to such companies include regulatory changes, carbon or water pricing, faster expansion of renewable technologies or changing market perceptions. However, divestments do not necessarily affect carbon emissions, water use/pollution, nor boost real-world resilience to physical climate impacts. In principle, differences in priorities may exist for fixed-income and equity investors, but both tend to have similar views on the importance of corporations strengthening their sustainability policies and actions.

In our analysis, we look at the impact of water risk in the different sub-sectors to address water risks and opportunities in the sector-allocation and portfolio-construction process. For each investment, we systematically ask: "Is the company materially exposed to water risk? How well can the company deal with this risk?" To do so, DWS has developed its own proprietary water-risk methodology. For company-level inputs, we subscribe to the four important ESG data providers, namely Trucost, MSCI, ISS-ESG and Arabesque, aiming to ensure a high reliability and objectivity of the final water-risk assessment.

How water risk may affect financial performance in practice is at the heart of this mapping exercise. Our analyses show that some of the highest- and excessive-water-risk companies are typically found in the energy, materials, food and beverages sectors as well as among independent power producers in the utility sector. For example, within materials, the need for key inputs such as water and energy in the mining sector is likely to physically and financially constrain the establishment of new operations. Companies with limited water risk are typically in the financial, healthcare, communication-services and some parts of the industrial sectors, such as transportation.

Aside from identifying high levels of water risk, we have also been able to identify the sectors, sub-sectors and individual securities where exposure to water has the potential to provide the most opportunities. We found that such opportunities tend to be most concentrated in industrial gases, homeimprovement retail, building products, specialty chemicals and renewables.

All told, we have found that investors are increasingly integrating ESG information into their investment decisions. This may have supported the performance of different sectors and sub-sectors during the first ten months of 2020. More importantly, it illustrates the usefulness of a formal framework when evaluating issuers against a consistent set of criteria in deriving a global outlook for a sector allocation.





November 19, 2020

In light of the very dynamic market environment these forecasts are subject to change at any time.

Macro / Cautiously optimistic

GDP growth (in %, year-on-year)

Region	2020F		2021F
United States	-4.4	7	4.0
Eurozone	-8.5	7	5.5
United Kingdom	-10	7	4.5
Japan	-5.5	7	3.0
China	2.2	7	8.2
World	-4.3	7	5.2

Fiscal deficit (in % of GDP)

Region	2020F		2021F
United States	18.0	7	15.0
Eurozone	9.7	7	6.0
United Kingdom	18.0	7	8.0
Japan	14.0	7	6.0
China	11.9	Ä	11.8

Consumer price inflation (in %, year-on-year)

Region	2020F		2021F
United States ¹	1.6	71	1.8
Eurozone	0.3	7	1.0
United Kingdom	0.9	71	1.5
Japan	0.0	71	0.2
China	2.9	n	2.0

Current-account balance (in % of GDP)

Region	2020F		2021F
United States	-2.5	→	-2.5
Eurozone	3.4	Я	3.0
United Kingdom	-2.8	Ä	-4.0
Japan	3.6	Ä	3.2
China	1.5	7	1.2

Benchmark rates (in %)

Region	Current*		Dec 2021F
United States	0.00-0.25	→	0.00-0.25
Eurozone	-0.50	→	-0.50
United Kingdom	0.10	→	0.10
Japan	0.00	→	0.00
China	3.85	Ä	3.55

Commodities (in dollars)

	Current*		Dec 2021F
Crude oil (WTI 12M forward)	41.1	7	49
Gold	1,877	7	2,100
Copper (LME)	6,934	→	6,950

F refers to DWS Investment GmbH forecasts as of 11/12/20

WTI = West Texas Intermediate

LME = London Metal Exchange

Legend applies to this and the following page

- _ Macro data, exchange rates and alternative investments: The arrows signal whether we expect to see an upward trend **3**, a sideways trend → or a downward trend **3**.
- The signals' colors illustrate the return opportunities for long-only investors: positive return potential for long-only investors. limited return opportunity as well as downside risk. negative return potential for long-only investors.

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^{*} Source: Bloomberg Finance L.P. as of 11/12/20

¹ core rate, personal consumption expenditure Dec/Dec in % (no average as for the other figures)

Equities / Low interest rates, higher valuations

	Current*	Dec 2021F				
		Forecast	Total return (expected) ¹	Expected earnings growth	P/E impact	Dividend yield
United States (S&P 500)	3,537	3,800	9.2%	31%	-23%	1.7%
Europe (Stoxx Europe 600)	385	400	6.7%	26%	-22%	2.9%
Eurozone (Euro Stoxx 50)	3,428	3,500	4.9%	25%	-23%	2.8%
Germany (Dax) ²	13,053	14,000	7.3%	25%	-20%	2.7%
United Kingdom (FTSE 100)	6,339	6,400	4.8%	25%	-24%	3.9%
Switzerland (Swiss Market Index)	10,496	10,900	6.8%	13%	-9%	3.0%
Japan (MSCI Japan Index)	1,050	1,100	6.6%	25%	-20%	1.9%
MSCI Emerging Markets Index (USD)	1,182	1,280	10.6%	28%	-20%	2.3%
MSCI AC Asia ex Japan Index (USD)	778	• 850	11.5%	24%	-15%	2.2%

^{*} Sources: Bloomberg Finance L.P., FactSet Research Systems Inc. as of 11/12/20 F refers to DWS Investment GmbH forecasts as of 11/12/20

Fixed Income / Credit to remain supported

United States

	Current*		Dec 2021F
U.S. Treasuries (10-year)	0.88%	•	1.00%
U.S. municipal bonds ¹	96%	•	90%
U.S. investment-grade corporates	109 bp	•	90 bp
U.S. high-yield corporates	435 bp	•	370 bp
Securitized: mortgage-backed securities ²	49 bp	•	45 bp

Europe

	Current*		Dec 2021F
German Bunds (10-year)	-0.54%	•	-0.50%
UK Gilts (10-year)	0.35%	•	0.30%
Euro investment-grade corporates ³	107 bp	•	85 bp
Euro high-yield corporates ³	414 bp	•	380 bp
Securitized: covered bonds ³	34 bp	•	40 bp
Italy (10-year) ³	122 bp	•	120 bp

^{*} Source: Bloomberg Finance L.P. as of 11/12/20

Asia-Pacific

	Current*		Dec 2021F
Japanese government bonds (10-year)	0.03%	•	0.00%
Asia credit	311 bp	•	300 bp

Global

	Current*		Dec 2021F
Emerging-market sovereigns	380 bp	•	350 bp
Emerging-market credit	358 bp	•	320 bp

Currencies

	Current*		
EUR vs. USD	1.18	n	1.15
USD vs. JPY	105	→	105
EUR vs. GBP	0.90	→	0.90
GBP vs. USD	1.31	u	1.27
USD vs. CNY	6.61	→	6.80

F refers to DWS Investment GmbH forecasts as of 11/12/20

¹ Expected total return includes interest, dividends and capital gains where applicable.

Dividends are not guaranteed. The amount of dividend payments can change or not take place at all.

² Total-return index (includes dividends)

¹ Ratio of 10-year AAA Municipal yield to 10-year U.S. Treasuries yield

² Bloomberg Barclays MBS Forward Index

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Glossary

The aim of an accommodative monetary policy is to support the economy by means of monetary expansion.

A balance sheet summarizes a company's assets, liabilities and shareholder equity.

One basis point equals 1/100 of a percentage point.

A benchmark is an index or other value against which an investment's performance is measured.

Brexit is a combination of the words "Britain" and "Exit" and describes the exit of the United Kingdom of the European Union.

Bunds is a commonly used term for bonds issued by the German federal government with a maturity of 10 years.

Carry is a strategy in which an investor sells a certain currency with a relatively low interest rate and then buys another, higher-yielding currency.

The Chinese yuan (CNY) is legal tender on the Chinese mainland and the unit of account of the currency, Renminbi (RMB).

A correction is a decline in stock market prices.

Correlation is a measure of how closely two variables move together over time.

A corporate bond is a bond issued by a corporation in order finance their business.

Covered bonds are securities similar to asset-backed securities (ABS) which are covered with public-sector or mortgages loans and remain on the issuer's balance sheet.

The credit cycle is the expansion and contraction of access to credit over time and is usually connected to the business cycle.

The current account includes trade in goods and services, a

net-factor-income balance (e.g. earnings on foreign investments and cash transfers from individuals working abroad) and transfers (e.g. foreign aid). It is a part of the balance of payments.

Cyclical is something that moves with the cycle.

The Dax is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

Default is the failure to meet the legal obligations of a loan, for example when a corporation or government fails to pay a bond which has reached maturity. A national or sovereign default is the failure or refusal of a government to repay its national debt.

The Democratic Party (Democrats) is one of the two political parties in the United States. It is generally to the left of its main rival, the Republican Party.

The dividend yield is the dividend that a company pays out each year divided by its share price.

Earnings per share (EPS) is calculated as a company's net income minus dividends of preferred stock, all divided by the total number of shares outstanding.

Emerging markets (EM) are economies not yet fully developed in terms of, amongst others, market efficiency and liquidity.

Investors increasingly take environmental, social and governance (ESG) criteria into account when analyzing companies in order to identify non-financial risks and opportunities.

The euro (EUR) is the common currency of states participating in the Economic and Monetary Union and is the second most held reserve currency in the world after the dollar.

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

The Euro Stoxx 50 is an index that tracks the performance of blue-chip stocks in the Eurozone.



The European Union (EU) is a political and economic union of 28 member states located primarily in Europe.

The Eurozone is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

The financial crisis refers to the period of market turmoil that started in 2007 and worsened sharply in 2008 with the collapse of Lehman Brothers.

Fiscal policy describes government spending policies that influence macroeconomic conditions. Through fiscal policy, the government attempts to improve unemployment rates, control inflation, stabilize business cycles and influence interest rates in an effort to control the economy.

The FTSE 100 is an index that tracks the performance of the 100 major companies trading on the London Stock Exchange.

Gilts are bonds that are issued by the British Government.

The term Goldilocks economy refers to a state of the economy, where there is neither a threat of inflation due to an overheating economy, nor a threat of a recession.

The Great Depression was the deepest and longest-lasting economic downturn in the history of the Western industrialized world.

The gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Gross national product (GNP) is economic statistic that measures what a country's citizens produced. It includes gross domestic product (GDP) plus any income earned by residents from overseas investments, but excludes income earned within the domestic economy by overseas residents.

Growth stocks are stocks from companies that are expected to grow significantly above market average for a certain period of time.

A hedge is an investment to reduce the risk of adverse price movements in an asset.

High-yield bonds are issued by below-investment-grade-rated issuers and usually offer a relatively high yield.

The ICE BofA Merrill Lynch A-BBB Euro Corporate Index tracks the performance of euro-denominated corporate debt rated A to BBB and publicly issued in the Eurobond or Euro member domestic markets.

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

The Japanese yen (JPY) is the official currency of Japan.

Liquidity refers to the degree to which an asset or security can be bought or sold in the market without affecting the asset's price and to the ability to convert an asset to cash quickly.

Monetary policy focuses on controlling the supply of money with the ulterior motive of price stability, reducing unemployment, boosting growth, etc. (depending on the central bank's mandate).

A mortgage-backed security (MBS) is a special type of assetbacked security where the holder receives interest and redemption payments from pooled mortgage debtors, secured by the underlying mortgages.

The MSCI AC World Index captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

The MSCI AC Asia ex Japan Index captures large- and midcap representation across 2 of 3 developed-market countries (excluding Japan) and 8 emerging-market countries in Asia.

The MSCI Emerging Markets Index captures large- and midcap representation across 23 emerging-market countries.



The MSCI Japan Index is designed to measure the performance of the large- and mid-cap segments of the Japanese market.

Municipal bonds (Munis) are debt securities issued by a state, municipality or country.

The Nasdaq 100 is an equity index which contains the 100 biggest common stocks listed on the Nasdaq composite index.

In economics, a nominal value is not adjusted for inflation; a real value is.

The Paris Agreement was reached after the 2016 United Nations Climate Change Conference in Paris. It sets goals on greenhouse-gas emissions mitigation, adaption and finance.

Periphery countries are less developed than the core countries of a specific region. In the Eurozone, the euro periphery

The pound sterling (GBP), or simply the pound, is the official currency of the United Kingdom and its territories.

The price-to-earnings (P/E) ratio compares a company's current share price to its earnings per share.

A put option is a financial security which gives the owner the right, but not the obligation, to sell an underlying asset at a specified price at a specified time (European option) or during a specified time period (American option).

Quantitative easing (QE) is an unconventional monetarypolicy tool, in which a central bank conducts broad-based asset purchases.

In economics, a real value is adjusted for inflation.

A recession is, technically, when an economy contracts for two successive quarters but is often used in a looser way to indicate declining output.

The Republican Party (Republicans), also referred to as Grand Old Party (GOP), is one of the two major political parties in the United States. It is generally to the right of its main rival, the Democratic Party.

Risk aversion is a characteristic of investors to prefer the asset

with lower risk and thus accept a lower potential yield.

The risk premium is the expected return on an investment minus the return that would be earned on a risk-free investment.

The roll-down effect can form a significant component of returns in fixed income. It arises when longer-term bonds offer higher yields than shorter dated ones of the same issuer. With such a yield-curve, the yield of the bond will decrease as maturity approaches, and as a result, its value will increase, as it "rolls down" the yield curve.

The S&P 500 is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

Sovereign bonds are bonds issued by governments.

The spread is the difference between the quoted rates of return on two different investments, usually of different credit quality.

The Stoxx Europe 600 is an index representing the performance of 600 listed companies across 18 European countries.

The Swiss Market Index (SMI) is Switzerland's most important equity index, consisting of the 20 largest and most liquid large- and mid-cap stocks.

The total return is a performance measure of an investment. It measures the earned income of an investment over a specific time period.

Treasuries are fixed-interest U.S. government debt securities with different maturities: Treasury bills (1 year maximum), Treasury notes (2 to 10 years), Treasury bonds (20 to 30 years) and Treasury Inflation Protected Securities (TIPS) (5, 10 and 30 years).

The United States Congress is the legislature of the federal government. It is comprised of the Senate and the House of Representatives, consisting of 435 Representatives and 100 Senators.

The United States Dollar (USD) is the official currency of the United States.



The United States Senate is a legislative chamber consisting of 100 Senators, with each state being represented by two Senators. Senators are elected for six year, overlapping terms in their respective state.

Value stocks are stocks from companies that are trading at prices close to their book value and that are therefore cheaper than the market average on that metric.

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

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.

A yield curve shows the annualized yields of fixed-income securities across different contract periods as a curve. When it is inverted, bonds with longer maturities have lower yields than those with shorter maturities.



PERFORMANCE / Overview

Performance in the past 12-month periods (%)

	10/15 - 10/16	10/16 - 10/17	10/17 – 10/18	10/18 - 10/19	10/19 - 10/20
Asia credit	7.8%	3.4%	-2.5%	12.6%	5.0%
Dax	-1.7%	24.0%	-13.5%	12.4%	-10.2%
Emerging-market sovereigns	11.6%	5.9%	-5.3%	13.7%	2.0%
Emerging-markets credit	9.9%	6.5%	-1.9%	13.0%	4.9%
Euro high-yield corporates	7.1%	7.8%	-1.3%	5.2%	-0.2%
Euro investment-grade corporates	5.1%	2.3%	-1.2%	6.1%	1.2%
Euro securitized: covered bonds	2.7%	-0.1%	-0.2%	3.8%	1.3%
Euro Stoxx 50	-8.0%	23.3%	-10.6%	15.9%	-16.2%
FTSE 100	13.8%	12.1%	-0.9%	6.4%	-20.4%
German Bunds (10-year)	3.8%	-0.3%	0.8%	6.2%	1.6%
Italy (10-year)	1.9%	1.9%	-8.3%	22.3%	3.9%
Japanese government bonds (10-year)	3.0%	-0.8%	0.0%	2.5%	-1.3%
MSCI AC Asia ex Japan Index	6.6%	30.4%	-13.6%	13.2%	15.9%
MSCI AC World Index	-0.1%	20.8%	-2.4%	10.3%	3.1%
MSCI Emerging Market Index	9.3%	26.5%	-12.5%	11.9%	8.3%
MSCI Japan Index	3.2%	17.8%	-3.6%	9.2%	0.3%
S&P 500	4.5%	23.6%	7.3%	14.3%	9.7%
Stoxx Europe 600	-6.2%	20.6%	-5.2%	14.0%	-11.4%
Swiss Market Index	-9.2%	22.0%	1.0%	17.1%	-3.0%
U.S. high-yield corporates	10.1%	8.9%	1.0%	8.4%	3.5%
U.S. investment-grade corporates	6.9%	3.2%	-2.8%	14.9%	6.7%
U.S. securitized: mortgage-backed securities	3.3%	0.5%	-1.5%	8.9%	3.9%
U.S. Treasuries (10-years)	4.6%	-1.8%	-3.2%	14.6%	8.5%
UK Gilts (10-years)	7.2%	1.1%	1.2%	7.9%	3.2%

Source: Bloomberg Finance L.P. as of 10/31/20

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