After COVID-19

How to invest in a more indebted, less global, and more digital world

Spotlight on coronavirus
In the immediate future, the market is likely to focus on how quickly lockdown measures are eased and the pace of the recovery in corporate profits. But investors will also need to consider the potential structural transformations being driven by this public health crisis.

We think that the post-crisis world will be more indebted, less global, and more digital. Investors will need to contend with higher taxation, financial repression, and moderately higher inflation, along with populism and protectionism, while navigating the transitions from global to local supply chains, and from physical to digital.

We do not think the crisis has materially changed the long-term outlook for modest economic growth. We anticipate increased investment in automation and robotics, along with the rising trend of people extending their working lives, offsetting the negative impact of financial repression and populism. However, the recent fall in high-quality bond yields means investors will need to reassess the role of cash and bonds in their portfolios.

Investors open to taking on increased investment risk should look at reducing exposure to cash and high-quality bonds in favor of higher yielding credit or globally diversified equities, as well as considering alternative diversifiers such as TIPS, private markets, and option strategies. Investors should also seek exposure to beneficiaries of the long-term trends that have been boosted by the crisis, including companies exposed to Automation and robotics, Digital transformation, Fintech, E-commerce, HealthTech, and Genetic therapies.

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Key trends

We think that a post-crisis world will be more indebted, less global, and more digital. Investors will need to contend with higher taxation, financial repression, and moderately higher inflation, along with populism and protectionism, while navigating the transitions from global to local supply chains, and from physical to digital.

More indebted

Debt levels will be much higher at the end of the current crisis. The precise fiscal spending picture is still unclear, but, given our current estimates, government debt as a percentage of GDP will be 15–25ppt higher by the end of 2021 than it was at the end of 2019 across much of Europe and in the US. This is broadly comparable with the scale of increase seen between 2007 and 2010 as a result of the global financial crisis.

Once the crisis is over, emergency spending measures will come to an end and budget deficits will fall. But, unlike the period following the global financial crisis, we
do not expect governments to make deep cuts in public spending to save money, given the negative experience with austerity during the Eurozone crisis, lower cost of debt, and the likely increased political demands for spending on social services, including healthcare. We therefore anticipate fiscal spending will remain high by historical standards well beyond 2020.

There will be regional variations in how governments finance this debt, but broadly we expect governments to use three means:

**Financial repression.** This has been already employed widely over the past decade, and occurs when regulation forces institutional investors like banks, pension funds, and insurers to own government bonds whose yield is reduced by forced buying, as well as by central banks’ quantitative easing and yield curve control programs. Ultimately, these lower returns are passed on by institutions to conservative savers, who end up sharing the burden of higher debt levels with taxpayers.

The flip side is that owners of riskier assets like equities and credit may profit. It’s worth noting that supporting risk assets is not just a side effect of financial repression; it is part of central banks’ strategy. The Bank of Japan already owns around two-thirds of the entire Japanese ETF market, while the Federal Reserve is now buying corporate bonds, including junk bonds recently downgraded from investment grade status. Given high levels of household stock ownership in the US, such measures could even be expanded in any future recession. Of course, if these actions contribute to greater inequality, it may increase political calls for further rises in taxation in some countries.

**Higher taxation.** Governments could also seek to finance debt through higher taxes. In particular, we expect to see higher taxes on large, transnational companies, and particularly on technology firms. This step was already being planned prior to the pandemic, and the demands of post-crisis government finance are likely to make this a higher priority. Tying taxes to where revenues are earned is likely to appeal to a sense of fairness, and it also aligns with the trend of de-globalization, by targeting foreign firms.

We might also see certain governments impose higher taxes on the wealthy to help finance debts. Although no jurisdiction has yet come out with concrete announcements, such tax measures might include higher taxes on capital gains, income, or gifts/inheritance, or the introduction or increase of wealth taxes, or financial transaction taxes.

The result is that long-term financial planning and considering after-tax performance will become even more important. These could include the use of tax-efficient investment/divestment strategies, such as the netting of capital gains and losses, and tax deferral strategies, among others. There will also be even more incentive for selecting tax-advantaged asset classes or investment instruments (for example municipal bonds in the US, Swiss stocks with partly tax-free distributions, or eligible private equity-type funds in other jurisdictions), and for careful instrument selection which considers after-tax performance. Amid uncertainty about which taxes might go higher,
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Key trends

investors should also consider whether they can diversify their assets’ tax status, for example by using tax advantaged savings accounts (e.g. IRAs, Health Savings Account, or 529 College Savings Accounts in the US, or ISAs and SIPPs in the UK), or by utilizing pension allowances. Last, but not least, estate planning—and the value of thinking intentionally about life insurance, inheritance, and philanthropy—will become even more prominent, not only due to uncertainty over taxes, but also due to the existential experience of this pandemic.

**Moderately higher inflation.** The other popularly cited means of reducing debt levels is inflation. But inflating away government debt is not as simple as it may first appear, both because, as seen in the past, generating inflation is not necessarily straightforward, and because higher inflation increases deficits. Large parts of government spending are directly linked to inflation, debt costs may rise where there is substantial inflation-linked bond issuance, and investors may demand an insurance premium if inflation uncertainty is high.

So we think it is unlikely that inflation would be allowed to deviate meaningfully from the target rate for long, given the potential cost of adding to inflation uncertainty. That said, central banks may be prepared to tolerate a rate of inflation somewhat above the 2% target rate for a year or two. Inflation between 2% and 5%, if not for too long, would likely not add to inflation uncertainty risk, and could help modestly reduce debt burdens. As with financial repression, inflation in this range can be regarded as a tax on conservative savers.

Please see the latest on the “More indebted” key trend at ubs.com/cio-coronavirus.

**Less global**

The COVID-19 lockdown era has been an unprecedented experiment in extreme localization, with many individuals been banned from even leaving their own homes. These measures will clearly not persist in the long term. However, we believe the world will be left structurally less global by the crisis, spurring on the de-globalization trend we discussed in our Decade Ahead publication.

**Populism.** Pandemics have a habit of increasing mistrust of outsiders and minority groups, with the political spats over the cause and name of the pandemic a clear example of this trend repeating. The associated international tension could rise further if restrictions on travel linger, if the recent trend of export bans and seizures of medical equipment continues, if divergent economic outcomes lead to higher future migration flows, or if conflict develops over debt burden sharing, for example in the Eurozone.

**Protectionism.** One manifestation of populism is likely to be increased protectionism. This could mean renewed focus by governments on the development or support of national champions through subsidies or tariffs on overseas imports. This is especially true for companies involved in goods that are deemed critical to public health, national security, or domestic prosperity, including pharmaceuticals, medical devices,
food stocks, information technology, essential manufacturing, defense contractors, financial services, energy suppliers, and security services.

Governments are also likely to focus again on the risks of international technology transfer. Many countries may expand monitoring of citizens via mobile devices to help mitigate the risk of COVID-19, or other infectious diseases, blurring the lines between the private and public ownership of data. Discussions about the security implications of using overseas telecom equipment suppliers are therefore likely to grow.

**Localization.** One upside of a less global world may be increased supply chain security. Automation, robotics, and the fourth industrial revolution increasingly allow for localized production. But adoption has been slowed over the past decade by the cost of building out local infrastructure. However, the COVID-19 crisis, coming on the back of the US–China trade conflict, will have further shifted the cost-benefit analysis in favor of investment in local production, which is more robust to insecurities in global trade and movement, and provides the additional benefit of reduced waste.

It will not happen overnight, and as an interim localization measure, transnational companies are likely to increase inventories. But given the potential benefits for national security, public entities may even sponsor private companies to accelerate the restructuring of supply chains. In Japan, for example, the Development Bank of Japan is providing funding to companies for this purpose.

Please see the latest on the “Less global” key trend at ubs.com/cio-coronavirus.

**More digital**

Lockdown measures have forced many consumers and businesses to fundamentally change the way they buy and sell goods and services. While we think most individuals and businesses will mostly return to previous ways of working as lockdown measures are repealed, there will be some lasting changes.

**Greater digital adoption.** Once the crisis is over, consumers forced to shop online during the lockdown may not fully revert to use of brick-and-mortar shops, a boost for companies exposed to E-commerce and Fintech. Meanwhile, students may push for e-learning to become a more commonplace component of school or college education. And businesses forced to use remote working and videoconferencing during the lockdown may see a longer-term opportunity to reduce spend on travel and office space.

**Less sharing.** One of the most powerful trends over recent decades has been the emergence of the sharing economy. In its early stages, the sharing economy was relatively simple and built upon industries with a scalable, corporate-sponsored, asset base (e.g. airlines, rental properties, cruise ships, rental cars). However, the democratization of the sharing economy has led to a proliferation of services, and the creation of whole new industries centered around a few dominant players (e.g. Uber, Airbnb, WeWork).
It remains unclear how quickly consumers and regulators will regain confidence in the safety of the sharing economy, particularly if current social distancing measures leave a permanent mark on the public consciousness. For instance, how soon will people feel comfortable sitting within just a few feet of a dozen potentially infectious fellow flyers while dining from a tray table which has not been thoroughly cleaned since the last passenger used it? This potential shift in how we interact with others and our environment has consequences across industries. For example, estimates of massive declines in auto fleet demand may need to be rethought if people start to once again demand their own car. The notion that we will go into work each day and “hot desk” at a random workstation on a first-come, first-serve basis may need to be reconsidered. Airlines might face a lower upper limit on utilization if consumers or regulators demand, for example, wider gaps between seats or longer turnaround times to allow more time for cleaning.

For investors, the significant uncertainty around this trend, and how it might play out across industries, underscores the importance of sector and single security diversification.

**HealthTech.** Another area likely to come into key focus is how technology can support improved and more efficient healthcare provision, particularly given that governments are likely to come under pressure to boost healthcare services while also facing elevated debt levels. We think this could drive increased focus on HealthTech, in particular, boosting demand in areas such as healthcare IT, cutting-edge innovations like telemedicine and population health software, as well as developments in treatment, in areas including Genetic therapies and Oncology.

Please see the latest on the “More digital” key trend at ubs.com/cio-coronavirus.
Investment implications

We do not think the crisis has materially changed the long-term outlook for modest economic growth. We anticipate increased investment in automation and robotics, along with the rising trend of people extending their working lives, offsetting the negative impact of financial repression and populism. However, the recent fall in high-quality bond yields means investors will need to reconsider the role of cash and bonds in their portfolios. In particular, investors with the capacity to take on investment risk should look at reducing exposure in favor of higher-yielding credit or globally diversified equities, as well as consider alternative diversifiers including TIPS, private markets, and structured investments.

Re-assess exposure to cash and nominal bonds

High quality bonds and cash can still play a role in curbing volatility, as well as provide peace of mind by securing short-term spending needs. But cash and high-quality bonds no longer yield positive real or nominal returns. So investors looking for
higher return will have to move up the risk spectrum and invest in higher yielding credit and equities. Yields on USD-denominated bonds have fallen particularly sharply; 10-year Treasury yields have dropped from about 2% at the beginning of the year to just 0.5% now.

Seek alternative diversifiers

As interest rates have little room to move much lower, the potential for high-quality bonds to provide significant positive returns in the event of equity market declines is currently very limited. Even worse, high-quality bonds could have negative real returns at the same time as equities if inflation is a future source of equity market concern.

This means investors will need to consider alternative diversifiers such as private investments, including real estate, private equity, and private debt, where liquidity requirements allow. Investors looking to manage portfolio volatility downside risk will need to consider strategies like dynamic asset allocation, that manages equity exposure actively, or incorporate structured investments that can provide an asymmetric return profile.

Global diversification

A less interconnected world, in which different countries enact various policies to deal with the coronavirus and its aftermath, will increase the potential diversity of outcomes. Predicting the winners and losers of this process is challenging, and so investors should seek global diversification to mitigate risk.

Sector and stock selectivity

The structural changes set in motion by the COVID-19 crisis will increase opportunities in equity selection and thematic investing in our view, while the trend of de-globalization will also increase the potential divergence in equity market performance across different regions. The role of actively managing portfolio exposure will hence grow. Investors may consider increasing portfolio flexibility to benefit from these opportunities, or adding exposure to hedge funds, which should be a beneficiary of this trend.
Asset class views

Equities

We expect moderate returns for equities over the years ahead, and don’t think the crisis has materially changed that outlook in absolute terms.

Potential pressures on returns include a continued environment of low nominal economic growth rates, in which we should expect muted growth in earnings, dividends, and buybacks. As discussed earlier, corporate taxes could rise as governments look for ways to service or reduce debt levels after the crisis. Societal demands for greater equality and redistribution could also contribute to higher minimum wages or stronger employment contracts, leading to margin compression.

However, equity valuations, based on both trailing and forward earnings per share, have become more favorable as a result of the crisis. Furthermore, the sharp drop in bond yields and interest rates mean equity earnings yields look even more attractive compared with government bonds than before.
Bonds

Government bonds are unlikely to provide any return. Low yields and the potential for moderately higher inflation suggest that investors are likely to experience a loss of purchasing power over the long term.

The diversification benefit of bonds has also decreased. With limited room for yields to fall further, bonds may not be able to achieve a strong positive return to offset losses in equities in the next crisis. And if an increase in inflation were to unsettle financial markets, there is a risk that bonds and equities would suffer simultaneously.

In such an environment, inflation-linked bonds could prove more attractive diversifiers than nominal bonds, and the asset class may become more popular if inflation expectations, or inflation uncertainty, increase.

Credit

Credit experienced significant spread widening at the start of the present crisis, but the recent stimulus packages, including the Fed’s move to buy corporate bonds for the first time, have helped tighten spreads somewhat. Over the next few years, we expect the asset class to remain well-supported by investors seeking higher yields than those available in cash or government bonds. Negative real interest rates should also help default rates remain low.

Given the low yield and diversification potential of developed markets’ bonds, emerging markets’ bonds may also receive more attention. Rather than as an alternative to developed market government bonds, these bonds should be thought of as a complement to the credit segment that should be tapped selectively.

Alternatives

We think the current crisis increases the role—where liquidity requirements allow—of private investments in portfolios. At a portfolio level, private equity provides investment opportunities in sectors underrepresented in public markets, and we expect investors to be compensated with additional return due to active ownership, complexity, and illiquidity. Across both private equity and debt, we anticipate managers will embrace the opportunities afforded by the emerging and accelerating trends highlighted in this report, as well as in debt restructuring. The drop in borrowing costs should also increase the benefit of leverage.

Meanwhile, private real estate should also benefit from the low yield environment and the search for return. That said, careful selection of real estate will become more important. Some sectors of the market (e.g. retail and offices) may suffer in a more digital world.

The demand for alternative diversifiers should also spark investor interest in hedge funds and in dynamic allocation strategies, which can generate alpha by changing...
Asset class views

Asset class exposure depending on the market environment. Risk parity, structured investments, and other alternatives for diversifying portfolio returns are also likely to attract increased attention.

Currencies

We expect the US dollar to depreciate over the long term, given both its high valuation and the fact that US interest rates are now only marginally higher than those in other developed economies. In the years ahead, high US debt and deficit levels, as well as the potential for credit rating downgrades, may raise questions about the reserve currency status of the dollar.

The euro also faces new uncertainties. A lack of clarity about how to share the costs of the pandemic could lead to renewed questioning of the viability of the common currency. The Eurozone is also at a disadvantage because its central bank and treasuries cannot coordinate as easily as these institutions do in the US or UK. The region may also suffer from the fact that its growth model is based on exports, which requires strong global growth. Yet there is one potential upside risk: the Eurozone’s structural integration could improve as a result of the crisis, as occurred in 2012 (see Will there be another Eurozone crisis?).

In general, we recommend that investors match the currencies they own to their liabilities and future spending commitments. This generally reduces risk without sacrificing return. However, there are a few exceptions to this rule, if, for instance, the long-term outlook for a currency deviates significantly for forward pricing. These deviations may become more common as countries follow different strategies for dealing with high debt levels. Countries that rely on financial repression and higher inflation are likely to see their currencies depreciate over the long term. Meanwhile, countries that are able to increase tax revenues are likelier to see their currencies appreciate.

Commodities

We think gold is likely to increase its relevance in portfolios over the longer term, due to heightened sensitivities to USD devaluation, high levels of public debt, financial repression, and geopolitical risks. The need for alternative diversifiers to high-quality bonds given historically low real interest rates also favors gold. An unexpected sharp tapering in monetary policy support is the main risk for gold at current levels over the coming two to three years.

We expect oil prices to stay volatile due to significant supply-demand uncertainty. On the demand side, the removal of mobility restrictions should support oil consumption, but it remains unclear how quickly previous travel patterns will resume, if ever (see Less sharing). On the supply side, low oil prices and steep capital expenditure cuts set the stage for muted non-OPEC production growth over the coming years. Overall, we think oil prices over the long term will gravitate toward USD 60/bbl.
Top longer-term investments

The structural changes set in motion by the COVID-19 crisis will pose challenges for investors. But they will also offer opportunities for thematic investing and stock selection. We think companies exposed to health technology (including genetic therapies), digital transformation (including fintech and e-commerce), and automation and robotics are all likely to see an enduring boost in demand.

Health technology

The coronavirus pandemic has exposed the cracks in healthcare systems across the globe. We expect technological developments in the field to play an increasingly central role in treating illness, driving down medical costs, and expanding access to care.

HealthTech. During the crisis, telemedicine has enabled individuals to access routine medical care without risking exposure to the virus or further straining the health care system. Since the outbreak began, one leading medical consultation...
platform experienced a 1,000% rise in monthly active users. Virtual care provider Teladoc reported an unprecedented 50% rise in daily visit volume in the US for the second week of March.

Importantly, telemedicine also has the potential to lower the cost of care by shifting treatment away from expensive hospital locations, and to expand access to care for those in underserved communities. While telehealth services are still in early stages, we may see increased adoption rates endure after the coronavirus has been contained.

But telemedicine is just one aspect of a larger trend toward healthcare technologies, or “HealthTech.” The healthcare industry generates 5% of the world’s data, yet remains one of the world’s least digitalized industries. Over the next decade, we expect a set of data-driven technologies, such as robotic surgery and artificial intelligence-assisted diagnostic imaging, to make healthcare more effective, efficient, and accessible. We recommend investing across a diverse range of established technologies, such as healthcare IT and cutting-edge innovations like telemedicine and population health software, to balance risk and reward over a long-term investment horizon.

Please see the full report Longer Term Investments: HealthTech for more information on related investment opportunities.

Genetic therapies. Genetic therapies will probably not provide a cure for viral diseases like COVID-19. But they could significantly help healthcare systems improve service provision, something likely to come heavily into focus post-crisis. Unlike traditional drugs, genetic therapies aim to cure diseases by modifying or removing faulty human genetic information, actually removing the cause of illness. This represents a paradigm shift in medical care today, which usually just slows disease progression or relieves symptoms, requiring lengthy and costly care.

Four genetic therapy products have already been launched in the US, with collective annualized sales of over USD 1bn. Based on approved treatments and the current late-stage pipeline, we anticipate the initial market opportunity will exceed USD 20bn, which translates into roughly 2% of global biopharmaceutical sales.

We think marked capital appreciation of the theme is possible should clinical trials and commercial rollouts meet our expectations. As is typical in drug development, not all companies will succeed and idiosyncratic risk is high. So we recommend investing in the genetic therapies theme through a diversified portfolio of companies to manage the risks associated with clinical failure.

Please see the full report Longer Term Investments: Genetic therapies for more information on related investment opportunities.
Digital transformation

**Fintech.** We think the pandemic will likely accelerate the shift toward fintech-based digital solutions as the experience of “lockdown” is encouraging consumers to adopt, or increase their use of, digital services like e-commerce, video streaming, food delivery, and online education, all of which are usually paid for using fintech solutions via mobile or online payments. Anecdotal evidence suggests fintech app downloads across Europe and other developed markets where penetration has been low have been rising significantly throughout the crisis. Regulations have also favored fintech adoption, as the WHO has encouraged people to use cashless transactions. Against this backdrop, we expect fintech to deliver double-digit growth opportunities over the next few years, growing at least three times faster than traditional financial services.

Please see the full report *Longer Term Investments: Fintech* for more information on related investment opportunities.

**E-commerce.** Similar to fintech, e-commerce penetration should increase due to the crisis, in our view. The lockdown measures implemented in response to the spread of COVID-19 have clearly hurt in-store sales, but there’s also been a significant uptick in online shopping. Retailers with a strong online presence have also benefited: Nike noted during its recent conference call that digital sales grew by a triple-digit rate in China while the country was on lockdown, and accelerated further even after stores reopened. Beyond the short-term tailwinds, structural drivers like population growth and urbanization, combined with an expanding middle class in emerging markets, should continue to support e-commerce, which we expect to grow 15% annually over the next 10 years.

Please see the full report *Longer Term Investments: E-commerce* for more information on related investment opportunities.

**Food revolution.** The rapid spread of the virus, and its devastating human and economic consequences, have set in motion a call for greater safety and transparency across the food supply chain.

This could lead to developments across the food supply chain. One potential area of growth is in the emergence of high-tech foods, such as plant-based meat alternatives, which may help satisfy demands for greater safety and transparency. Furthermore, many cities have required restaurants to shift to delivery-only service, in accordance with social distancing measures, a trend that we expect to continue even as virus concerns abate, as consumer preferences shift, and urbanization continues. We expect the food delivery segment to grow by about 16% annually, and to be worth about USD 365bn by 2030.

To gain exposure to these trends, as well as more related opportunities, we recommend investing in a basket of food related opportunities across the consumer, technology, and industrial sectors.

Please see the full report *Longer Term Investments: Food Revolution* for more information on related investment opportunities.
Automation and robotics

The COVID-19 pandemic, arriving on the back of the US-China trade tensions, has clearly demonstrated the vulnerability of global supply chains. Following the crisis, companies and governments will likely seek to diversify their supply chains and bring them closer to home.

We see several long-term beneficiaries of this trend. One is warehouse automation, which we expect to experience structural growth alongside the rise of online shopping. Another is factory automation—companies with automated factories have been able to maintain production through the crisis, a clear competitive advantage. Digital tools, including automation software, will also play an important role, and we think the Industrial Internet of Things (IIoT) will be a key enabler and hasten this switch to digital manufacturing. Robots and warehouse equipment all generate data. The IIoT enables asset owners to use that data to improve efficiencies, and makes supply chains more robust by reducing the reliance on service engineers.

Please see the full report *Longer Term Investments: Automation and Robotics* for more information on related investment opportunities.
Hyperinflation or debt-deflation?

The COVID-19 crisis is a demand shock that, in the near term, will lead to lower consumer prices. Like any economic shock, the effects will not be evenly distributed. Some goods and services will rise in price as others fall. But, overall, the loss of demand and some rise in unemployment will be disinflationary.

Over time, the effects of the demand shock will fade. Inflation will then become a matter for normal central bank policy. In our base case, we think central banks may be prepared to tolerate a rate of inflation somewhat above the target rate of 2% for a short period of time. Given base effects and volatility, a figure between 2% and 5%, if not for too long, may be acceptable. But central banks will want to keep long-term inflation expectations stable. Two years of 4% inflation, or three years of 3% inflation should not meaningfully increase long-term inflation uncertainty, but it is unlikely that inflation would be allowed to deviate meaningfully from the target rate for a long time due to the potential costs of elevated inflation uncertainty, both for the economy and for government financing costs.
One scenario some investors have asked about is the risk of hyperinflation, or the risk of a period of very elevated inflation (e.g. like in the 1970s). We don’t think this is likely because, while central banks have put in place a lot of quantitative easing policy, it’s reversible. Central banks can sell assets if they are concerned about inflation risk (as the Fed did in 2018 with “quantitative tightening”). Quantitative policy is different from “helicopter money” or monetization, which cannot be reversed. Monetization risks higher inflation, as the central bank gives up control of the money supply. It is also crucial to remember that printing money does not, in and of itself, lead to inflation. Printing too much money creates inflation. Today’s cash is being supplied by central banks after an increase in demand for cash. If the supply and demand of cash are balanced, there is no inflation reaction. One scenario in which we might see much more elevated inflation is if we were to continue to see very elevated fiscal deficits in the years following the crisis, or if central banks lose their independence. This scenario would tend to favor real assets like real estate or inflation-linked securities over nominal assets, but is not our base case.

Another scenario some investors have asked about is “debt-deflation,” characterized by a combination of falling prices and high debt levels, most notably experienced by Japan since the 1990s. While initially we will probably face disinflation as a result of the demand shock, we don’t think a prolonged period of deflation is likely because monetary and fiscal policymakers have reacted very quickly and aggressively to the economic shock and appear both willing and able to do more if their actions prove insufficient. The circumstances under which a more prolonged period of deflation could occur is if a very extended recession leads to significantly higher debt and hysteresis in the labor force, and/or if monetary and fiscal policymakers lose the willingness or ability to inject stimulus into the economy. A deflationary environment would tend to favor nominal assets over real assets, but again, is not our base case.

Will there be another Eurozone crisis?

Debt in the Eurozone is likely to be significantly higher after the crisis, and likely far in excess of levels reached during the 2010-2012 Eurozone crisis.

But we think concerns around debt sustainability this time are likely to be mitigated by the European Central Bank, and by the support mechanisms developed in that period (ESM, OMT). The main pressure points in 2010–12 were lost access to affordable funding, euro breakup risk, and the possibility of having to restructure debt as part of a bailout. With various ECB bond buying programs in place, and financial markets seeming to have little doubt about the ECB’s commitment, funding should not be a concern for now. We expect some downgrades, but large-scale downgrades of European sovereigns are unlikely at this point. Banks’ capitalization, liquidity, and asset quality are also at comfortable levels, thanks to regulation introduced after the global financial crisis.

Our biggest concern, however, centers on the impact the pandemic will have on national versus EU identity and political unity. Crises have previously brought the Euro-
zone closer together, sustainably improving its stability. The next step in this regard ought to be a fully functioning fiscal union. But with national governments taking the lead in combating the crisis, closing borders, and, in some cases, competing for medical equipment and resources, the EU has been noticeably ineffective. This seeming impotence could further damage voters’ perception of the benefits of the EU. In the wake of the crisis, parties at both ends of the political spectrum are likely to champion national interests which, through elections or wider political discourse, could drag the mainstream parties further from the European project.

In an upside case, this setback merely slows the integration of the Eurozone. In a downside case, we may see nationalist sentiment trigger repeats of “Brexit” with other member states, triggering volatility across European assets, although we should note realization of an exit would likely take years to materialize, and that non-euro members of the EU would be more likely to move first, given the higher economic costs of leaving a currency union.

Will the COVID-19 pandemic and low oil prices impact renewable investment?

Overall, we don’t currently foresee a significant long-term impact on the pace of renewables infrastructure investment as a result of low oil prices or the COVID-19 pandemic. That said, there is some potential downside risk to the near-term pace of development as a result of COVID-19-related dynamics. Lockdown measures are impacting project construction feasibility and timelines, and government stimulus efforts and funding globally clearly prioritize supporting the immediate needs of citizens and industries hardest hit by the pandemic.Explicit policy measures and support may focus elsewhere in the near term, although the potential impact of stimulus in this area on jobs and long-term sustainability should be compelling for governments to consider. For now, we expect any such headwinds to be temporary in nature, pending the eventual duration of the pandemic and resulting measures.

From a longer-term perspective, we do not anticipate low crude oil prices will have much impact on renewables growth globally, particularly in the developed world where the use of crude oil for power generation is more limited. Ironically, with fossil fuel products used to manufacture parts for wind turbine blades, for example, low oil prices could actually help to further reduce the installed cost of new renewable (wind) generation. Beyond these direct impacts, it is important to keep in mind that renewables generation costs—both wind and solar—have continued to decline and are generally competitive with the lowest cost fossil fuel generation, which is currently natural gas. In countries where externalities like carbon emissions are priced into the total cost of generation, the advantages for renewables are even greater. As evidence, it is worth considering that during the period of 2015–16, when oil prices last declined significantly, renewable power generation growth continued throughout.
Appendix

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk**: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, “junk bonds,” derivatives, distressed securities, non-U.S. securities and illiquid investments.

- **Managed Futures**: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.

- **Real Estate**: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.

- **Private Equity**: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.

- **Foreign Exchange/Currency Risk**: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer’s “home” currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.
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