



C IO VIEW

July 2020

OUR 12-MONTH
ECONOMIC & MARKET OUTLOOK



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June 10, 2020

Back to normal. But what is normal?

The record market slide has been followed by record-breaking stimulus – and a superfast rally. The economy is yet to follow.

“ The Coronavirus crisis has further increased the influence of governments and central banks. Many market mechanisms have been suspended. This poses long-term risks. In the short term, investors should be able to take advantage of the rescue packages' positive effects on markets. ”

Stefan Kreuzkamp
Chief Investment Officer



Coronavirus and its repercussions continue to dominate people's lives, the economy and stock markets. The calming in continental Europe's former virus hotspots and the increasing speed with which lockdowns are being eased should not obscure the fact that the virus continues to rage worldwide. In addition to new hotspots, especially in Latin America, the persistently high number of new infections in Great Britain and the United States is also striking. Nevertheless, these governments too are pressing vehemently for a return to business as usual.

The reason why many Americans still have to stay at home is no longer quarantine but curfew. The violent death of an African American, George Floyd, at the hands of the police has sparked weeks of protests in numerous U.S. cities. How President Trump's response to both the protests and the pandemic may affect the presidential elections is likely to be on investors' minds during the summer.

In our forecasts we assume that most countries experienced their economic trough in April, or in May at the latest. Even though we expect some countries and regions to suffer further flare ups in infection rates, we do not expect the broad global lockdown of the spring to be repeated. Normalization is coming, and we expect it to be fast at first, but then gradual, so that global economic output will not return to its late-2019 level until the end of 2022.

But the term 'normalization' should be used with caution. Despite advances in treatment and more experience in dealing with the virus, it may well continue to frighten many people and have a major impact on economic and social life for some time to come.

For the economy, too, normalization looks difficult. We should not forget just how extraordinary the fall was. Whether in transport, car sales or tourism, drops in activity of 80% or more were recorded. As a result, in the second quarter, industrialized countries are likely to have suffered the biggest economic decline in percentage terms in their history: more than 10% down on a year earlier. The outlook for 2020 as a whole is not much better. We expect the Eurozone economy to contract by 7.5% on a year earlier and the U.S. by 5.7%. Added to this is the longer-term uncertainty as to how unemployment, which has soared to unprecedented highs, especially in the U.S., will be brought back down.

There are further negative factors. Protectionism and de-globalization have been further intensified by the crisis. More positively, so too has digitalization. The extraordinary increase in government intervention in the economy, meanwhile, is highly problematic. Together with the new record-high levels of national debt, it threatens to create distortions that would have a long-term negative impact on potential growth.

For central banks, too, normality seems a long-forgotten concept. Since the turn of the millennium, they have built up expectations that they will be willing and able to run to investors' rescue and absorb any capital-market turbulence or economic dips rapidly. It is hard to argue that the record aid packages to alleviate the coronavirus crisis were not logical. Interest rates were cut, packages worth billions were turned into trillions, securities bought in more and more market segments, and the Federal Reserve's balance-sheet total alone could rise from four to over ten trillion dollars this year. But the consequences are going to be complex.

Against this background, what does normality look like on the capital markets? On the bond side, the pre-crisis trends seem to be hardening and significant increases in government-bond yields have disappeared off the horizon for now: They are staying low. And yet the "for now" must be emphasized more strongly than before the crisis. The huge fiscal stimulus programs and surges in debt make a significant rise in inflation a less fanciful idea than at the end of 2019.

Inflation-linked bonds should benefit in this environment. We believe that with good selection, companies and emerging markets can also be expected to yield adequate returns again. We see opportunities particularly in Asia, which has so far coped better than other regions with the virus and continues to benefit from the low oil price. Overall, we believe the risk-return profile of high-yield bonds in particular has improved substantially in the wake of the strong rise in yields provoked by the crisis.

What about the risk-return profile of equities? As measured by the MSCI AC World Index, they are already trading back at the November 2019 level and the Nasdaq is now up again since the beginning of the year.¹ This once again reflects the triumph of technology stocks. Coronavirus, meanwhile, has made the healthcare sector another star of the equity universe. And from a relative perspective these sectors remain

our favorites. From an absolute perspective, however, it is hard to justify the current valuations – and this also applies to the market as a whole. Assuming the same earnings level in 2022 as in 2019 and discounting that to the present, the valuation (price-to-earnings ratio) for the S&P 500 for example is above the pre-crisis level. That would normally be seen as expensive. But what is normal? The economic cycle is more uncertain than ever and it is unclear what might plague us in the not too distant future: inflation, or deflation. In addition, central banks are continuing to expand their balance sheets apace. In these extraordinary circumstances, more and more investors seem to be coming to the conclusion that inflation-resistant assets such as equities would be the preferable choice. While medium-term returns for equities might be moderate, we still expect some sectors to profit from mega trends such as further digitalization and automation and smart urbanization. Cash-distributions are another important issue as slow-to-recover earnings test high valuations. Dividend-oriented strategies have suffered as many investors doubt the ability of companies to pay dividends as a result of the crisis. But good dividend-stock selection made it possible to come through the turmoil surprisingly well. We believe attention was and is needed to be paid not only to the quantity but also to the quality of the pay-outs, or, put differently, the ability of the company to generate the necessary cash flows for the dividends. And now that some degree of economic recovery is likely, selected cyclical stocks have also become interesting again. We are looking at mining and selected material stocks.

Even though we expect low-single-digit returns on equities, selected bonds and alternative investments over the next twelve months, many imponderables – including the Coronavirus, the U.S.-Chinese trade dispute, de-globalization, the completely abnormal economic trends, and also the U.S. election – argue in favor of broad positioning and a portfolio cushioned against possible further turbulence by adding gold, real-estate investments or the yen.

¹ Refinitiv Datastream as of 6/4/20

June 15, 2020

At a turning point

Five months into the Covid pandemic, there are signs of improvements. The risk of setbacks remains high, however.

- _ Globally, infection rates remain worryingly high. In developed markets, a resurgence in outbreaks appears likely.
- _ Despite recent progress in containing Covid-19, the indirect costs of the pandemic continue to mount. To an extent, that is reflected in our baseline forecasts.
- _ However, it is far too early to assess the full effects on political stability, social cohesion and the world's productive capacity.



Johannes Müller
Head of Macro Research

At the risk of stating the obvious, the world has changed dramatically since February. Instead of growing by 2.5% globally, we now expect the world economy to shrink by just over 3% in 2020. Containing the virus required a broad-based lockdown of about two months in country after country. Sharp drops in activity have been followed by early signs of recovery.

Our baseline scenario is that the world's productive capacity will remain impaired for the foreseeable future. However, the extent of the impairment varies country by country, and sector by sector. This can be illustrated by contrasting Covid-19's impact on the tourism, hospitality and retail sectors on the one hand and that on manufacturing and white-collar office work on the other. During the lockdown, airplanes remained grounded. Non-essential shops and restaurants were forced to close, as were many offices and factories. These blunt measures are now being lifted again. However, strict conditions continue to apply, typically relating to the maximum number of people allowed at once in shops, restaurants or within any given office space. Hygiene measures, such as more frequent cleaning of factory and shop floors, have been stepped up.

In quite a few areas, the lockdown experience is likely to prove productivity-neutral, or perhaps even slightly positive. Among

white-collar office workers, the need for distancing means more space is required for each employee actually working at the office. Such workers and their employers have gained plenty of firsthand practice in working from home. Over time, this is likely to lead to changes in how they work, perhaps even reducing the need for costly office space in crowded urban areas. Manufacturing activity can also swiftly bounce back to pre-lockdown levels, although social-distancing measures are likely to result in higher costs per unit produced.

By contrast, hospitality and retail businesses are facing semi-permanent capacity constraints on top of decreased demand. For example, many smaller restaurants may continue to struggle, even if and when demand recovers to pre-crisis levels since they can serve far fewer customers. Restrictions such as mandatory mask wearing are also likely to dampen demand. Similarly, tourism travel flows are likely to be severely impacted for many months to come.

Given all these business specific effects, we have looked in detail, sector by sector, at the potential recovery paths of all the countries we cover. The net effect is that we see activity bouncing back, once lockdown measures are lifted, but only until capacity constraints start to kick in. From then onwards, we believe the recovery can only continue in slow motion.

As a result, we do not expect most industrialized countries to reach pre-crisis levels of output before 2022. That translates into the U.S. shrinking by about 6% in 2020, before growing by roughly the same amount in 2021 from a much lower base. In the Eurozone, we have penciled in a slump of 7.5% this year, followed by 4.5% growth in 2021. The deeper slump and slower recovery for the Eurozone partly reflects sector effects previously mentioned. Countries such as Spain and Italy, for example, are heavily dependent on tourism.

The above forecasts are meant to give you a rough idea of our current expectations in a situation with few, if any, reliable historical precedents. To again state the obvious, the Covid-19 crisis has not been a garden-variety recession, brought about, for example, by economic excesses during a previous boom. There are elements of that, to be sure, such as newfangled and heavily indebted real-estate companies offering shared workspaces. Mostly, however, the slump has been induced by mandatory measures in the face of a health emergency.

Our most crucial assumption is that at least in terms of lockdown measures, the worst is indeed behind us for most industrialized countries. That is, we do not expect another March-style, broad-based second lockdown, involving a large number of countries simultaneously. If this were to happen, the result would be a W-shaped pattern, with the second leg below the first one in economic-activity terms. We are cautiously optimistic that such a scenario can be avoided. We think more selective measures will suffice to contain local outbreaks, which we would expect to continue to see in coming months.

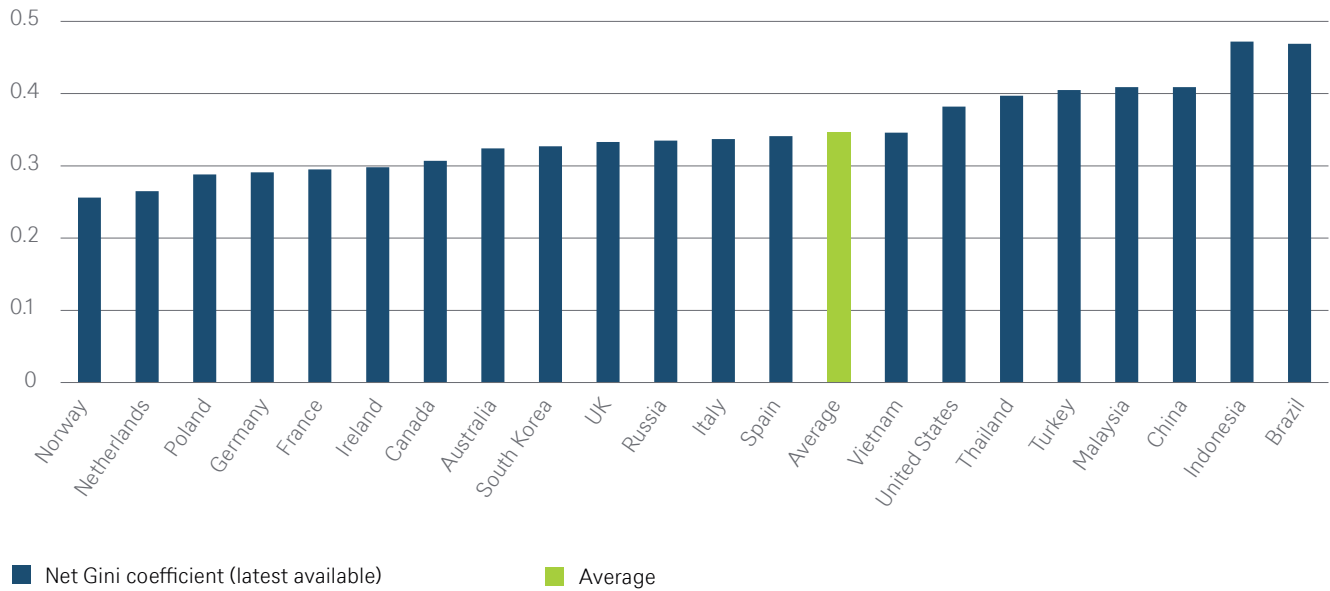
We will leave it to virologists to decide how large a spike in infection rates would justify talk of a second wave. To us as economists, it is quite remarkable, however, how much better most countries in East Asia have dealt with their first wave, than those in either Europe or the Americas. Broadly speaking, East Asia has been able to contain infections and deaths at much lower levels, and at smaller economic costs. This is very suggestive of institutional learning from the severe acute respiratory syndrome (SARS) epidemic of 2003. Similar learning effects are likely to facilitate dealing with further Covid-19 waves in the rest of the world and alleviate the need for a second round of broad-based lockdowns.

It is worth stressing that plenty of our modelling assumptions are even more debatable than they usually would be at any cyclical turning point. To start with, scientific understanding of Covid-19 continues to improve week by week. This does not guarantee rapid breakthroughs. Nor will new discoveries necessarily be positive. But it is at least possible that science might come to the rescue, if it turns out, for example, that background immunity because of previous infections is more widespread than currently thought. Closer to our own area of expertise, one positive source of surprises has been the energetic and so far quite effective response of both fiscal and monetary policy on both sides of the Atlantic. In Europe, the new recovery fund marks the European Union's (EU's) first sizeable mutualized-debt-issuance program. It also contains a sizeable transfer element. So, one positive indirect effect of the current crisis might be that we see substantial fiscal integration within the Eurozone, or the whole EU, making the common currency less prone to future crises.

Meanwhile, however, the pandemic remains far from under control in much of the continental United States. It also continues to rage in many emerging markets, notably Brazil and India. In addition to the direct toll on human lives and local economies, this could have plenty of economic and political knock-on effects on the rest of the world, including disruptions to key supply chains and new refugee crises. All told, it remains far too early to assess the full effects on political stability, social cohesion and the world's productive capacity. However, our sector-by-sector analysis suggests one area of concern. During a typical downturn, relatively lower-paid service-sector jobs, such as those in hospitality and retail, tend to soak up some of those entering the job market, or those whose skills are no longer in demand. In the current slump, these types of jobs are unlikely to fully return any time soon, let alone offer employment for those laid off by other sectors. As a result, the current crisis will probably exacerbate social, economic and even racial divides. Recent events in the U.S. offer an indication of how politically explosive this could prove.

INCOME INEQUALITY VARIES WIDELY ACROSS COUNTRIES

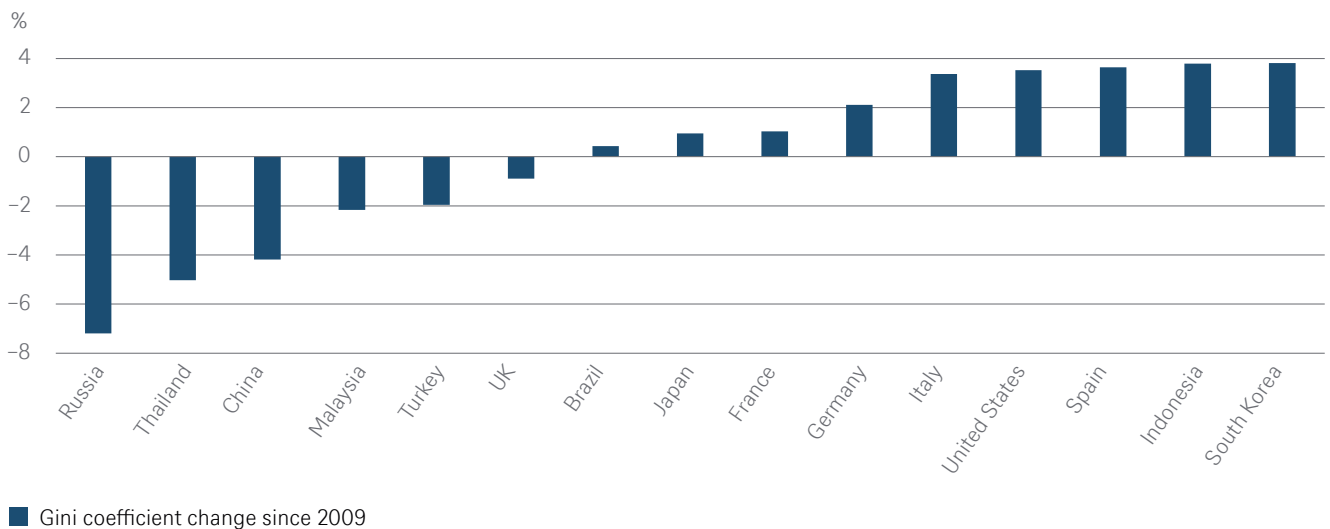
Net Gini coefficients measure income inequality after taxes and state transfer payments. A coefficient of zero would indicate a completely equal income distribution.



Sources: Harvard Dataverse, DWS Investment GmbH as of 6/3/20

SINCE 2009, INCOME INEQUALITY HAS GONE UP IN MANY INDUSTRIALIZED COUNTRIES

Even before the pandemic hit, many countries saw their Gini coefficients increase. Income inequality tends to limit access to healthcare and may now exacerbate the Covid-19 damage.



Sources: Harvard Dataverse, DWS Investment GmbH as of 6/3/20

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June 19, 2020

Almost back to normal

We do not expect much from government bonds for the time being. Our focus remains on corporate and emerging-market bonds.

- _ New debt on the one hand, and central-bank purchases on the other, should result in sideways movement in government-bond yields.
- _ Corporate bonds have recovered significantly, but we still see good opportunities here, not least because of central-bank support.
- _ We also continue to like emerging-market bonds, especially those from Asia.



Jörn Wasmund
Head of Fixed Income/Cash

The world is going through its most severe recession since the Second World War. Unemployment and short-time working¹ are at record levels in many countries, rating agencies are lowering their ratings at record speed and global Covid-19 new infections continue to rise and are stubbornly high in the U.S. At the same time, however, the recession may prove to be one of the shortest in history, individual regions in Asia and, especially, continental Europe have new infections largely under control, and governments and central banks have put together rescue packages that, both in quantity and in scope, far outweigh the 2008/09 interventions.

In general, this is a crisis in a hurry. Not only the stock markets, but also swathes of the bond market, were at record heights just before their spring dive. U.S. investment-grade corporate bonds, for example, generated a total return of over 21% from the beginning of 2019 until their peak on March 6 this year, from which 19 percentage points were erased within the subsequent two weeks. Yet today, less than three months from the low, they are trading close to their pre-Covid-19 record level² again. And this in an environment where the consensus is that the U.S. economy will not return to its pre-crisis level until 2022.³

Bond investors don't lack questions about what's going on.

Have the markets recovered too quickly? Are they foolishly ignoring the damage that many economies have suffered as a result of the slump or underestimating the dangers of a virus that remains uncontrolled? Will the expected credit defaults wipe out all corporate-bond yields? And will the immense hunger for capital caused by rescue packages and tax deficits drive government-bond yields higher? More generally, what about the inflationary or potentially deflationary forces in the economies during and after the crisis? In addition, have emerging-market bonds seen their best times given low commodity prices, increasing de-globalization and a strong dollar?

Our answer to the risk that interest rates may rise can be summed up in one word: low. The reason, again in one word, is central banks. Of course, they cannot by themselves ensure that bond yields do not rise significantly in the near future. For that to happen, the environment – that is, a gradual economic recovery and the prospect of controlling the virus in the course of next year – must also be right. But support from the central banks for the bond markets could hardly be higher. The key interest rates of the four major central banks (U.S., Eurozone, Japan and UK) are close to or below zero.

None of these banks has even hinted at wanting to raise rates

¹ Government scheme in a lot of European countries that companies can use to have the government pay their employees (part of their salary) temporarily when they don't have enough work for them (as to avoid laying them off)

² Bloomberg Barclays US Credit total return value unhedged, as of 6/14/20.

³ Bloomberg Finance L.P. as of 6/14/20.

in the foreseeable future. (As U.S. Federal Reserve (Fed) Chairman Powell put it, "We're not even thinking about thinking about raising rates yet.")⁴ On the contrary, the members of central-bank monetary-policy committees are increasingly being quoted as saying that the interest-rate environment is unlikely to change in 2021. In the case of the Fed, which has repeatedly spoken out against negative interest rates, direct steering of the yield curve (yield curve control, as currently pursued by the Bank of Japan) should also help to ensure that investors do not need to worry too much about rising interest rates. For our strategic planning horizon of twelve months we therefore believe that fears of interest-rate hikes will not play a major role in the markets.

Nevertheless, there are many medium-term uncertainties. The Fed's balance sheet has already almost doubled within a few months to over 7 trillion dollars. The U.S. budget deficit is set to widen to almost 20% of gross domestic product (GDP) and government debt is rising to 99% of GDP, up from 78% last year. Japan shows that still higher debt levels than that do not necessarily force a country to its knees. But we have highlighted the negative consequences of ever higher debt levels and the increase in government intervention on countries' potential growth in a recent study (CIO Special: Fiscal packages – necessary short term, dangerous long term). So far, we assume that the Covid-19 recession could have stronger inflationary effects in the medium term than previous recessions, as demand is likely to recover faster than supply.

For the time being, however, these risks are playing only a secondary role and, given supportive fiscal and monetary policy, we continue to focus primarily on corporate and emerging-market bonds. After the rapid recovery in these bond segments since the beginning of April, much of the potential gain has certainly already been captured, but we believe there is still some meat on the bone. However, the much higher dispersion of yields within bond segments compared with the beginning of the year means that bond selection is more important than before the crisis.

With government bonds what is critical is that we do not expect any significant change in interest rates, in Europe or the U.S. The increased capital needs of governments and increased bond purchases by central banks should balance one another out for the time being. Given the historically low current yield

and the poor prospects for bond-price increases, we do not expect much from this segment. In the portfolio context, however, longer-dated securities can serve as protection against renewed market distortions.

We see more potential in government bonds from the emerging markets. Despite their current challenges (the lower oil price, firm dollar and de-globalization), we believe there are a number of points in their favor, in Asia in particular. Asian countries have solid public finances, benefit from low commodity prices and are disproportionately active in the technology segment, which has remained relatively stable during the crisis.

In the case of corporate bonds, two players – central banks in Europe and the U.S. – are (again) on the buyer side, which should provide price support. We see good opportunities in both investment grade and high yield. High yield is currently enjoying special, never before received support in the U.S.: one element of the big Fed bailout package is the purchase of high-yield bonds via ETFs, which has been effective. In this segment, we are also looking at more cyclical stocks, for example from the chemicals, logistics, cable and telecommunications segments, provided the balance-sheet quality is appropriate. In the investment-grade segment, our focus in the U.S. is on more defensive sectors and maturities below five years.

Although we do not fear a rise in inflation in the near future, we believe that inflation-indexed bonds (linkers) are currently well priced to hedge against these risks. For our main scenario, however, these linkers remain merely an addition to a portfolio that continues to focus primarily on corporate and emerging-market bonds.

The currency market, meanwhile, looks more difficult than ever to forecast in the midst of a pandemic, billions of dollars in fiscal and central-bank interventions, and protectionist measures in many countries. At present, investors seem to be attaching most importance to short-term impulses from rescue packages or presumed further developments towards a European debt and liability union, rather than thinking about the possible long-term consequences of these measures.

For now, however, the dollar appears to be continuing to benefit from its reputation as a crisis currency. But in the medium term we believe both the swelling U.S. budget deficit and further

⁴ <https://www.dailytelegraph.com.au/business/powell-were-not-even-thinking-about-thinking-about-raising-rates/video/7430c3f4b18b5ce663b8bf75ca795cd7>

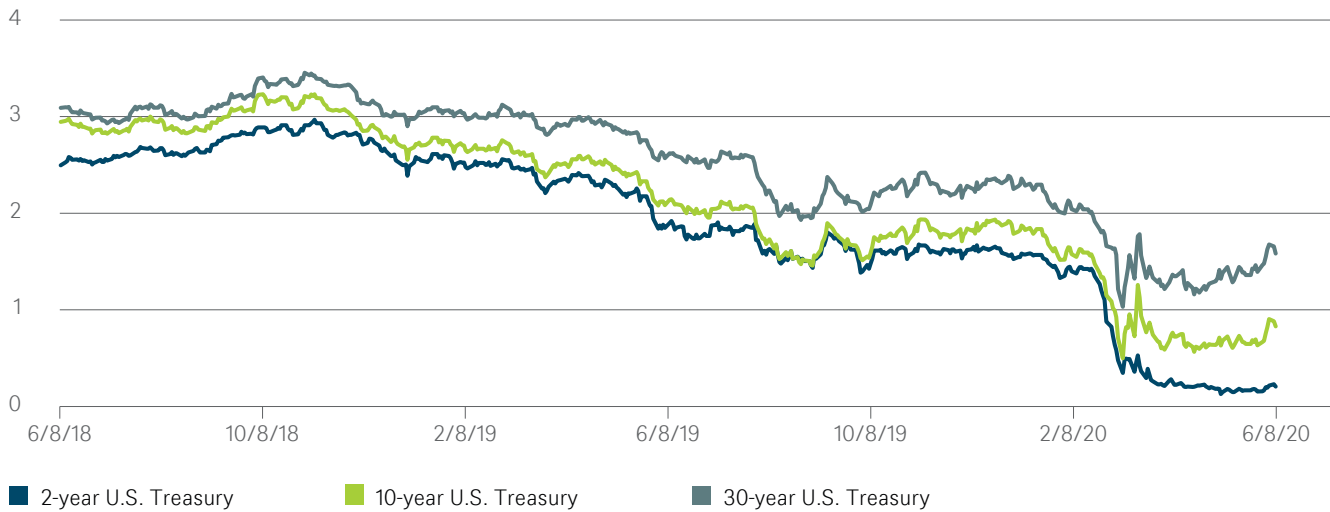
protectionist measures by the U.S. could drive the dollar out of fashion again. Aside from the greenback, we expect pressure

on the British pound because of Brexit and on the renminbi as a result of the trade disputes with the U.S.

MINIMAL UPSWING ON THE LONG END

While yields of U.S. Treasuries with shorter maturities remain on record-low levels, they are slightly increasing again on the longer end. This leads to a steepening yield curve.

yield in %

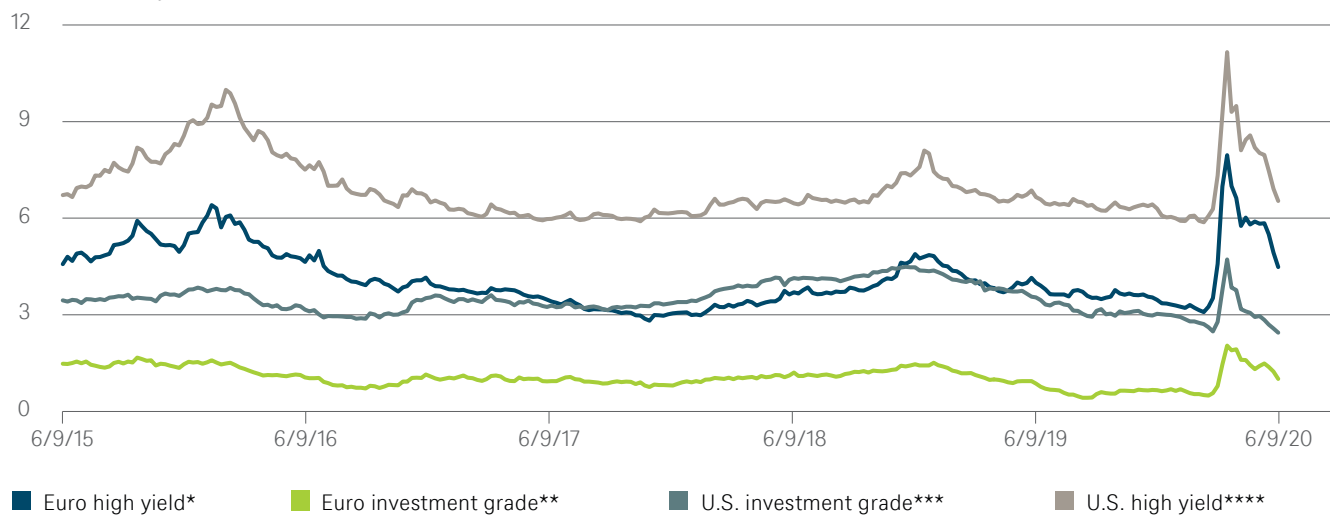


Sources: Refinitiv, DWS Investment GmbH as of 6/10/20

SELECTION BECOMES MORE IMPORTANT FOR CORPORATE BONDS

Corporate bonds have recovered so quickly from their slump that many are back to pre-crisis levels. With the central banks behind them, however, things could go a little further.

Yield to maturity in %



* ICE BofA Merrill Lynch Euro High Yield Index; ** ICE BofA Merrill Lynch A-BBB Euro Corporate Index; *** ICE BofA Merrill Lynch A-BBB US Corporate Index; **** ICE BofA Merrill Lynch US High Yield Index; Sources: Refinitiv, DWS Investment GmbH as of 6/10/20

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June 24 2020

Time for a bit of patience

During the swift rebound since the March lows, equity markets may have gotten a little ahead of themselves.

- _ We are leaving all of our 12-month index targets unchanged from the last review meeting, suggesting limited upside.
- _ We feel that we have sufficiently stretched our fundamental valuation models in deriving our index targets.
- _ Despite recent signs of a recovery, risks remain. Given these underlying uncertainties, there is scope for short-term disappointments but also selective opportunities.



Dr. Thomas Schüssler
Co-Head of Equities



Andre Köttner
Co-Head of Equities

Unlike our equity index targets, markets have been on a rollercoaster ride in the year-to-date. The recovery in share prices since March has certainly been faster than we expected. We would attribute this to a combination of a health crisis unprecedented in recent economic history that has been accompanied by equally unprecedented monetary and fiscal stimulus measures. In such an environment, it is naturally difficult to assess the current value of highly uncertain future earnings streams that, in theory, underpin market valuations.

Against this backdrop, we are leaving all of our 12-month index targets unchanged from our last review meeting. Those were 3,100 for the S&P 500 and Dax 12,000, to cite two prominent examples. We will leave it to you to calculate the likely price returns until June 2021 by the time you read this. At the time we made our decision, our targets translated to mid-single-digit total returns over the coming 12 months – or roughly what markets have been gaining or losing on a weekly and sometimes daily basis in recent months.

In such an uncertain environment, we believe a disciplined approach is crucial. We feel that we have sufficiently stretched our fundamental valuation models in deriving our index tar-

gets. Driven by falling interest rates we have increased the warranted price-to-earnings multiples for the global lead index – the S&P 500 – from 16 times earnings in 2013 to about 20 times expected earnings. Lately, the Covid-19 pandemic has compelled us to extend the time horizon for our earnings per share (EPS) forecasts as well, from 2 to 3 years. This was necessary in order to capture the pandemic and lockdown-related EPS collapse in 2020 and subsequent expected sharp profit recovery until 2022. It is worth noting, however, that most companies have suspended their guidance during the past few months, making all EPS forecasts highly uncertain. As we apply a very generous discount rate to highly unpredictable earnings streams, we feel that equity markets may have gotten ahead of their fundamental prospects.

This need not necessarily translate into quick and dramatic setbacks of the sort markets experienced in March. Nor does it rule out markets overshooting further on the way up. After all, monetary and fiscal policy remain ultra-loose. Leading indicators should turn positive shortly and many workers who recently became unemployed are likely to find their way back to the labor market during the coming months. However, the downside risks for the economy and earnings remain

considerable. To name only a few: a renewed surge of Covid-19 cases might require a second wave of lockdowns; the timing and effectiveness of the various fiscal stimulus programs are uncertain; lower interest rates will continue to pressure bank earnings; U.S.-Chinese tensions remain a burden; and, last but not least, the upcoming U.S. election introduces plenty of uncertainty in terms of U.S. economic policymaking.

Among these risk factors, our most crucial assumption is that a second wave of lockdowns can be avoided in most industrialized countries. Partly, this reflects our growing confidence that populations and policymakers are rapidly learning how to deal with the pandemic in less economically damaging ways. To again list just a few examples, testing capabilities are much improved. In most countries, wearing masks is becoming increasingly common. Hospital capacities have been expanded and will probably be upgraded further ahead of this year's flu season in the Northern hemisphere. All this should help alleviate the need for a second round of broad-based lockdowns in the face of renewed outbreaks. While the above describes the situation in the European Union and parts of Asia quite well, however, we are less confident that the first wave has already been contained in the United States. There, it is quite possible that we could see further lockdowns at the municipal or state level, or alternatively, consumers might themselves decide to stay at home. Moreover, the pandemic continues to spread in many emerging markets. So for the world as a whole, it is still premature to talk about second waves – for now, the first one has not even crested yet!

Partly as a result of all these uncertainties, we do not express a strong regional preference. Instead, we favor a well-diversified global portfolio with a meaningful share invested in emerging-market equities and a bias towards "quality" (i.e. with little debt and resilient cash flows) companies. We believe this should offer the best balance of risks and reward prospects for long-term equity investors, especially when combined with selectively buying high-quality names during periods of market turbulence.

Regarding sectors, we have long favored growth stocks compared to value stocks. We continue to like segments with solid long-term prospects, including in the technology and health-care areas. During the current crisis digitalization trends have accelerated further. In particular, office workers and their employers have gained plenty of firsthand practice in working from home. This is likely to lead to change in how they work much more quickly than might otherwise have been the case. Contactless payments and efficiency initiatives may also provide additional support to the IT sector. Health care should continue to benefit from its structural defensive-growth characteristics and may get additional support from more investments in health systems.

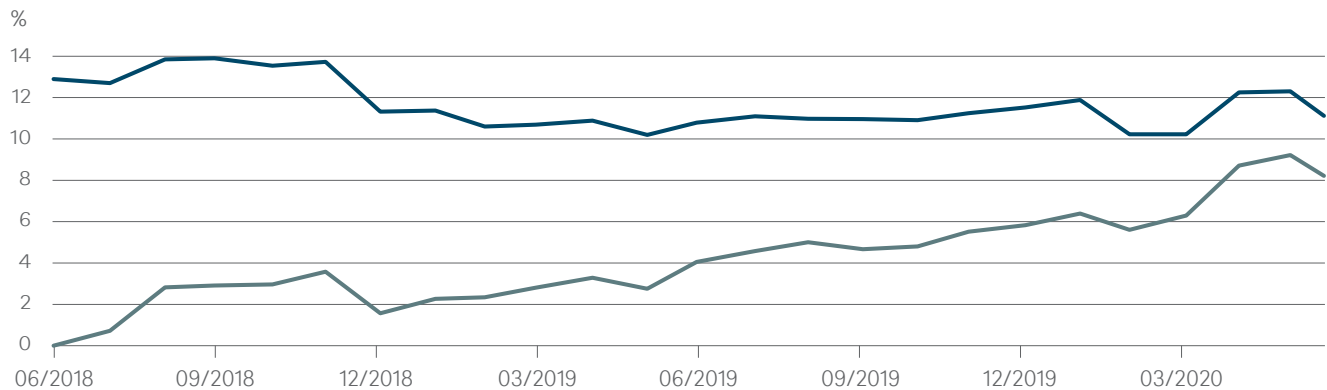
That said, we do believe that the expected economic recovery will eventually favor some attractive "value" and "cyclical" stocks to temporarily outperform. As a result, we have already started to weaken our growth bias somewhat. Notably, we have recently raised the materials sector to neutral. Mining companies, in particular, should benefit from rational pricing, stable Chinese demand for iron ore and copper and resulting attractive free-cash-flow yields. This is in striking contrast with oil markets, where OPEC producers continue to jockey for market share with each other and producers from other countries. It also highlights the need for a selective approach, combined with an in-depth understanding of relevant sector dynamics. Similarly, we expect some of the stocks in the highly cyclical machinery industry to outperform as leading indicators are improving. We remain underweight in utilities, due to subdued growth prospects, and are downgrading real estate to underweight, with shopping malls being challenged by e-commerce and office real-estate investment trusts (REITs) suffering from "working from home." In our view, selection and active management will be key in coming months – whether at the country, sector, or company level.

Valuations overview

UNITED STATES: NEUTRAL (NEUTRAL)*

Compared to most industrialized countries, the U.S. has been less successful in containing the pandemic thus far. In the recovery phase, U.S. equities may nevertheless benefit from a more flexible and dynamic jobs market, a large number of technology

mega caps, and outsized U.S. fiscal and monetary stimulus, easily outpacing European economic emergency-relief measures. Given recent stock-market strength, a lot of hope is already priced in, leaving scope for short-term disappointments.

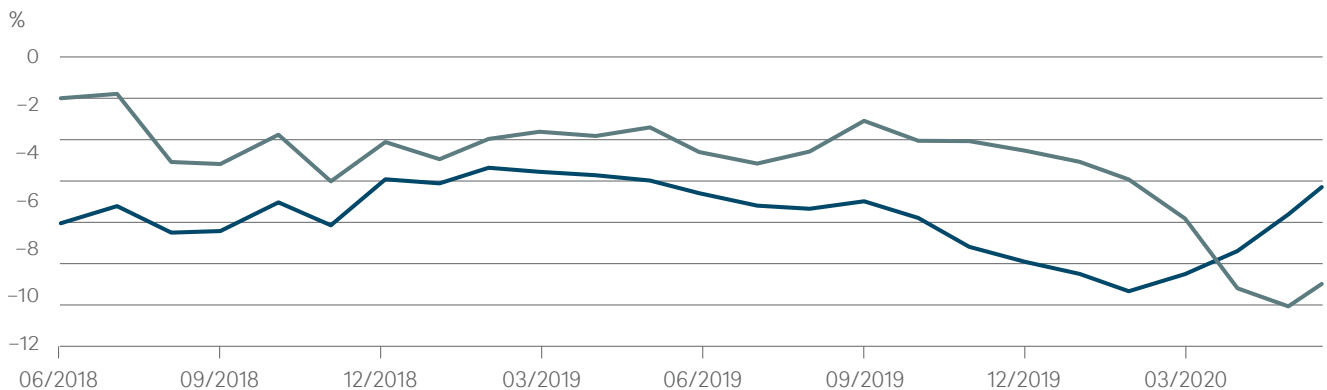


- Relative valuation (P/E ratio): S&P 500 vs. MSCI AC World Index
- Relative performance: S&P 500 (in dollars) vs. MSCI AC World Index (in local currency)

EUROPE: NEUTRAL (NEUTRAL)*

Investor positioning in European equity markets remains quite low. This suggests scope for further upside in companies able to deliver solid second-quarter earnings, or at least reassuring guidance on the likely slope of their earnings recovery. Meanwhile, the

new EU recovery fund marks the first sizeable mutualized-debt-issuance program, which may make the common currency less prone to future crises. Risks abound, however, including no trade deal between the UK and the EU being reached.



- 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)

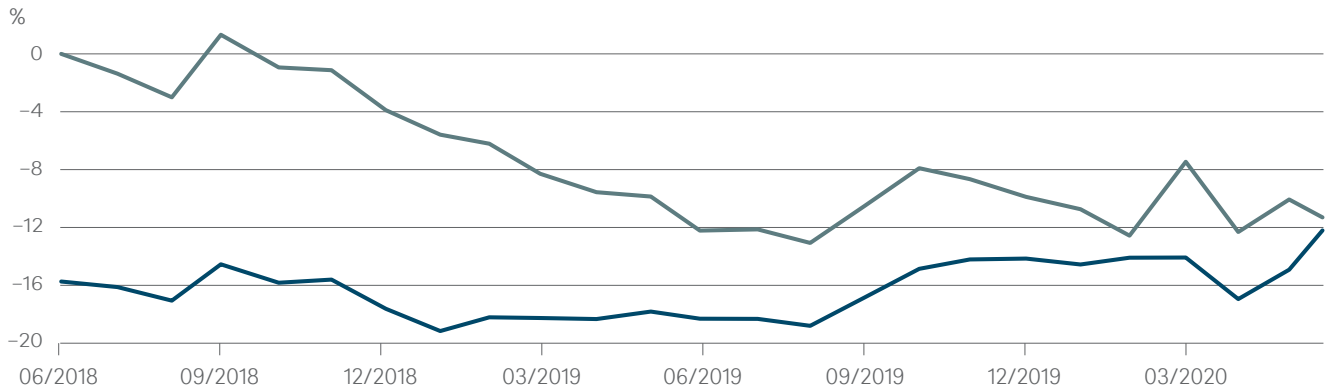
* Our assessment is relative to the MSCI AC World Index, the last quarter's view is shown in parentheses.
Sources: FactSet Research Systems Inc., DWS Investment GmbH as of 6/17/20

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JAPAN: NEUTRAL (NEUTRAL)*

In the current crisis, earnings and dividends of Japanese companies have been much more resilient than in most countries. Partly, that reflects the success of public-health authorities in containing the pandemic, albeit after a slow start. Solid balance

sheets have helped and many companies would be well positioned to benefit from a world-wide economic rebound. The reverse, alas, is also true, if global trade stalls or geopolitical risks rise, for example due to rising tensions with China.

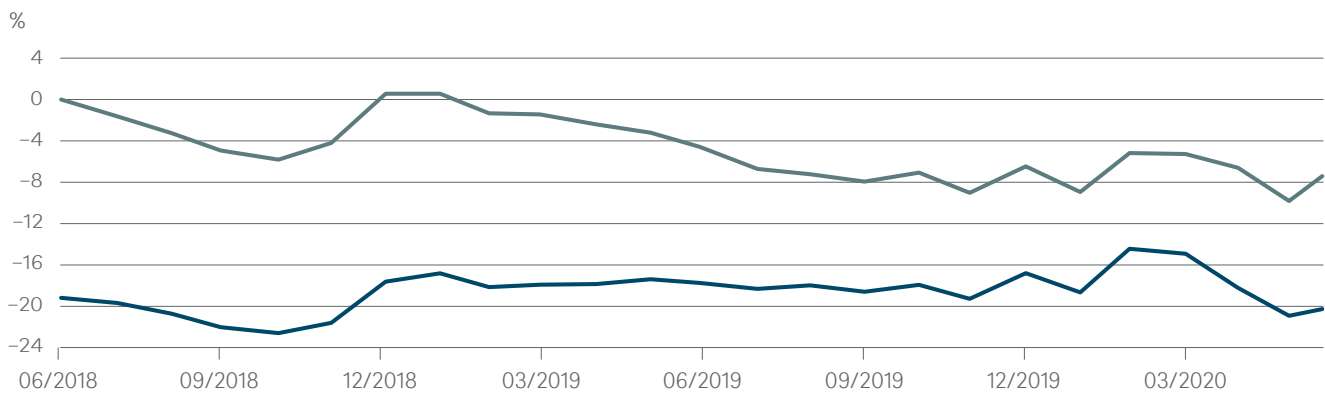


- Relative valuation (P/E ratio): MSCI Japan Index vs. MSCI AC World Index
- Relative performance: MSCI Japan Index (in yen) vs. MSCI AC World Index (in local currency)

EMERGING MARKETS: NEUTRAL (NEUTRAL)*

Many emerging markets have been badly hit by Covid-19, with Brazil, India, Russia, Mexico and Peru among the most prominent examples. Moreover, it remains too early to say when and at what cost the pandemic can be contained. Even in China, the discov-

ery of new clusters of cases at a Beijing wholesale food market has brought back the specter of further disease waves. Renewed tensions with the U.S. over Hong Kong, as well as China's border conflict with India, have not helped matters either.



- 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)

* 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 6/17/20

July 6, 2020

How a virus may speed up the energy transition

What the last few months taught us about winners, losers and survivors in European electricity markets.

- _ The Covid-19 pandemic already looks set to cause the biggest drop in global energy demand in modern history in 2020.
- _ Especially in Europe, the crisis may represent a catalyst for the ongoing energy-transition process toward renewables and smart grids.
- _ For farsighted investors willing to dive into the intricacies of electricity markets, there will certainly be no shortage of opportunities.



Hamish McKenzie
Head of
Infrastructure



Gianluca Minella
Head of Infrastructure
Research, Alternatives

Covid-19 has been an unprecedented shock for global energy markets in general. The pandemic is expected to cause the biggest drop in global energy demand in modern history. To put things in perspective, the 6% reduction in energy demand expected for 2020 may be over six times the scale of the drop experienced during the Great Financial Crisis.

You might recall that back in April, the price per barrel of West-Texas-Intermediate (WTI) crude for the May 2020 futures collapsed to almost minus forty dollars. That took a perfect storm of weak demand due to Covid-19, unrestrained production by warring producers, and the near exhaustion of storage capacity at Cushing in Oklahoma. Cushing landlocked, also known as the "Pipeline Crossroads of the World", is the delivery point specified in WTI futures contracts.¹

The shock has also been severe for electricity markets in Europe. However, unlike the situation in oil markets, short-lived episodes of negative prices for hourly contracts have become increasingly common over the past decade in European electricity markets.² Moreover, utilities tend to hedge

power prices for 12 to 18 months, further mitigating the potential financial impact of such risks.

Lockdown measures led to a material contraction of industrial production in March and April, and to a decline in peak power prices. Residential demand has remained more resilient, providing some support to baseload power prices. However, the growth in renewable energy capacity, and especially wind, has made key sources of electricity generation increasingly unpredictable. Crucially, electricity cannot be easily stored, unlike crude oil for example, and large-scale chemical batteries are not yet a fully economically viable electricity storage solution. To keep the electrical grid stable, surplus production has to be temporarily switched off. Or demand has to be boosted, say by inducing large electricity users to increase consumption, pumping up water to the reservoir of a hydropower plant.

As a result, roughly at the same time that WTI-crude futures prices went sub-zero, there were similar short-lived price patterns in the electricity markets of several countries, notably in Germany and France. The main difference is that it did not take anyone by surprise to see negative prices for electricity

¹ For further details on the episode, see DWS CIO Flash Oil goes sub-zero as of 4/21/20

² For overviews on German prices, see <https://www.bhkw-infozentrum.de/faq-bhkw-kwk/negative-strompreise-wie-haeufig-kommen-negative-strompreise-vor> and <https://www.strom-magazin.de/info/negative-strompreise/>

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(which are usually traded one day ahead) for a few hours. In certain European electricity markets, such short-lived events are almost inevitable, due to inflexible renewable or nuclear power production, and limited capacity either of pumped-storage hydropower plants or batteries, when there is historically low power demand.

Like the events in Cushing, however, developments in Europe point to opportunities as well as threats for investors in infrastructure assets. The collapse in WTI prices highlighted the need for additional and more flexible crude storage capacity in the United States. In Europe, investors have had plenty of time to come to terms with this sort of challenge, not only determined by market conditions, but also by a clear direction of policymakers supporting energy transition over recent years.

Notably, lower energy consumption has also resulted in a decline in global CO2 emissions, now expected to decrease by 8% in 2020. In Europe, CO2-emission prices have initially dropped substantially to 15 euros per ton, before rebounding strongly to about 25 euros.³ That is roughly where emissions prices were trading before the crisis. It partly reflects plans by the European Union (EU) for a green recovery, such as imposing carbon tariffs on imported goods. This would allow the bloc to further shrink the pool of emissions permits and effectively increase emission prices, without eroding the competitiveness of EU manufacturers.

As lockdown measures are being progressively lifted across several European countries, we note that industrial production and power demand are gradually resuming, supporting a recovery in power prices already seen during the past eight weeks. However, we anticipate that the recovery may be slow, and progress well into 2021.

In our view, the Covid-19 crisis may represent a catalyst for the ongoing energy-transition process, and provide us with an indication of who may be the winners, losers and survivors over the coming years. One way or the other, it seems likely that things will only get harder for coal-fired power stations, Germany, the Netherlands, Italy, France and the United Kingdom all have plans to accelerate the phase out of coal and lignite.

Meanwhile more efficient gas generators will probably have a role to play in supplying peak demand. With renewables generation continuing to expand across Europe, the need to balance supply and demand on the power grid should continue to prove supportive for efficient gas power generation in the long-term. Merchant power generation margins have been hit by weaker power prices. Nevertheless, European utilities have proven to be largely resilient so far, as electricity networks benefit from regulated returns, and hedging contracts generally stabilizing margins over a period of 12 to 18 months. In the longer-term, more interconnectors between national power grids could reduce pricing power, however.

The likely winners certainly include renewables, which the International Energy Agency expects to be the only energy source experiencing demand growth in 2020. In the short term, lower power prices may negatively impact planning assumptions for greenfield renewables projects. Nevertheless, falling technology costs, particularly for photovoltaic, should in our view support renewables as the likely long-term winner in the energy transition process.

As retail-power prices are already high in some countries, including for example Germany, financing the energy transition may be more complex than what is currently envisaged. A growing share of renewables will require substantial investment in grids. Smart grids use digital communications technology to detect and react to local changes in usage. As a result, they can help alleviate the need for big moves in prices of the sort we saw in April. Energy-from-waste and energy storage, should also benefit. As the price of battery storage should continue to fall, transport electrification poses a threat to oil demand, but likely only in the long-term, as the process of substitution may be slow.

For farsighted investors willing to do their homework in understanding the intricacies of electricity markets, we believe there will certainly be no shortage of opportunities to consider deploying capital.

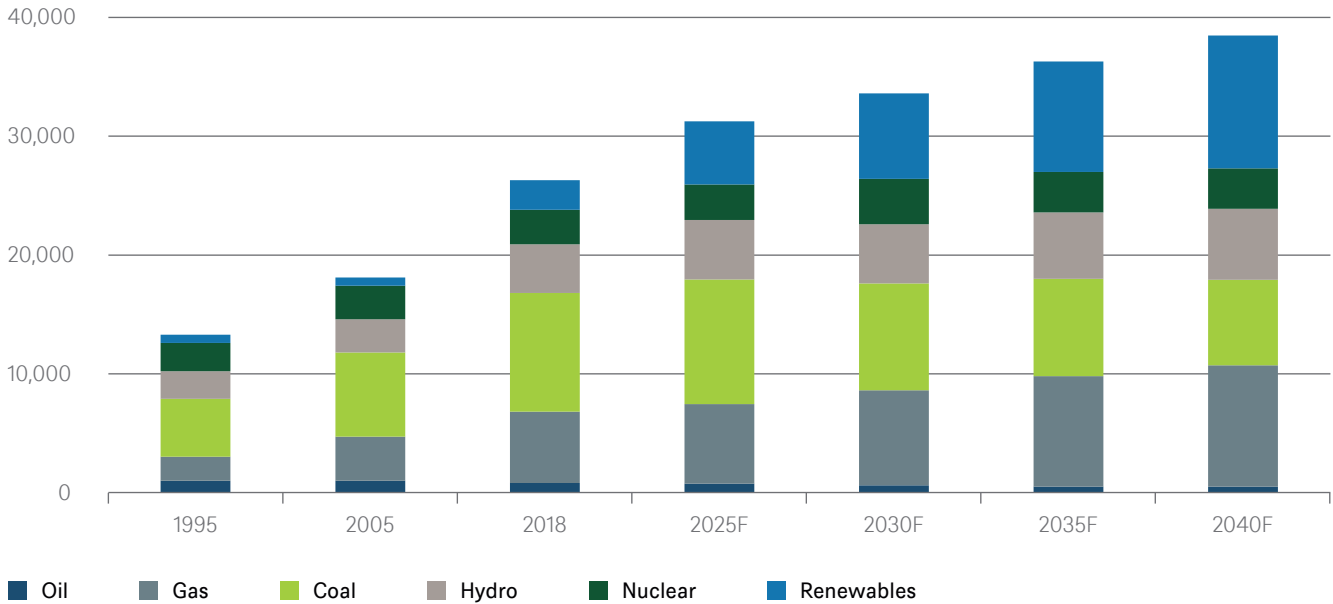
³ <https://www.ft.com/content/be382b73-cb83-4997-b0a6-dc543f30877c>

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ELECTRICITY FROM RENEWABLES LOOKS SET TO GROW FURTHER

Coal-fired power plants are likely to be squeezed further in industrialized countries. However, they may well continue to play a role in electricity supply across emerging markets.

terawatt hours



Sources: S&P Global, Platts Analytics as of May 2020

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July 3, 2020

Equities still the place to be

Monetary and fiscal packages are driving the markets, but their valuation leaves little room for economic disappointment.

- _ One can interpret the course of the economies, markets and the pandemic quite differently; at present, the (too?) optimistic view prevails.
- _ Even if the summer holidays could lead to a reversal of some of the lockdown-easings, we do not expect the economy to come to a new standstill globally.
- _ In our opinion, the monetary and fiscal packages are primarily supporting equities and corporate bonds, but there is also a lot to be said for commodities and gold at present.



Klaus Kaldemorgen
Fund manager

Stock-market trading would dry up quite quickly if market participants did not have different forecasts for the economy, politics and this year the likely course of a pandemic. Views differ, however, not only about the future but also the present and the past. History is constantly being rewritten and reinterpreted. To give one example: has the U.S. economy been on the brink of a recession anyway, as the inverted yield curve in August 2019 suggested? Even without Covid-19 might the U.S. have been facing recession? In the summer of 2020 these different aspects and ultimately the capital markets are particularly open to completely different interpretations. This is the almost inevitable consequence of a global economy that has been forced into partial hibernation by the push of a pandemic alarm button, has shrunk at record speed and begun to revive and recover to some extent quite soon after its mandatory slump. One crucial factor is the reference point. If the low point for mobility, business activity and markets was in March/April, then the current situation may not be so bad because things are clearly looking up. If the yardstick is the pre-crisis level, the economy is still a long way down.

According to our estimates, it may not be before 2023 that some countries return to their end-2019 level. The capital mar-

kets, meanwhile, are already quite a few steps ahead. The leading global stock index, the S&P 500, has almost made it back to its level at the beginning of the year. The Nasdaq 100 Index gained more than 10% and was able to exceed its previous highs at the beginning of June. The situation on the bond markets is in some way similar. There was considerable panic in these markets in March, when even trading in U.S. Treasuries was thought to be disrupted but since then the losses have been largely recovered. The price index for U.S. investment-grade corporate bonds¹, for example, is around 5% higher than at the beginning of the year and only a few percentage points below its record high of March 6.

The markets were more volatile than during the financial crisis of 2008: in March, the S&P 500 fell by 15.4% within two weeks and then rose by 13.3% in less than a month. These capital-market rallies were mainly driven by the courageous rescue packages of governments and above all central banks, whose glasses are not so much full as constantly overflowing. The key interest rates of all major central banks are close to zero or slightly below. Yield-curve control, i.e. the direct control of market interest rates, is increasingly being discussed by members of the U.S. Federal Reserve (Fed) – on top of the multiple credit guarantees, liquidity tenders and of course bond

¹ Bloomberg Barclays U.S. Aggregate Credit Index

purchases. The Fed is now even buying non-investment-grade corporate bonds. Jerome Powell, the Fed Chairman, who was initially perceived as a hawk three years ago, revealed in a recent Congressional survey how he now interprets his task: as long as inflation does not rise, he said, the clear mandate is to support the labour market, and not prevent any asset price bubbles that may arise.²

Many investors should have taken Powell's statement on the Fed's current philosophy with relief. After all, the negative effects of rising debt levels and immense government intervention will only become apparent with a longer time lag, for example by reducing potential economic growth, as we have argued in the study "CIO Special: Fiscal packages – necessary in the short term, dangerous in the long term".

The original problem that created the need for rescue packages, the pandemic triggered by Covid-19, is also open to a variety of assessments. A focus on regions such as East Asia and Europe, where the pandemic appears to have been largely brought under control, might generate a more optimistic view. Things look much less optimistic, however, when Latin America and the United States are considered. Here the spread of the virus has even regained momentum, reflected – at least so far – more in the number of new infections rather than deaths. Even if there seems little interest at the highest political levels in the United States in imposing an extensive lockdown, economic recovery could still be delayed. First, lockdowns are the responsibility of state governors, some of whom already feel compelled to act in the face of rapid new infection numbers. And second, people could become more cautious by themselves, without being instructed to do so. Mobility data are already showing signs of decline again in some U.S. states. To what extent investors are being guided by this new dynamic is difficult to say. The major stock markets though have been unable to push their recovery rally higher in June. Many investors may be hoping for new fiscal largesse or central-bank rescue packages in the event of new lockdowns or slowing economic recovery. And even if the virus and the resulting economic rollercoaster ride currently still dominate market events, other troubling issues have lingered or are regaining momentum. First and foremost among them is the U.S.-China

trade and technology dispute, which is again moving markets as it worsens or eases.

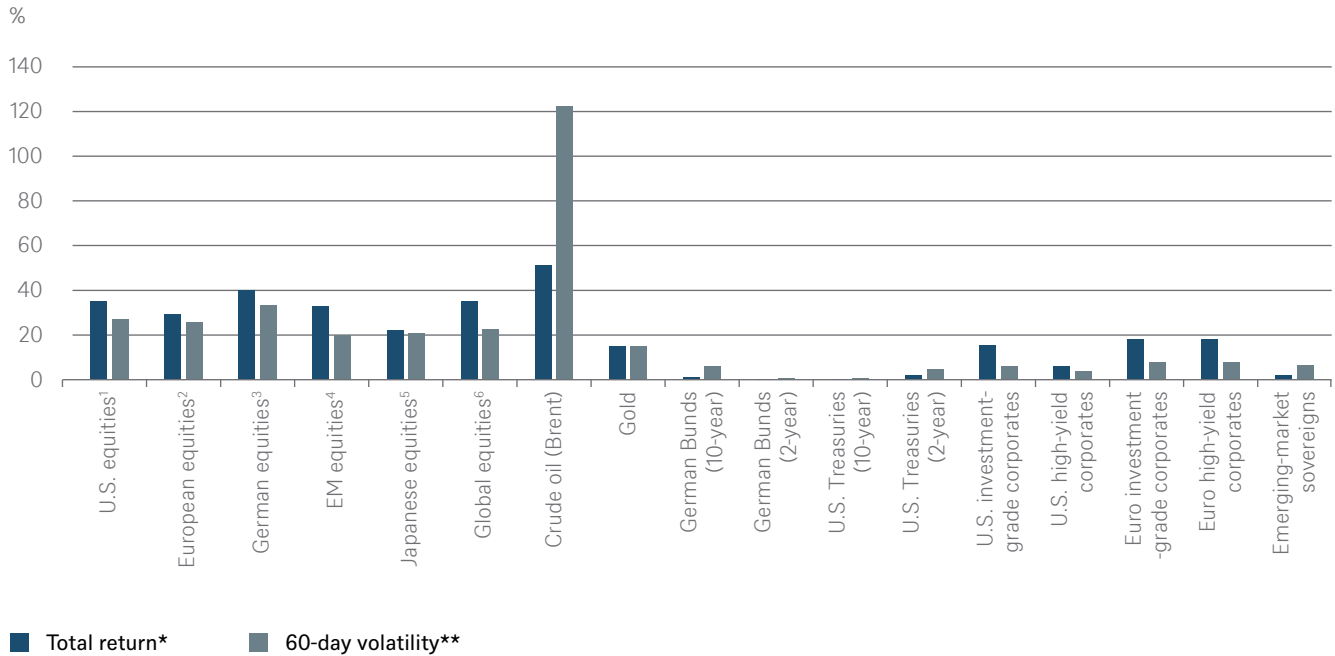
Based on our main scenario of a gradual recovery from now on – not without hiccups, but without a second global lockdown – we believe the strategic outlook for equities and corporate bonds is attractive, especially in view of the fact that interest rates are anchored close to zero in the short-maturity segment around the globe. The extremely expansionary, liquidity-promoting monetary policy of central banks also helps these asset classes. Together with recovering fundamental data, this also puts rapidly rising equity valuations into perspective. However, anyone who is concerned about inflation in the longer term as a result of the current highly expansionary monetary policy is likely to give a clear preference to equities. We do not yet see inflation emerging in a 12-month perspective and are sticking to a moderate equity allocation target. Increasing exposure to European equities can make the equity component somewhat more cyclical and more in favor of value stocks. Overall, however, we believe the focus should remain on quality and growth stocks, with a slightly elevated positioning in U.S. equities.

After their strong performance since the beginning of the year, government bonds (especially U.S. Treasuries) have lost much of their appeal. Low yields are likely to reduce not only current income but also future diversification potential. By contrast, investment-grade corporate bonds look much better. Although this bond segment has already performed well in recent months thanks to narrowing yield spreads, in our opinion, it should continue to benefit from structural demand from central banks and institutional investors. We also believe that parts of the high-yield segment are currently much more attractive than government bonds. There are still some interesting securities to be found, especially in the European corporate-bond segment, and to a lesser extent in U.S. companies. By contrast, we do not believe that risks have yet decreased to the same extent in emerging markets. Given low opportunity costs (interest rates close to zero or negative) and low inflation expectations, we feel that commodities and gold should not be missing in the portfolio.

² See: <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20200610.pdf>

A BROAD RECOVERY WITH RETURNS GENERALLY IN LINE WITH HISTORIC RISK LEVELS

Since the lows in most equity indices on March 23, equities and corporate bonds have performed especially well.



* total return from 3/23/20 to 6/29/20

** as of 6/29/20

¹ S&P 500; ² Stoxx Europe 600; ³ Dax; ⁴ MSCI Emerging Markets Index; ⁵ MSCI Japan Index; ⁶ MSCI AC World Index

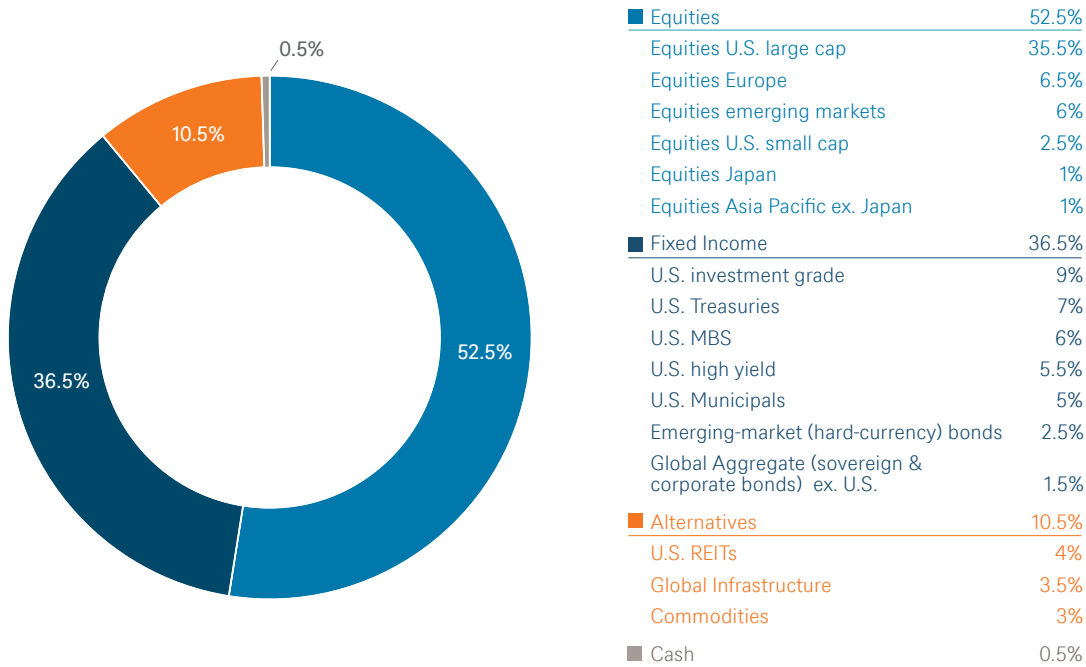
Sources: Refinitiv, DWS Investment GmbH as of 6/29/20

Equities seem pricey

Improving economic fundamentals warrant a somewhat less cautious stance...

Although we have selectively added risk to the model portfolios, caution should still prevail. As we continue to find equity valuations unreasonably elevated, an underweight seems justified. In compensation we increased our exposure to fixed income. We particularly expect corporate bonds to be supported by fiscal and monetary policy. Our regional tilts remain indicative of our

preference for technology and growth stocks, articulated via our overweight in U.S. equities. We remain overweight emerging-market (EM) Asia as these countries continue to see some economic recovery. This exposure has also weathered the most recent risk-off event comparatively well.



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 6/16/20

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Investors sunbathe – in heavy rain

Great mood, bad outlook

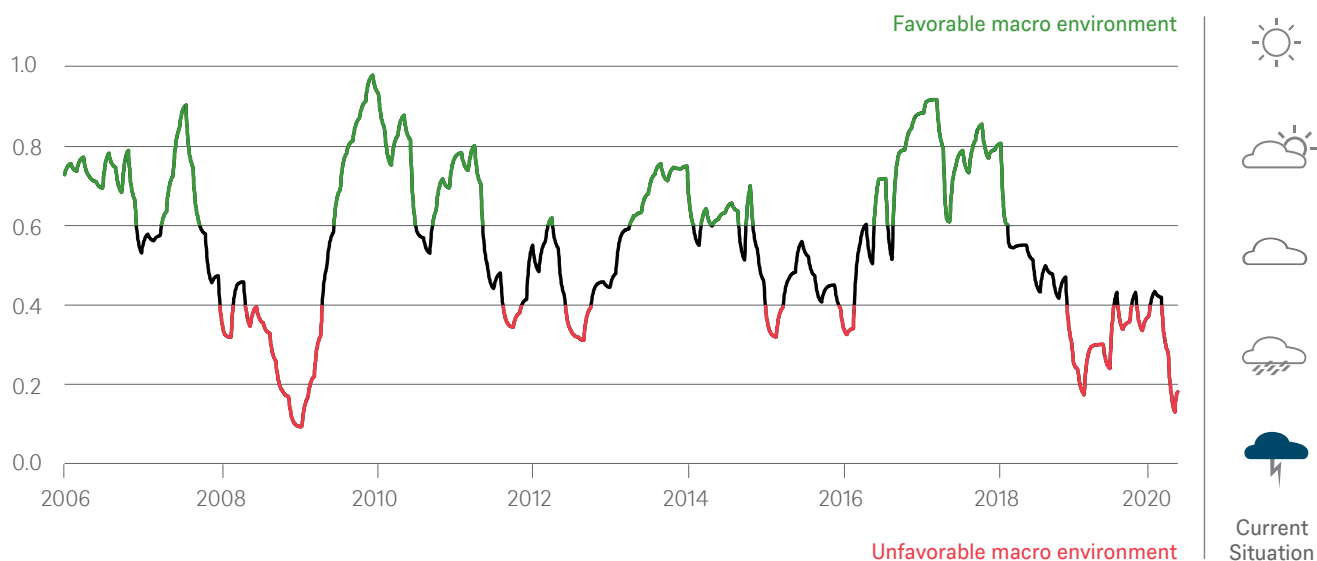
Covid-19 remained the dominant topic on the markets in the second quarter, though with different dynamics. In the first quarter, the virus's galloping and devastating spread around the world terrified investors. In the second quarter, by contrast, the news was dominated by the unprecedented fiscal and monetary support announced by politicians and central banks. The goal was to cushion the worst effects of the profound recession into which the global economy was falling and to generate a V-shaped bounce as quickly as possible. The U.S. government debt's extreme increase is just one example of markets' response: It rose by more than 12 percentage points in the past three months. And in the same period, showing some of the cause behind the effect, the U.S. Federal Reserve's (Fed's) balance sheet doubled.

Investors' high hopes in the authorities' emergency measures are reflected in the DWS indicators. A huge gap has opened up between the DWS surprise and risk indicators, which reflects investors' mood, and the actual fundamental situation (the DWS macro indicator). The divergence has been the largest among the worst readings over the last 15 years. Historically, such a large divergence between the indicators' readings has never lasted long.

In the medium term, therefore, some convergence between sentiment and fundamentals can be expected. Since experience shows that fundamentals tend to change more slowly it can be assumed that the adjustment will take place via a clouding of investor sentiment. This in turn is likely to be associated with setbacks for the capital markets.

MACRO INDICATOR / Condenses a wide range of economic data

Given that the current recession is the deepest in industrialized countries since the Second World War, the frail fundamental picture is not surprising. In May, the macro indicator fell to its lowest level since 2008, with all sub-indicators trading at historic lows. The slight recovery in June cannot hide the fact that the economic environment remains clearly negative overall. The indicator is likely to remain in its weakest segment (see chart) for some time to come.

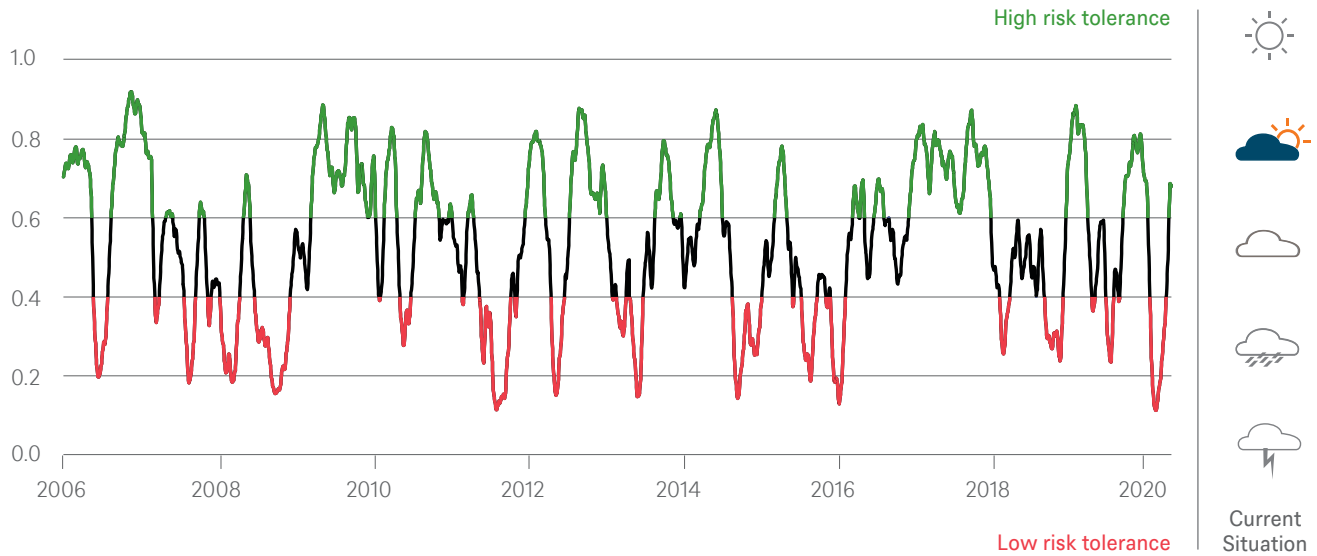


Source: DWS Investment GmbH as of 6/16/20

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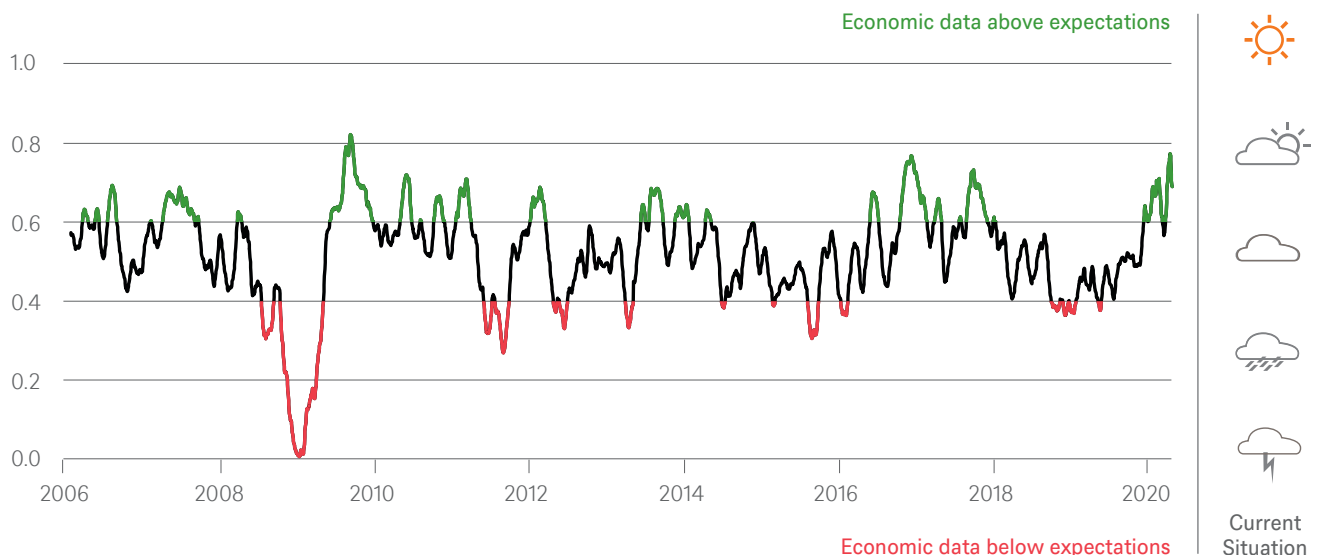
RISK INDICATOR / Reflects investors' current level of risk tolerance in the financial markets

The risk indicator has risen rapidly from its low at the end of March and has been in positive territory again since mid-May. All sub-indicators have contributed equally to the positive development. However, the indicator currently reacts very sensitively to changes in the sub-indicators, in both a positive and negative direction. Therefore, the current positive risk appetite could soon reverse again.



SURPRISE INDICATOR / Tracks economic data relative to consensus expectations

The surprise indicator has been on the rise since the beginning of 2019. The sentiment figures in particular have exceeded analysts' low expectations for some time now. After data in the United States disappointed in April, positive surprises have dominated since May, and the situation in Asia is similar. In Europe, on the other hand, the data continue to regularly fall short of expectations. We believe that this could also be the way forward for the global indicator and expect it to weaken soon again.



Source: DWS Investment GmbH as of 6/16/20

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June 25, 2020

Sustainable success stories

Increasingly, Sustainable Development Goals help drive our global outlook for sector allocation.

- _ Over the last two years, we have integrated Sustainable Development Goals (SDGs) into our investment-decision-making process.
- _ This enables us to identify true SDG leaders, allowing us to capture investment opportunities while reducing risks.
- _ The sectors with the greatest SDG exposure are healthcare, technology and real estate.



Petra Pflaum
CIO for Responsible Investments

Sometimes, setting goals is the easy bit. The hard task is actually implementing them. Over the last two years, we have been examining how to integrate Sustainable Development Goals (SDGs) into our investment-decision-making approach for listed markets. This work has taken place against the backdrop of broader efforts to set aspirations and targets for economic development, social inclusion and environmental sustainability around the world.

Building on its previous Millennium Development Goals, the United Nations (UN) has set 17 SDGs, including Affordable and Clean Energy (SDG7), Climate Action (SDG13) and Good Health and Well-being (SDG3), the areas where the most prominent SDG investment opportunities are typically concentrated. Achieving the 17 Sustainable Development Goals require governments, businesses, investors and civil society to join together in taking action. Unlike the predecessor framework of the UN's Millennium Development Goals, the current SDG agenda explicitly calls on the private sector to deliver solutions. Many companies around the world have already started to incorporate sustainability into their business activities. For example, more than 12,000 companies are signatories to the UN Global Compact, officially launched in July 2000. This initiative encourages companies to follow ten principles

in the areas of human rights, labor standards, environment and anti-corruption.

The SDGs take this commitment further, calling on companies to incorporate the SDGs into their business models, innovations and investments. In its 2017 "Better Business, Better World Report," the 35 chief executives and civil-society members of the Business and Sustainable Development Commission identified 60 major market opportunities across the food and agriculture, urban-development, energy and materials, and health and well-being sectors.¹ Examples of business opportunities are reducing food waste, new farm technologies, affordable housing, energy-efficient buildings and public transport or developing circular business models in big sectors.

Which is all well and good, but how can such thinking be integrated into a coherent investment approach? Having done so for quite a while, we can tell you that it is by no means straightforward. Our work included research originally published in April 2018 outlining our proprietary methodology as to how best to invest through an SDG lens.² During the current year, we have enhanced that methodology to deliver more granularity. This includes assessing not just issuers'

¹ Business and Sustainable Development Commission (January 2017). Better Business, Better World

² <https://www.dws.com/insights/global-research-institute/integrating-un-sustainable-development-goals-into-investment-portfolios/>

positive contributions to the SDGs but also the ability to evaluate their negative contributions to the SDGs. With it, we believe that we can now deliver a more complete picture of an individual issuer's overall net contribution to the SDGs.

Our investment universe for this analysis is the MSCI AC World Index. Within this index, we assess where companies' product and services are contributing the most to specific SDGs. We find that company activities are typically clustered around five SDGs, namely Climate Action (including alternative energy and energy efficiency, SDG 13), Quality Education (SDG 4), Good Health and Well-being (SDG3) as well as Responsible Production & Consumption (including pollution prevention, SDG 12). However, within the sectors, the exposure to the different SDGs varies substantially.

From this analysis, we aim to identify true SDG leaders. This starts with identifying companies with revenues positively linked to SDGs. Furthermore, the firms thus identified face additional scrutiny through a risk-control layer. The layer is designed to identify true leaders, by removing issuers with any severe issues either in ESG quality, as measured by our DWS SynRating, or any norm violations or controversial sector involvement. True leaders, in other words, are companies with the highest net contribution (i.e. positive SDG contribution net of risk factors, including revenues from SDG-dubious activities).

Our analysis shows that most of the industries focus their efforts on contributing to SDG 13 (Climate Action). However, this reveals significant variations both within and across sectors. Notably, we can differentiate between positive to negligible contribution observed in the communication services, real-estate, materials and healthcare sectors on the one hand and negative contributions of the energy and consumer-staples sectors. By contrast, we have found that the only sectors contributing meaningfully to SDG 11 (Sustainable Cities & Communities) and SDG 3 (Good Health & Well-being) are the real-estate and healthcare sectors, respectively.

When examining the results from our in-depth analysis, we find that the sub-sectors that have the highest contribution to the SDGs are within healthcare, technology and real estate. By contrast, the sectors with the lowest share of "True SDG leaders" and "SDG leaders" are energy and communication services.

In spite of norm violations in product safety which penalizes the SDG rating across the healthcare sector, both the sub-sectors of pharmaceuticals, biotechnology & life sciences and health care equipment & services have high proportions of "true SDG leaders" and "SDG leaders" (81% and 82% of the market cap in their sub-sectors respectively).

In the IT sector, all three sub-sectors have a high proportion of SDG leaders. We find that IT products are typically deployed for energy-efficiency purposes and are associated with SDG13 (Climate Action); the same also applies to certain devices in the semiconductor sub-sector.

In the food and beverages sub-sector, we often observe a lower exposure to the Sustainable Development Goals than one might have expected. These companies are contributing to the SDGs, but nevertheless have disappointing ratings due to their net negative SDG contribution particularly to SDG 2 (Zero Hunger – Nutrition). Within SDG 2, one of the main targets that need to be achieved is the elimination of all forms of malnutrition by 2030 and to address the nutritional needs of society. That means some companies within the consumer-staples sector get punished when their SDG contribution is calculated. This includes companies producing soft drinks, confectionary, desserts, red-meat-based products and highly processed food products with critical levels of certain non-healthy nutrients (e.g. salt, sugar, fat). As a result, this negative impact typically offsets any positive contribution in the area of SDG 2, for example dairy products with limited processing or additives, unsweetened tea and staple foods such as rice.

Last but not least, most of the companies in the communication-services sector have little to no positive SDG revenue. As a result, and even though many companies may score highly in terms of ESG quality they will be marked down on an SDG basis, achieving an SDG rating of "D" at best. By contrast, SDG leaders are rated "A" or "B."

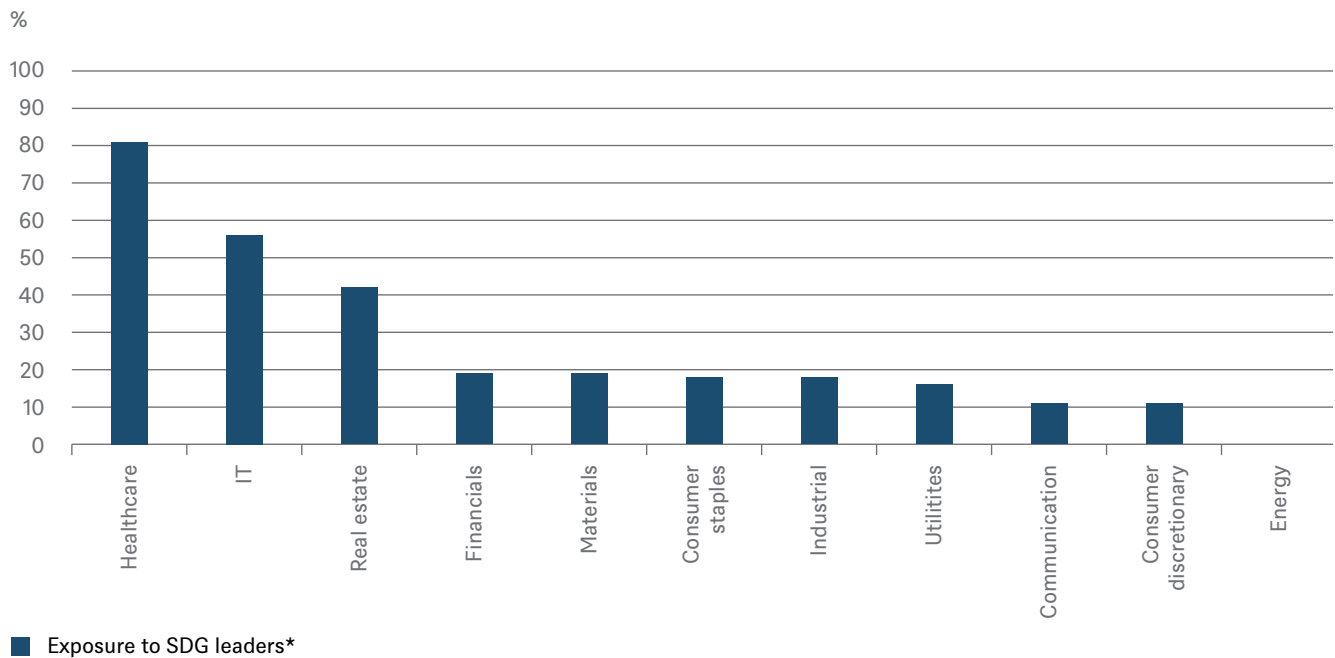
So, what does it all mean? Well, our analysis shows that the sectors with the greatest SDG exposure are healthcare, technology and real estate. In the sub-sector analysis, standouts include technology hardware and equipment, pharmaceuticals, biotechnology & life sciences, health-care equipment & services as well as the household and personal products companies. Beyond that, it illustrates the usefulness of having a

formal framework to assess issuers across consistent criteria sets in deriving our global outlook for our sector-allocation and security-selection processes. By including ESG information in general and SDG information in particular, we aim to reduce

our investment risks, capture investment opportunities and facilitate efforts to improve environmental and social challenges faced by society.

A DIFFERENT WAY TO THINK ABOUT TACTICAL AND STRATEGIC SECTOR ALLOCATION

Our proprietary SDG methodology reveals big variations in terms of which sectors have the highest proportion of SDG leaders



* Percentage share of companies with the two highest ratings, "A" or "B," on our proprietary SDG methodology
Source: DWS Investment GmbH, as of 6/17/20

June 10, 2020

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

MACRO / A recovery, of sorts

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

| Region | 2020F | | 2021F |
|----------------|-------|---|-------|
| United States | -5.7 | ↗ | 5.6 |
| Eurozone | -7.5 | ↗ | 4.5 |
| United Kingdom | -8.0 | ↗ | 6.5 |
| Japan | -5.5 | ↗ | 3.3 |
| China | 1.0 | ↗ | 9.0 |
| World | -3.1 | ↗ | 5.5 |

Fiscal deficit (in % of GDP)

| Region | 2020F | | 2021F |
|----------------|-------|---|-------|
| United States | 17.8 | ↘ | 7.0 |
| Eurozone | 7.5 | ↘ | 3.6 |
| United Kingdom | 8.5 | ↘ | 4.6 |
| Japan | 7.0 | ↘ | 2.8 |
| China | 11.2 | ↘ | 9.6 |

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

| Region | 2020F | | 2021F |
|----------------------------|-------|---|-------|
| United States ¹ | 1.2 | ↗ | 2.1 |
| Eurozone | -0.3 | ↗ | 1.0 |
| United Kingdom | 0.9 | ↗ | 1.8 |
| Japan | -0.3 | ↗ | 0.1 |
| China | 2.8 | ↘ | 1.8 |

Current-account balance (in % of GDP)

| Region | 2020F | | 2021F |
|----------------|-------|---|-------|
| United States | -2.1 | ↘ | -2.3 |
| Eurozone | 2.6 | ↗ | 2.7 |
| United Kingdom | -3.8 | ↘ | -4.5 |
| Japan | 2.5 | ↗ | 3.0 |
| China | 0.4 | ↗ | 1.0 |

Benchmark rates (in %)

| Region | Current* | | Jun 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 | ↘ | 3.55 |

Commodities (in dollars)

| | Current* | | Jun 2021F |
|-----------------------------|----------|---|-----------|
| Crude oil (WTI 12M forward) | 35.5 | ↗ | 43 |
| Gold | 1,730 | ↗ | 1,830 |
| Copper (LME) | 5,377 | ↗ | 6,060 |

* Source: Bloomberg Finance L.P. as of 5/29/20 F refers to our forecasts as of 5/28/20

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

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 ↗, a sideways trend → or a downward trend ↘.

– 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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Equities / An unusually rapid rebound

| | Current* | | Jun 2021F | | Total return (expected) ¹ | Expected earnings growth | P/E impact | Dividend yield |
|-----------------------------------|----------|---|-----------|--|--------------------------------------|--------------------------|------------|----------------|
| | | | Forecast | | | | | |
| United States (S&P 500) | 3,044 | ● | 3,100 | | 3.5% | -5% | 7% | 1.6% |
| Europe (Stoxx Europe 600) | 350 | ● | 370 | | 8.9% | -7% | 13% | 3.3% |
| Eurozone (Euro Stoxx 50) | 3,050 | ● | 3,150 | | 6.6% | -8% | 11% | 3.3% |
| Germany (Dax) ² | 11,587 | ● | 12,000 | | 3.6% | -7% | 8% | 2.8% |
| United Kingdom (FTSE 100) | 6,077 | ● | 6,300 | | 7.7% | -12% | 15% | 4.0% |
| Switzerland (Swiss Market Index) | 9,831 | ● | 10,150 | | 6.3% | -1% | 4% | 3.0% |
| Japan (MSCI Japan Index) | 946 | ● | 950 | | 2.6% | -11% | 12% | 2.1% |
| MSCI Emerging Markets Index (USD) | 930 | ● | 1,000 | | 10.0% | 0% | 8% | 2.6% |
| MSCI AC Asia ex Japan Index (USD) | 601 | ● | 660 | | 12.1% | 1% | 9% | 2.4% |

* Sources: Bloomberg Finance L.P., FactSet Research Systems Inc. as of 5/29/20 F refers to our forecasts as of 5/28/20

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

² Total-return index (includes dividends)

Fixed Income / Yields to stay low, again

United States

| | Current* | | Jun 2021F |
|--|----------|---|-----------|
| U.S. Treasuries (10-year) | 0.65% | ● | 0.90% |
| U.S. municipal bonds ¹ | 125% | ● | 90% |
| U.S. investment-grade corporates | 164 bp | ● | 165 bp |
| U.S. high-yield corporates | 637 bp | ● | 640 bp |
| Securitized: mortgage-backed securities ² | 67 bp | ● | 50 bp |

Europe

| | Current* | | Jun 2021F |
|---|----------|---|-----------|
| German Bunds (10-year) | -0.45% | ● | -0.50% |
| UK Gilts (10-year) | 0.18% | ● | 0.50% |
| Euro investment-grade corporates ³ | 175 bp | ● | 150 bp |
| Euro high-yield corporates ³ | 573 bp | ● | 600 bp |
| Securitized: covered bonds ³ | 50 bp | ● | 50 bp |
| Italy (10-year) ³ | 192 bp | ● | 190 bp |

* Source: Bloomberg Finance L.P. as of 5/29/20

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

² Bloomberg Barclays MBS Forward Index

³ Spread over German Bunds

Asia-Pacific

| | Current* | | Jun 2021F |
|-------------------------------------|----------|---|-----------|
| Japanese government bonds (10-year) | 0.01% | ● | -0.10% |
| Asia credit | 379 bp | ● | 350 bp |

Global

| | Current* | | Jun 2021F |
|----------------------------|----------|---|-----------|
| Emerging-market sovereigns | 516 bp | ● | 525 bp |
| Emerging-market credit | 458 bp | ● | 450 bp |

Currencies

| | Current* | | Jun 2021F |
|-------------|----------|---|-----------|
| EUR vs. USD | 1.11 | → | 1.10 |
| USD vs. JPY | 108 | → | 105 |
| EUR vs. GBP | 0.90 | → | 0.90 |
| GBP vs. USD | 1.23 | → | 1.22 |
| USD vs. CNY | 7.14 | → | 7.30 |

F refers to our forecasts as of 5/28/20

bp = basis points

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Glossary

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

The **Bank of Japan (BOJ)** is the central bank of Japan.

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.

The **Bloomberg Barclays U.S. Aggregate Credit Index** measures the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate and government-related bond markets.

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.

A **central bank** manages a state's currency, money supply and interest rates.

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

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

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

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.

Deflation is a sustained decrease in the general price level of goods and services.

The **discount rate** is the interest rate charged to commercial banks and other depository institutions for loans received from the country's central bank's discount window.

Diversification refers to the dispersal of investments across asset types, geographies and so on with the aim of reducing risk or boosting risk-adjusted returns.

A **dividend** is a distribution of a portion of a company's earnings to its shareholders.

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.

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 **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.

An **exchange-traded fund (ETF)** is a security that tracks an index or asset like an index fund, but trades like a stock on an exchange.

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.

Free Cash Flow (FCF) is a measure of financial performance calculated as operating cash flow minus capital expenditures. It shows how much cash a company is able to generate after deducting the money required to maintain or expand its asset base.

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

Fundamentals are data giving information about the general well-being of companies, securities or currencies and serving for the subsequent valuation of these as an investment opportunity.

Gilts are bonds that are issued by the British Government.

Government (sovereign) debts/bonds are debt/bonds issued and owed by a central government

Greenback is a commonly used expression for the U.S. dollar.

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.

Hawks are in favor of a restrictive monetary policy.

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.

The **ICE BofA Merrill Lynch A-BBB US Corporate Index** tracks the performance of dollar-denominated corporate debt rated A to BBB and publicly issued in the U.S. domestic market.

The **ICE BofA Merrill Lynch Euro High-Yield Bond Index** tracks the performance of euro-denominated below investment-grade corporate debt by issuers around the world.

The **ICE BofA Merrill Lynch US High Yield Index** tracks the performance of dollar-denominated below investment grade, including zero-coupon and payment-in-kind (PIK) bonds.

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

An **inflation-indexed bond** is a bond where the principal and / or coupon is indexed to the consumer price index.

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

Investment grade bonds are all bonds with a good to very good credit rating

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

Market capitalization, in the context of an individual firm, is the number of shares issued multiplied by the value of the shares.

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 asset-backed 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 mid-cap 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 mid-cap 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.

The **Organization of the Petroleum Exporting Countries (OPEC)** is an international organization with the mandate to "coordinate and unify the petroleum policies" of its meanwhile 12 members.

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 **Real Estate Investment Trust (REIT)** is a company that owns and, in most cases, operates income-producing real estate. REITs sell like a stock on the major exchanges and invest in real estate directly, either through properties or mortgages.

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

Renminbi (RMB) is the currency of the People's Republic of China.

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 **U.S. Federal Reserve**, often referred to as "the Fed", is the central bank of the United States.

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.

Valuation attempts to quantify the attractiveness of an asset, for example through looking at a firm's stock price in relation to its earnings.

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 (%)

| | 06/15 - 06/16 | 06/16 - 06/17 | 06/17 - 06/18 | 06/18 - 06/19 | 06/19 - 06/20 |
|--|------------------|------------------|------------------|------------------|------------------|
| Asia credit | 7.4% | 3.1% | -0.7% | 10.0% | 5.4% |
| Dax | -11.6% | 27.3% | -0.2% | 0.8% | -0.7% |
| Emerging-market sovereigns | 10.3% | 5.5% | -2.4% | 11.3% | 1.5% |
| Emerging-markets credit | 5.6% | 7.0% | 0.1% | 10.7% | 4.6% |
| Euro high-yield corporates | 2.2% | 9.8% | 0.8% | 5.2% | -2.2% |
| Euro investment-grade corporates | 5.0% | 1.2% | 1.1% | 4.8% | -0.5% |
| Euro securitized: covered bonds | 3.5% | -0.9% | 0.9% | 3.2% | 0.9% |
| Euro Stoxx 50 | -13.9% | 23.3% | 1.3% | 5.1% | -5.1% |
| FTSE 100 | 3.8% | 16.9% | 8.7% | 1.5% | -13.7% |
| German Bunds (10-year) | 8.4% | -3.5% | 2.6% | 5.7% | 0.8% |
| Italy (10-year) | 11.3% | -3.5% | -1.4% | 8.8% | 7.3% |
| Japanese government bonds (10-year) | 6.0% | -2.4% | 0.7% | 2.0% | -1.3% |
| MSCI AC Asia ex Japan Index | -12.0% | 26.7% | 9.9% | -0.5% | 1.7% |
| MSCI AC World Index | -5.7% | 16.5% | 8.6% | 3.6% | 0.3% |
| MSCI Emerging Market Index | -12.1% | 23.7% | 8.2% | 1.2% | -3.4% |
| MSCI Japan Index | -8.9% | 19.2% | 10.5% | -4.2% | 3.1% |
| Nasdaq 100 Index | 1.8% | 29.4% | 26.0% | 10.2% | 33.8% |
| S&P 500 | 4.0% | 17.9% | 14.4% | 10.4% | 7.5% |
| Stoxx Europe 600 | -10.4% | 18.8% | 3.5% | 5.1% | -3.8% |
| Swiss Market Index | -5.5% | 14.9% | 0.0% | 18.8% | 4.9% |
| U.S. high-yield corporates | 1.6% | 12.7% | 2.6% | 7.5% | 0.0% |
| U.S. investment-grade corporates | 7.6% | 1.8% | -0.6% | 10.3% | 9.1% |
| U.S. securitized: mortgage-backed securities | 4.3% | -0.1% | 0.1% | 6.2% | 5.7% |
| U.S. Treasuries (10-years) | 9.4% | -4.0% | -1.8% | 10.1% | 12.8% |
| UK Gilts (10-years) | 11.5% | -0.6% | 0.7% | 5.7% | 6.3% |

Source: Bloomberg Finance L.P. as of 6/30/20

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