Please note that this document may contain technical language. For this reason, it is not recommended to readers without professional investment experience.

LEGACY OF THE LOCKDOWNS





The asset manager for a changing world

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Note to readers: all assessments, data and forecasts in this document are made using data and information up to and including 31 October 2020, unless stated otherwise. Views expressed in this publication have a 6-12 month horizon, unless stated otherwise, and are those of the authors. Views are as of 31 October 2020, are based on available information, and are subject to change without notice. Individual portfolio management teams may hold different views and may make different investment decisions for different clients. This material is not intended to constitute investment advice or an offer to sell, or the solicitation of an offer to purchase shares or other securities.

LETTER TO INVESTORS

Dear reader,

2020 was a turbulent year for the economy and for markets, to put it mildly. 2021 looks set to carry on in the same vein, with the virus not yet under control, vaccines in the pipeline and winner-takes-all run-off elections in Georgia for control of the US Senate. We believe that if you look through the day-to-day volatility in financial markets that the news flow generates, there are some underlying truths. These have helped us to navigate the pandemic. We believe they will continue to stand us in good stead in 2021.

We believe that there is no substitute for high-conviction investment strategies rooted in painstaking research of the fundamentals if you want to deliver solid returns for your clients consistently.



We favour a relentless focus on the underlying themes that we believe will drive society, the economy and markets over months and years rather than the market fads that have a shelf life of hours or days. We insist that old-fashioned concepts such as the competitive edge a company enjoys, the resilience of its balance sheet, the stock of intellectual capital, the strength of its brand, and its capacity to innovate are as important now as they ever were in valuing companies.

We don't pretend that we have all the answers, that we had everything right in 2020. However, we are convinced that through constant introspection, learning from our mistakes, reviewing our process and performance, and developing our talent, we can be better in 2021 than we were in 2020. We hope that you will join us on that journey.

The pandemic has simultaneously demonstrated the fragility of society to major shocks and the capacity of policymakers to take dramatic action in response. In 2020, politicians shut down the economy to save lives. In 2021, we need those politicians to approach the climate crisis with the same commitment to do whatever it takes to tackle the problem. We don't need to lockdown the economy to save the planet, but we do need to transform it.

At BNP Paribas Asset Management, we believe that as an asset manager and asset owner, we have a responsibility to act as future makers and bring about the necessary transition to a more sustainable world. That is a world in which we can earn long-term sustainable returns for investors, while shaping the kind of future that we want for ourselves, our clients and the generations that follow.

Robert Gambi

Global head of investments, BNP Paribas Asset Management

EXECUTIVE SUMMARY

LEGACY OF THE LOCKDOWNS

In our 2021 Investment Outlook, we seek to help investors navigate the next phases of the pandemic, the legacy of the lockdowns, and the ensuing economic recovery. We also consider how solutions to the climate crisis can be found at the same time as the world tackles the social and economic problems laid bare by the pandemic.

A SUSTAINABLE RECOVERY

We devote a significant section of our outlook to the opportunities that we believe the green economic transformation offers investors.

The current crisis is a reminder that we as investors must align investing with the realisation of sustainable long-term growth. Investing for the long run will be key because the typical 3-5 year investment cycle does not match the lifespan of financing the shift to green hydrogen or the innovation required to achieve e-mobility, develop natural capital and build green infrastructure.



INVESTMENT THEMES FOR THE LONG RUN

Our investment themes for 2021 have both a sustainable angle – energy transition and environmental sustainability – and a focus on long-running trends including healthcare improvements and disruption via new technology.

Our regional spotlight goes to China, the world's fastest growing major economy, home to many innovative companies and a market that increasingly warrants a standalone allocation within multi-asset portfolios.

MACROECONOMICS AND MARKETS

The takeaways from our macroeconomics and markets sections include

- The sharp global contraction in early 2020, and the likely second dip in the US and Europe in the fourth quarter, should nonetheless be followed by a rebound in growth in 2021.
- COVID vaccines could be widely available by the second half of 2021. Until then, countries will need to 'live with' the virus as repeated full-scale lockdowns are not a sustainable strategy.
- Accommodative monetary and fiscal conditions look set to remain in place to prevent
 marginal sections of the economy from collapsing. Policymakers will make every effort
 to forestall a deflationary slowdown from wrecking the global economy. Major central
 banks will continue to finance budget deficits, at least until GDP growth returns
 to trend. Their asset purchases should put a floor under risky assets, although the
 resulting high valuations may limit future gains.
- Will the events of 2020 ultimately prove to be inflationary? Not, we believe, in the near future. The hunt for yield, be it in corporate credit or in emerging market debt, will remain a key focus for fixed income investors.
- One of the key 2021 calls is whether value stocks can begin to reverse the underperformance of the last several years. The wide valuation gap versus growth stocks, the prospect of higher interest rates and an end to lockdowns suggest more upside is ahead. ■

SECTIONI

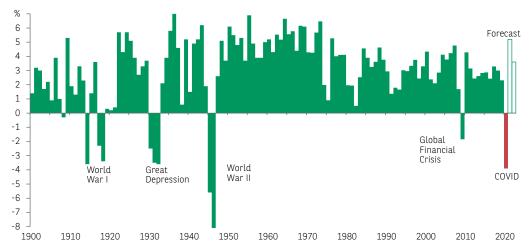
GLOBAL ECONOMY

The coronavirus pandemic is one of the most significant in history. This is not because of the number of deaths, however, which have been low relative to previous pandemics, but because of the dramatic changes in geopolitics, economic activity, consumer behaviour, and indebtedness that have followed the imposition of nationwide lockdowns in many countries.

So far, with over 1.3 million deaths globally, about 0.018% of the world's population has died due to coronavirus. This is half the rate of the Hong Kong flu of the 1970s and one-fifth of the toll of the Asian flu of the 1950s. The Spanish flu at the end of World War I was estimated to have killed up to 50 million people when the global population was one-quarter of today's level.

The coronavirus pandemic has been much less lethal because governments responded to the threat in an unprecedented fashion. Previous pandemics saw limited containment measures and consequently had a relatively modest economic impact. The response to coronavirus by contrast led to the biggest decline in global GDP growth since World War II (see Exhibit 1). The spread of technology in modern economies in part explains the difference in response. The internet enabled a large share of the population to work from home, a situation unimaginable 40 years ago.

Exhibit 1: Largest decline since WWII - graph shows change in world gross domestic product (inflation-adjusted, in %)



Data as at 23 November 2020. Source: Haver, IEA, Bloomberg, BNP Paribas Asset Management

Economies will nonetheless recover; global growth is forecast to rebound to 5.2% in 2021 (Bloomberg consensus estimate). But even as aggregate demand rises, particularly after the arrival of one or more vaccines, the world will be a profoundly altered place. We will travel differently, shop differently, work differently and be entertained differently. Geopolitical dynamics will shift as China's economy has advanced relative to other countries that have managed the pandemic less well. Growth rates across countries will diverge as economies that are more flexible re-allocate labour and capital more easily to future growth areas.

Some of the changes will stem from shifts in mentality, for example, the realisation that one does not need to fly thousands of (polluting) kilometres for a face-to-face meeting when a video call will suffice, or to travel to the office every day.

Some of the changes will come because businesses fail to survive lengthy or repetitive closures. Some will follow the dramatic increases in indebtedness as governments financed businesses and households through the lockdowns. Governments will also be more willing to fund measures to stem climate change as austerity gives way to implicit central bank support for fiscal stimulus.



CHIEF MARKET STRATEGIST

These are some of the legacies of the lockdowns.

US WILL SEE THE FEDERAL RESERVE BACK IN THE DRIVER'S SEAT

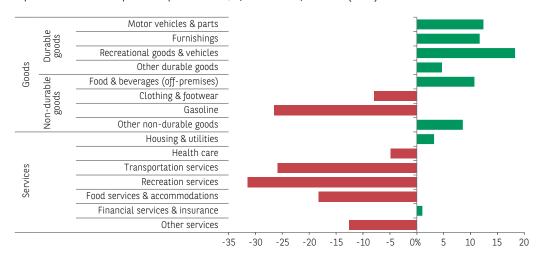
The US economic recovery will likely be aided by at least some fiscal stimulus even if not the multiple trillions of dollars that investors had hoped for prior to the election. Few significant legislative changes can be expected given a divided Congress, meaning that the Federal Reserve and interest rates will resume their traditional, primary role in the economy.

Policy rates will be steady; with the Fed's new average inflation targeting framework, the central bank will not raise rates even if the fiscal stimulus turns out to be much larger than we expect. Quantitative easing and muted inflation expectations look set to keep longer-term rates low, allowing the economy to recover from the lockdown recessions.

The strength of the rebound will depend on how quickly consumer spending returns to prepandemic levels. In contrast to the global financial crisis, when swings in business investment drove gross domestic product (GDP), this time it has been consumer demand.

Personal consumption expenditures are still 2% below end-of-2019 levels, but there is wide dispersion in the growth rate across categories. Money that was not spent on activities either prohibited or unattractive under lockdown (going to a restaurant, for example) was instead directed towards what one could actually do (buying home furnishings) (see Exhibit 2). Services expenditure should recover in 2021 as restrictions are eased further and a vaccine allows transportation and leisure activities to resume.

Exhibit 2: Wide dispersion in the growth rate of personal consumption - graph shows change in personal consumption expenditures, Q4 2019 - Q3 2020 (in %)



Data as at 23 November 2020. Source: US BEA, BNP Paribas Asset Management

EUROPE FACES CHALLENGES TO A QUICK RECOVERY

Europe faces a more daunting task to rebound from the collapse in GDP during 2020. While the US is expected to return to its pre-pandemic level of GDP by the end of 2021, a full recovery is not forecast for the eurozone until the end of 2022. Europe's labour markets have so far suffered far less from the lockdowns than those in the US thanks to more generous unemployment benefits, lengthier furlough schemes and extended bans on firings. The EU unemployment rate has risen to just 7.5% from a pre-pandemic low of 6.5%, while the US rate had reached 14.7% already in April, but has since dropped below 7%.

This resilience comes at the cost of flexibility, however. It is not simply a matter of tiding workers over until a vaccine is widely available, the pandemic has passed and everyone returns to their old ways. Many industries will need fewer workers (hospitality, retail), while others will need more (technology, warehousing). The comparatively low rankings of some of the larger European countries in the World Bank's Ease of Doing Business survey (Spain 30, France 32 and Italy 58) reflects this inflexibility.

Many eurozone governments have responded to the economic damage from the lockdowns with significant fiscal aid. Debt-to-GDP levels have consequently soared, increasing for many countries by more than they did in the years following the Global Financial Crisis (see Exhibit 3).

Spain Italy Greece UK France Portugal Belgium Austria Poland Germany Hungary Netherlands ■2019-20e Finland 2008-10 Czech Rep. Sweden Switzerland Ireland Denmark 24 -2 0% 6 8 10 12 22 26 28

Exhibit 3: Fiscal aid to the rescue - graph shows change in the debt-to-GDP ratio for EU members (in %)

Data as at 23 November 2020. Source: IMF, BNP Paribas Asset Management

In the short term, the resulting decline in creditworthiness should not lead to higher interest rates or drag on growth since the ECB is buying the bulk of the debt. Interest expense is low (at just 3.6% of GDP for the EU in 2019), again thanks to the ECB. Part of the debt is even 'interest free' since the interest that governments do pay on debt purchased by the ECB via the respective national central banks is paid back to the country's Treasury. The risk in the medium to long term is that interest rates rise or the ECB begins to run down its balance sheet, but for now, governments are able to borrow enough to cushion the blow of the lockdowns, but not necessarily enough to quickly restore growth to pre-pandemic levels.

Another reason for the slower recovery in the eurozone is the limited scope for the ECB to 'do more' in a way that has a meaningful impact on growth or inflation. In 2021, the central bank is expected to adopt a new inflation target closer to the US Federal Reserve's symmetric 2% objective, recalibrate its quantitative easing programmes, adjust its longer-term refinancing operations to possibly allow banks to borrow more at an even cheaper rate for longer, and perhaps make a small cut in the deposit rate.

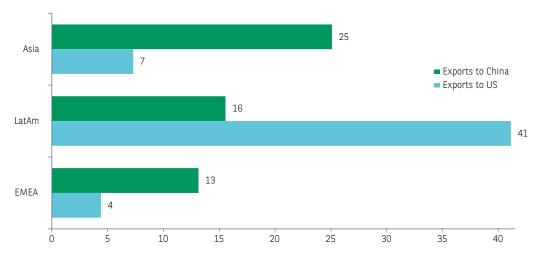
While such moves will be helpful, we note that interest rates are already near historic lows in many markets, banks are reluctant to lend and businesses are loath to borrow. It is only once a vaccine is widely available and governments lift restrictions that the region's economies can hope to return to trend-rates of growth.

EMERGING MARKETS SHOULD BENEFIT FROM CHINA AND US STRENGTH

Emerging markets suffered similar declines in GDP as developed markets following the lockdowns despite deploying far less fiscal or monetary stimulus, meaning they face fewer risks from higher debt burdens than the US or Europe. The recovery into 2021 should be aided by what we expect to be stronger growth in both the US and China.

Domestic demand-orientated fiscal stimulus in the US should pull in exports from many emerging markets. China's recovery, while perhaps less commodity-intensive than in the past, should still support activity in the wider Asian region. Emerging Europe, the Middle East and Africa may benefit less since their exports are oriented more towards a slower-growing Europe (see Exhibit 4).

Exhibit 4: Emerging markets benefit from China's recovery - graph shows EM exports to China and the US as a share of total exports (in %)



Data as at 23 November 2020. Source: Source: IMF, BNP Paribas Asset Management. Past performance is no guarantee for future returns.

In the same way that the COVID lockdowns have led to a divergence in the outlook for the US and Europe, China is distancing itself from the world's developed economies. Thanks to the country's effective management of the pandemic, GDP has already regained the losses from the lockdown, and this without resorting to quantitative easing, negative interest rates, or a big increase in government debt.

One potential concern for China is the acceleration by the pandemic of the de-globalisation trend begun by US President Donald Trump. Although there will be a new administration, there is broad consensus in Washington for a more distant relationship with China and trade relations are unlikely to change much (the Democrats have traditionally been more sceptical towards trade agreements).

COVID has encouraged governments and companies to bring manufacturing production closer to home. However, China is not the same economy it was when it joined the World Trade Organisation in 2001. The manufacturing sector then was nearly 10% larger than the services sector, whereas today services is nearly twice the size of manufacturing. Net exports contributed to China's growth in the years leading up to the GFC, but over the last five years, growth has come much more from consumption, while the contribution from net exports is near zero.

China's recent 5th Plenum highlighted domestic demand growth, import substitution and technological self-sufficiency as the economy's main drivers. 'Greening' the economy by reducing carbon emissions and improving environmental protection will also be a priority. We believe China will aim for, and likely achieve, 5% to 6% annual growth in the next several years.

SECTIONI

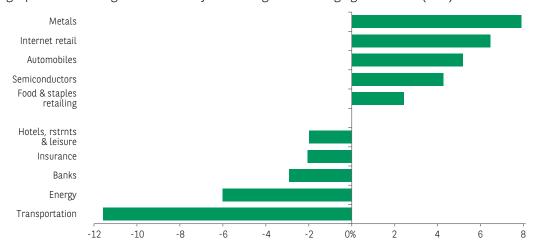
MARKETS

EQUITIES

Opportunities for stock pickers

2021 will be a story of recovery irrespective of how the pandemic evolves in the US and Europe in the near term. Future waves of the virus may well necessitate mini-lockdowns, with the inevitable negative impact on growth and corporate profits, but as we saw already in the rebound in growth and earnings in the third quarter of 2020, a bounce-back should come quickly and vaccines will be increasingly available. While the structural changes from the pandemic and the lockdowns have reduced the long-term earnings growth potential in certain sectors, the scope for growth in other sectors has improved (see Exhibit 5).

Exhibit 5: The pandemic and the lockdowns have altered companies' earnings potential - graph shows change in estimates for the long-run earnings growth rate (in %)



Data as at 23 November 2020. Combination of MSCI EM and World IMI. Source: FactSet, BNP Paribas Asset Management

Value stocks and the scope to catch up in 2021

One of the key calls for 2021 may be whether value stocks will fully reverse their underperformance of the last several years. The arguments in favour of a turnaround are the wide valuation gap between value and growth stocks and an expectation that the divergence in performance must re-converge at some point. To properly assess the likelihood of this happening, one must first understand what has driven the contrasting performance of the two indices.

There are inevitably definitional issues when evaluating the performance of growth and value stocks. First is the question of how one exactly defines growth and value. Then there is the construction of the indices. Can a stock fall into both the growth and value categories? Different benchmark index providers answer this question in different ways.

We use the popular Russell 3000 as the benchmark in this analysis, which allocates from 0% to 100% of a stock's market capitalisation to each index depending on the balance of the stock's book-to-price ratio, the forecast medium-term earnings growth rate and the salesper-share growth rate. A strong case can be made, however, for a quantitative approach that better isolates the true growth and value factors in a portfolio and avoids the sector biases inherent in Russell's methodology.

Value has underperformed growth since March 2007 by 6% per year on average, though there have been stages in the degree of underperformance (see Exhibit 6). The initial period from March 2007 through March 2009 coincided with the deflation of the mortgage debt/housing bubble, and given the weight of financials in the value indices, the underperformance was not surprising.

1978

1983

1988

1993

One might have expected that from the bottom of the market in early March 2009, value would have recovered. Indeed, it held its own through December 2016. With the election of Donald Trump as US president and the subsequent corporate tax cuts, the outperformance of growth (and tech) accelerated sharply, only to pick up even more speed with the arrival of the coronavirus pandemic.



Exhibit 6: Value stocks underperformed, then held their own, then underperformed again - graph shows relative performance of the Russell 3000 Growth and Value indices

Data as at 23 November 2020. Note: total return. Source: FactSet, BNP Paribas Asset Management. Past performance is no guarantee for future returns.

1998

2003

2008

2013

The underperformance of value since 2016 has varied across sectors. If the divergence had been driven by a fundamental difference in the prospects for the growth and value factors, one would expect to see divergent performance within every sector.

In fact, only a few sectors, and indeed relatively few stocks, explain much of the difference. Of the 95 percentage-point difference in returns of the two indices since December 2016 through 20 November 2020, the technology sector accounts for nearly 45%, followed by consumer discretionary and communication services (see Exhibit 7). For most other sectors, there was comparatively little difference in the returns of 'growth' and 'value' stocks.



Exhibit 7: Tech, consumer discretionary and comms services account for most of the difference in returns - graph shows sector contribution to the difference

Data as at 23 November 2020. Source: FactSet, BNP Paribas Asset Management. Past performance is no guarantee for future returns.

The two leading sectors after technology are not coincidental, of course. The world's largest e-commerce business alone accounted for one third of the return in the consumer discretionary sector, while the rest of the FAANGs¹ contributed two-thirds of the return for communication services.

The combination of the technology sector and the remaining FAANGs (call it Tech+) not only explains much of the outperformance of growth over the last four years, but also accounts for the bulk of the gap in valuations. The forward multiple of the growth index relative to value had recently reached levels not seen since the tech bubble.

With the announcement of better-than-expected vaccine trial results in late November 2020, the gap has narrowed somewhat, but it is still wide. The ratio for the rest of the growth index (ex-Tech+) versus value, however, is near the long-run average since 2002 (see Exhibit 8).

Exhibit 8: Much of the gap in valuations is due to Tech+ - graph shows the relative forward multiple of the Russell 3000 Growth and Value indices



Data as at 23 November 2020. Source: IBES, FactSet, BNP Paribas Asset Management. Tech+ is made up of the technology sector plus Amazon, Facebook, Google and Netflix. Past performance is no guarantee for future returns. These companies are mentioned for illustrative purpose only. This is not intended as solicitation of the purchase of such securities and does not constitute any investment advice or recommendation.

The rotation in the markets from growth to value since the vaccine trial announcements indicates which trends will need to persist for value to further recover its losses. The financial sector has advanced in line with higher 10-year Treasury yields, while the energy and transportation sectors rose on the prospect of a resumption in travel. Growth has lagged due to exactly those sectors that had most benefited from lockdowns: technology, internet commerce and home entertainment.

Looking ahead, further gains in interest rates, and therefore the outlook for the financial sector, will depend partly on the size of any stimulus package passed by Congress. Energy and transportation have further room to recover as lockdowns will not be eased until the spring alongside wider availability of a vaccine. A Biden administration emphasising renewable energy at the expense of fossil fuels may limit the medium-term upside for oil prices, however.

Given the leap in valuations for the subset of the Tech+ sector that has seen the biggest gains from the lockdowns, there is likely further scope for multiple compression. Regulatory risk remains, but is less of a concern now assuming Congress remains divided. The biggest threat to the technology sector – a reversal of the Trump tax cuts – also looks much less probable without a Democratic majority in the Senate.

The performance of value versus growth has begun to turn around thanks to relatively cheap valuations, higher interest rates and the prospect of an end to the lockdowns. How far and long these factors persist is an open question, but we believe there is more upside for value stocks ahead.

¹ See, for example, the NYSE FANG+ index, which is an equal-dollar weighted index designed to represent a segment of the technology and consumer discretionary sectors consisting of highly-traded growth stocks of technology and tech-enabled companies such as Facebook, Apple, Amazon, Netflix and Alphabet's Google.

Valuations supported by central banks

Equity index valuations are elevated relative to historical averages, but this primarily reflects supportive central banks, low interest rates and subdued inflation. Central banks have set aside their reluctance to monetise government debt and their support now extends to buying corporate bonds (including high-yield). The one part of the market where to some investors index valuations appear high is US technology. The median price/earnings ratio of the stocks in the index is far less elevated, however, suggesting that there are still good opportunities for stock pickers.

Emerging markets should benefit from an improved tone in international trade relations. A growing US economy will pull in exports from emerging markets despite a continued 'buy American' bias. The recovery in EM domestic demand may lag given the inability of many countries (or the reticence in China's case) to compensate households for the loss of income from the lockdowns.

On the positive side, repeated waves of infections appear less likely in emerging markets since the pandemic either is already under control or is further along its natural course towards burning itself out.

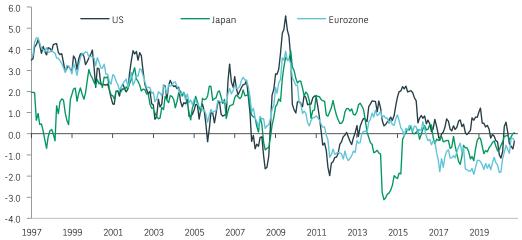
Emerging market valuations relative to developed markets appear quite reasonable and we expect to see emerging markets make up some of their underperformance from the last decade.

FIXED INCOME

Sovereign interest rates - Low for much longer

Real interest rates are now near zero or negative in most developed economies (see Exhibit 9). We expect central banks in these economies to seek to keep front-end real yields as low and as negative as possible to help governments and business work off the debt burden.





Data as at 23 November 2020. Source: Bloomberg, BNP Paribas Asset Management. Source: Bloomberg, BNP Paribas Asset Management.

The COVID-19 crisis is a serious economic shock often affecting highly levered economies already suffering from relatively low trend growth. Central banks, in keeping interest at ultra-low levels, are giving room for expansive fiscal policy by reducing the cost of servicing debt and giving growth its best chance of rising rapidly. In effect, there will be a sort of monetisation of a large part of a quickly expanding national debt, much as Japan has done.

The ECB has already made it very clear that it intends to buy as many bonds as needed to prevent monetary conditions from tightening for all eurozone governments. The size of G3 central bank bond buying programmes outweighs anything to do with fundamentals. As such, G3 sovereign debt markets are much more driven by technical factors than has historically been the case.

The appropriate historical parallel is the post-World War II formula, in which central banks capped bond yields at levels well below the trend GDP growth rate to gradually reduce the national debt as a proportion of GDP. The implication is that the government debt managers and central banks are likely to coordinate the maturity profiles of issuance and purchases to engineer low real yields over coming years.

Initially, a disinflationary impact

The impact of the lockdown recessions so far has been disinflationary. The economic impact of public health measures and uncertainty is to throttle both aggregate demand (workers lose income if they do not work and opportunities to consume if they are confined) and aggregate supply (businesses cannot produce without workers or orders). Overall, however, we would expect the slump in aggregate demand to dominate the decline in supply and for core inflation to slow.

Inflationary longer term?

In the longer term, however, as aggregate demand recovers, we could see the economy push up against capacity constraints given the damage done to potential output. A recovery in oil prices as travel resumes post-vaccine will also boost headline inflation. Furthermore, it is possible that pre-existing international trade tensions, as well as concerns over the resilience of highly connected global supply chains in an age of pandemics and great-power rivalries, will result in further moves towards protectionism. Any reversal of globalisation should be inflationary by limiting competition.

Politically, it is also highly likely that electorates whose financial fragility has been aggravated by mandated lockdowns will demand changes to the current economic structure and social contract in which wealth and incomes have become so concentrated. Higher wages, stronger social security nets and enhanced healthcare benefits must be paid for and could be inflationary. On the other hand, we cannot deny the potential for automation, technology and price transparency in the age of the internet to continue to limit inflationary pressures.

Corporate bonds - The search of yield and central banks help

As investors began to appreciate that the lockdown recession was going to be far more severe than that which followed the Global Financial Crisis, the worry was that defaults and downgrades would also be worse. Thanks to central bank intervention and central government stimulus, those fears have so far proved unfounded. While bankruptcies have certainly increased, they have remained well below the levels reached in 2008-09.

One would expect bankruptcies to rise further, particularly for those industries that still face constraints on activity (airlines, hotels, leisure, etc.), although state aid is likely to continue. Governments have spent too much money already to let these businesses fail. The risk is rather the opposite, particularly in continental Europe, that too much support is provided and enterprises that do need to close are allowed to continue operating. These 'zombie' companies would not be able to remain solvent without extremely low interest rates. There is a risk that the increase in debt in 2020 leads to misallocations of capital and limits creative destruction. This would raise deflationary pressures through ever-weaker 'demand-pull.'

As corporate profits collapsed and companies took advantage of central bank liquidity to shore up their balance sheets, credit metrics deteriorated sharply. Net leverage had been rising anyway post the Global Financial Crisis as low interest rates encouraged companies to borrow ever more money. That process accelerated during the first stages of the pandemic, but companies have begun deleveraging now. Thanks to low rates, however, the increase in the interest rate burden has been less than the increase in the debt burden, minimising the damage to the interest coverage ratio. In any event, both metrics are expected to improve in 2021 to near pre-recession levels as earnings recover. High yield is likely to continue to outperform investment grade debt in developed markets. This will be driven primarily by the carry, however, as there is little room for further spread compression, particularly in investment grade, as spreads have already returned to near pre-pandemic levels.

In the current environment, the search for yield in fixed income will likely underpin valuations in corporate debt markets. The primary concern for credit investors is to differentiate between those industries that will be permanently damaged by the pandemic and the lockdown recessions and those that are only temporarily out of favour. It is equally important to avoid those sectors whose prices have been bid up as investors seek out safe havens, but which are at risk of significant underperformance – primarily in the US – as the economy recovers and fiscal stimulus boosts growth and inflation expectations.

COMMODITIES & CURRENCIES

Look for further US dollar losses

The US dollar stands to benefit from the relative strength of the US economy, but this will be offset by fiscal stimulus, widening US budget and current account deficits, and a reversal of safe haven flows. The dollar also looks expensive historically.

The direction of the US dollar against the euro may depend primarily on the relative expansion of the money supply in the two regions. While the ECB may increase its bond buying programmes in December, the Fed is likely to be more aggressive, shifting the balance in favour the euro (see Exhibit 10).

Exhibit 10: The direction of the US dollar against the euro may depend primarily on the relative expansion of the money supply in the two regions



Data as at 23 November 2020. Source: Haver, Financial Forecast Centre, BNP Paribas Asset Management

There is more scope for emerging market currencies to appreciate against the US dollar given that they have recovered far less from the sell-off in the spring of 2020. Valuations look attractive on a real effective exchange rate (REER) basis. Reduced imports have helped stabilise current account balances in several EM economies and foreign exchange reserves have remained quite resilient.

A continued global cyclical economic recovery should support commodities prices, even if China's expansion will be less commodity-intensive than in the past. Gold and silver prices should be supported by stable low real yields, but there is likely little potential for significant further gains.

An opportunity for a more environmentally sustainable, safer world

Lockdowns will leave much of the world with more debt and leave many industries permanently damaged, but also create new opportunities. Most importantly, the pandemic has changed our view on what kind of world we want to live in – one that is more environmentally sustainable and safer – and it has reinforced our commitment to achieve it. That will be the lasting, positive legacy of the lockdowns.

SECTION II - INVESTMENT THEMES

MANAGING INSTABILITY IN 2021

It is clear that the pandemic of 2020 has given rise to a cycle of low growth and high debt in which security selection will generate added financial value.

Such a setting favours actively managing investment positions as the gap between top-performing companies (and countries) and the rest widens. We believe that on the equity side, the focus must be on high-growth segments where resilient and financially healthy companies can be expected to produce the kind of sustainable earnings growth that justifies at times challenging valuation multiples.

To uncover the winners over the longer term, that is those companies that can adapt to the current 'great instability', we believe investors should look for companies with strong business models, significant pricing power, solid brand loyalty and durable balance sheets. Resilience is necessary – not only from an operational perspective, but also in terms of management skills.

THE PANDEMIC – IN ADDITION TO EXISTING TRENDS

Before the pandemic and the human suffering and economic destruction it has wrought, other secular trends were already contributing to a sense of flux.

These include climate change, and with it the need for a transition to clean energy, as well as inequality, and with it the need for more inclusive growth, more inclusive healthcare and more inclusive innovation.

We believe the pandemic has the potential to trigger a more sudden realignment, reinforcing technological innovations, commercial trends and movements in politics. This is bound to lead to major shifts in economic activity, corporate earnings and ultimately asset valuations.

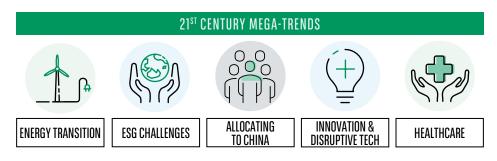
Disruptive change, in other words. As an investor, this leaves us with these questions: how do these deeper socio-economic trends impact companies around the world and what are the investment themes and opportunities that arise from them?

INTEGRATING ESG CRITERIA

Apart from financial considerations, an essential part of the assessment involves applying strict environmental, social and governance (ESG) selection criteria. A solid ESG performance has been found to contribute to long-term sustainable returns, making it an unmissable building block in security selection. At BNP Paribas Asset Management, it is the cornerstone of our philosophy.

This approach also features in our choice of investment themes to manage the 'great instability' as it continues in 2021. We believe science and innovation, supported by the capital markets, will allow companies to adapt to the shifts in economic and consumer behaviour. As investors, we must identify the companies best placed to recognise, facilitate and benefit from such global challenges.

FUTURE INVESTMENT OPPORTUNITIES



Healthcare

The pandemic will be a catalyst for changes in the availability, cover and affordability of healthcare. It could also lead to the greater use of technology, including artificial intelligence, to develop cures and innovation in drug delivery and miniaturisation.

We expect spending on healthcare to rise to address apparent capacity and coverage issues. There will be considerable expenditure in the biotech and pharmaceutical sectors to fight the pandemic with tests, antivirals and ultimately a vaccine.

Beyond that, there is the theme of technological change facilitating improvements in the quality of healthcare services, from enabling contact over large distances between patient and clinician to exploiting the advances in genetic sequencing to develop new treatments. The earnings of those companies driving the changes should benefit.

KEY INNOVATIVE TRENDS IN HEALTHCARE







NOVEL MODES OF DELIVERING THERAPIES



UTILISING MINIATURISATION AND AUTOMATION IN MEDICAL DEVICE DEVELOPMENT



HARNESSING BIG DATA TO SOLVE HEALTHCARE PROBLEMS



DRIVING SYSTEMATIC CHANGES IN THE DELIVERY SYSTEM TO INTEGRATE CARE & CONTROL COST

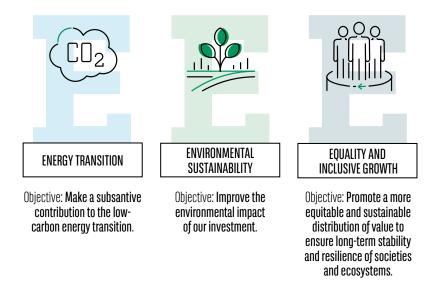
ESG challenges

While the pandemic made most of the headlines in 2020, wildfires and hurricanes still raged, floods still smothered cities and land, and earthquakes still made thousands homeless. Climate change continued, and in a welcome development, governments included spending on sustainability in their billion dollar plans to support growth and jobs, raising hopes for a green recovery.

With the importance of dealing with income and wealth inequality creeping up the political agenda, COVID-19 has brought to the fore social issues for migrant workers such as crowded housing, unfair contract practices and unhealthy working conditions. Companies in some industries are having to spend heavily to ensure production can continue and supply is not disrupted.

Governance remains a hot topic. Investors must be alert to the possibility of radical shifts in the regulatory and anti-trust framework in which companies operate and the impact on valuations this would have. Encouragingly, the trend that has seen demand fall for goods and services seen as incompatible with a net zero carbon economy, or ESG criteria more broadly, persists.

ANSWERING THE ESG CHALLENGES: SUSTAINABLE INVESTING



Innovation and disruptive technology

Globalisation and automation were already transforming business when the lockdowns of societies triggered a seismic shift in the way we work. Remote working has become the norm in many countries, setting off greater demand for technology and innovative solutions ranging from servers that are more powerful, tele-conferencing, and better internet services to cloud computing access.

E-commerce has taken off, boosting web advertising and electronic payment services and creating a boom in physical and automated warehousing and in home delivery. Increasingly, the possibilities of e-medicine are attracting interest, not only to alleviate COVID-stretched hospitals and other medical services, but also in the context of cost control and improved efficiency as healthcare spending rises.

Big data, artificial intelligence and data analytics are seen more and more as essential tools, both to manage the pandemic and to solve complex problems concerning healthcare, climate change and other major economic, demographic and societal questions.

THE INVESTMENT THEMES WITHIN DISRUPTIVE TECHNOLOGY













CLOUD COMPUTING

INTERNET OF THINGS

ARTIFICIAL INTELLIGENCE / DATA ANALYTICS

AUTOMATION / ROBOTICS

FOUNDATIONAL & EMERGING THEMES

Energy transition

The pandemic has had positive knock-on effects: commuting and air travel have fallen off, reducing their impact on the planet and underscoring the need for, and the greater use of, cleaner energy sources as we progress towards a low-carbon economy. Wind and solar power generation as well as biofuels have an established foothold, but there is still significant potential for growth. Improved fuel cell and battery technology holds the key to efficient electrification.

At the same time, it has become clear that from a cost perspective, renewable energy sources can compete with fossil fuels. Alternatives such as green hydrogen will need to be scaled up so they can play the sizeable role that plans for carbon-free societies have assigned to them.

The trend towards decentralised energy production – rooftop solar panels, backyard wind turbines, or geothermal heating – is creating opportunities in energy infrastructure, distribution and storage, while digitalisation helps improve energy efficiency in industry, buildings and homes with smart power and gas networks.

ENERGY TRANSITION - CORE THEMES



DECARBONISING

the energy system through production of renewable and transitional energy



DIGITALISATION

the energy system through electrification, efficiency and technology



DECENTRALISING

the energy system through infrastructure, distribution and storage

Allocating to China

In the coming world order, China offers investors opportunities.

In 2020, the Chinese economy grew by almost 5%, without the authorities having to suppress interest rates through quantitative easing, or dramatically increasing the government's debt burden by stimulus spending. All other major economies saw growth fall. Not only is China likely to remain the fastest growing large economy in the world, its equity market boasts numerous innovative companies.

Leading bond and stock index providers are increasing China's weight in or adding the country to their main emerging market benchmarks. The renminbi strength in 2020 partly reflected overseas money flowing into China's asset markets. Chinese government bonds currently yield around 3%, dwarfing bond yields in advanced economies. Yet China remains underweight in many international investors' portfolios. In the post-pandemic world, investors should consider a standalone allocation to Chinese assets.

SECTION II - INVESTMENT THEMES

SUSTAINABILITY

A SUSTAINABLE 2021?

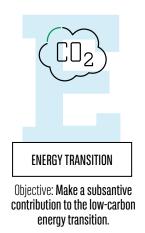
The flow of news in 2020 was sobering on many fronts. Dominated by the economic, health and social impact of the COVID-19 crisis, we also received alarming updates on biodiversity loss and incidents of extreme weather linked to climate change. The year was topped off by the unsettling realities of a US election that reflect a bitterly divided country.

In this context, it is hard to be particularly upbeat about 2021. Yet, after 20 years in the field of sustainable investment, I have honed my skills as a 'pragmatic optimist' and tend to focus on the opportunity. Put more simply by Winston Churchill, "never let a good crisis go to waste".

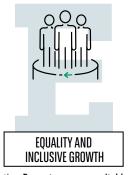
OPPORTUNITY IN CRISIS

The parallel crises of COVID, climate and biodiversity provide a window of opportunity for companies, countries, investors and the economy to pivot in a sustainable direction. These themes align well with the '3Es' in our 2019 Global Sustainability Strategy: the energy transition, environmental sustainability and equality & inclusive growth. We identified these as essential pre-conditions to a sustainable economy -as such, they guide our overall approach to sustainability, including strategic research, stewardship, ESG integration and thematic fund development. We believe that when you take a holistic, systemic, long-term view - as we do - you are less likely to be surprised by crises and better able to manage through them.

It is through the lens of the 3Es that we can consider some of the key themes for 2021 and how we can tackle them as investors.







Objective: Promote a more equitable and sustainable distribution of value to ensure long-term stability and resilience of societies and ecosystems.

ENERGY TRANSITION

• The race to net zero is on: A crucial 2018 report² showing that the impact of 2°C of warming would be significantly worse than 1.5°C brought renewed urgency to the effort to limit the global temperature increase to 1.5°C. In turn, the report has shifted the focus in the international dialogue away from the carbon budget per se, and more on achieving net-zero emissions by 2050. The concept of net-zero targets has entered the mainstream corporate and political debate, with many leading companies,³ asset owners⁴ and a growing number of governments setting such targets for 2050 (or in some cases even earlier).

² Intergovernmental Panel on Climate Change (IPCC), Special Report: Global Warming of 1.5°C: https://www.ipcc.ch/sr15/.

Recent analysis⁵ indicates that "just over half (53%) of global GDP is produced in countries, states and regions, and cities that have either set a net zero target or have expressed the intention of doing so", with these geographies also accounting for 23% of global CO₂ emissions and 2.6 billion people.



GLOBAL HEAD OF SUSTAINABILITY

- The UN has launched its Race to Zero campaign, 6 a coalition of net-zero emissions private-sector and public-sector initiatives, covering 992 businesses, 449 cities, 21 regions, 505 universities and 38 institutional investors. It states, "These 'real-economy' actors join 120 countries in the Climate Ambition Alliance, creating the largest ever alliance committed to achieving net zero carbon emissions by 2050 at the latest". We expect to see more countries follow the commitments in Europe, Japan, South Korea and China.
 - In 2021, BNP Paribas Asset Management will publish a paper that takes a companywide view on a number of crucial climate-related metrics.
 - We will continue to engage with important companies around the world to ensure they adopt credible net-zero commitments, backed by disclosures that allow investors to assess them against those commitments. We will also continue our focus on 'Parisaligned' corporate climate lobbying, an effort we helped to launch in Europe in 2018 and brought to the US in 2019.
- Green hydrogen and carbon pricing: as outlined in our recent research paper, we see green hydrogen as a key technology in helping the world achieve net-zero emissions by mid-century. We also see the need for carbon-pricing regimes around the world to help green hydrogen achieve commercial viability, first as a feedstock by 2030, and then in the following decades as an energy source to compete directly with natural gas and petroleum in heating, transportation, and as a back-up source for power generation.
 - The EU is leading the way on this, with an increased emissions-reduction target for 2030 likely to drive a tightening of the EU's carbon market and higher prices over the next decade enabling green hydrogen to become competitive by 2030.
 - The EU is looking at the possibility of establishing a carbon-border tax to ensure that its domestic industry is not at a disadvantage to non-EU companies that sell into the EU market. The European Commission will present its impact assessment and proposal for such a tax in 2021, with potentially huge implications for bringing carbon pricing into the discussion on global trade flows.
- · We expect to see voluntary markets play a bigger role. BNP Paribas Group is an active member of the Taskforce on Scaling Voluntary Carbon Markets and we see scope for growth in natural-capital solutions to climate change in coming decades.
- We are exploring the use of carbon offsets with some clients as a supplementary tool in decarbonising portfolios.

³ See, for example, the UN-convened Business Ambition for 1.5°C (https://www.unglobalcompact.org/ take-action/events/climate-action-summit-2019/business-ambition/business-leaders-taking-action), an initiative that commits corporate signatories to a 1.5°C target through the Science Based targets initiative. As of June 2020, 237 companies with a combined market cap of over USD 3.6trn have committed to the Business Ambition for 1.5°C.

⁴ See, for example, the UN-convened Net Zero Asset Owner Alliance (https://www.unepfi.org/net-zeroalliance/) comprising 25 institutional investors with a combined \$4.7trn of AUM, committed to net zero GHG emissions in their portfolios by 2050.

⁵ The ECIU analysis is available here: https://eciu.net/news-and-events/press-releases/2020/analysisand-comment-on-cop26-race-to-zero-launch

⁶ See https://unfccc.int/news/cities-regions-and-businesses-race-to-zero-emissions.

ENVIRONMENTAL SUSTAINABILITY

- Alongside the climate crisis, we are also losing biodiversity at an alarming rate. Both BNP
 Paribas Group and BNP Paribas Asset Management are working on strategies to address
 the systemic threat that has significant implications for economies and our investments.
 The pandemic itself may be linked to our degradation of the natural buffer systems that
 forests provide, helping to keep zoonotic diseases such as COVID-19 from leaping from
 wildlife to humans.
- In 2021, we will launch a paper outlining our approach to identifying and managing biodiversity related challenges as an investor, including our deforestation and water footprints. This will provide us with a roadmap for understanding the complex relationship between our investments and these critical elements of the earth's support system for life and the economies we have developed.
- BNP Paribas was named co-chair of a working group to launch the Taskforce for Nature-Related Financial Disclosures. The TNFD aims to produce a disclosure framework, similar to that of the TCFD, to help measure, manage and mitigate our dependencies and impacts on nature.

EQUALITY AND INCLUSIVE GROWTH

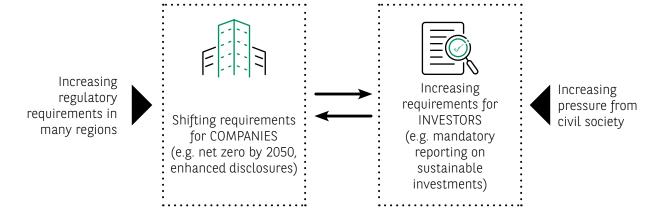
- The COVID-19 crisis has further entrenched income inequality. The job market distortions it caused could be long lasting. The pandemic has helped to demonstrate what we already knew income and wealth inequality seriously threaten our economies and our societies.
- A silver lining could be the emerging opportunity for moving high-quality jobs out of
 urban centres, providing more flexibility for workers in terms of location, commuting and
 working hours. Conversely, we have also seen how too much flexibility can leave workers
 without the protections that traditional employment provides in a crisis. We have an
 important opportunity to think about how to reimagine work to ensure both flexibility and
 stability for workers at all socioeconomic levels.
- The global Black Lives Matter movement has helped to refocus attention on entrenched racial inequalities. What are the implications for our investments? A <u>Citigroup economist</u> estimates that since 2000, US GDP lost USD 16 trillion due to racial discrimination, including in education and access to business loans.
- In our stewardship activities, we will be asking companies what they've learned from the crises and what steps they are taking to 'build back better.' How can we best incentivise corporate resilience?
- We are working on a new Inclusive Growth strategy that will focus on how companies behave on a range of social, human capital and governance dimensions thereby helping to tackle the issues spanning income, gender and racial inequality.



THE DYNAMIC REGULATORY AND CIVIL SOCIETY CONTEXT

Europe is at the forefront of shepherding in a suite of sustainable policies, driving more focus on a net zero target by 2050, along with the new green taxonomy and mandatory reporting across the full company-investment chain. We have been deeply involved in this process and will continue to have a seat at the table through BNP Paribas's role as one of the rapporteurs on the <u>recently announced</u> European Platform on Sustainable Finance.

We see unprecedented pressure from civil society and non-profit organisations on both financial and non-financial companies and their impact across the 3Es.



LOOKING AHEAD

It is difficult to predict what 2021 will bring given the fractured geopolitical dynamics in and across many countries and regions. What we do know is that as we approach 2021 we must all think creatively and ambitiously about how to tackle the trinity of global challenges:

- · COVID-19 with its triple whammy on health, the economy and social inequality
- Climate transition, and the rise in costly and socially crippling floods and fires
- Biodiversity loss with the underappreciated risks to food production and security, health
 and the contribution that healthy ecosystems make to addressing the climate challenge.

For BNP Paribas Asset Management, we will continue to track and adapt to these sustainability drivers, while keeping a firm eye on our progress as we implement our global sustainability strategy. In 2019, we set out our ambition and vision; in 2020, we focused on tooling up to be able to implement, and 2021 will see us deliver more new ideas, exciting investment strategies and enhanced reporting to our clients.

It's important to point out that – with risk, comes opportunity. We will be looking to identify those companies best positioned to support the transition to a low-carbon, environmentally sustainable and inclusive economy.

As a future maker, we look forward to working together with you to tackle tomorrow's challenges today – strengthening our insights as an investor, and helping to contribute to a more secure economic future. ■

ASSET CLASS OVERVIEW

PERFORMANCE: TOTAL RETURN IN EUR

(AS OF 31 OCTOBER 2020)

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
9.90%	57.70%	28.80%	6.20%	26.70%	21.20%	32%	11.50%	15.60%	8.40%	0.10%	30.00%	4.70%	Performance
-5.30%	34%	19.50%	6.20%	19.20%	6.50%	19.50%	10.40%	10.70%	7.50%	-0.20%	25.30%	4.20%	
-25.20%	25.90%	15.10%	3.60%	14%	0%	8.40%	1%	10.10%	3.70%	-2.70%	13.30%	-0.80%	
-37.60%	17.50%	14.50%	-2.40%	10.70%	-0.10%	7.50%	-0.50%	8.10%	0.30%	-3.80%	9.20%	-5.00%	
-37.60%	16.60%	7.20%	-2.70%	4.40%	-0.10%	2.60%	-0.70%	4.60%	-0.20%	-4.10%	4.50%	-12.40%	
-45%	1.10%	3.50%	-14.70%	-2.10%	-9.80%	-17.80%	-25.90%	2.30%	-2.10%	-13.70%	4.30%	-24.60%	Performance

Global government bonds (H)

Global corporate bonds (H)

Global corporate high-yield (H)

Commodities (H)

Developed equities (UH)

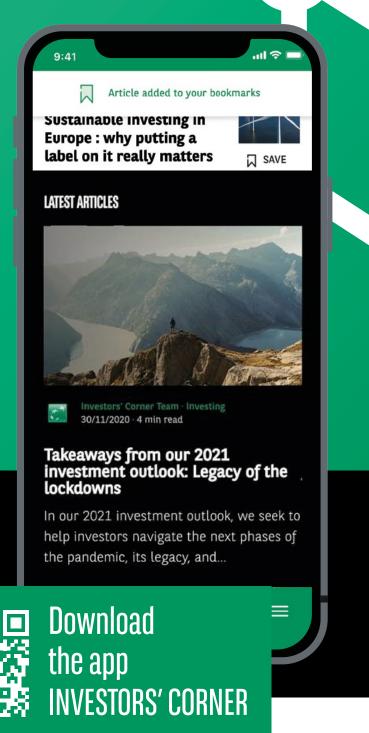
Global real estate (UH)

H: hedged; UH: unhedged

Source: Bloomberg, Quant Research Group, BNP Paribas Asset Management Indices used: global real estate (RNGL), developed equities (MSDEWIN), global government bonds (SBWGEC), global corporate bonds (LGCPTREH), global corporate high-yield (LG30TRUH), commodities (BCOMHET); Bloomberg ticker in brackets

Past performance or achievement is not indicative of current or future performance.

READ TIMELY MARKET, ECONOMIC AND INVESTMENT INSIGHTS ON THE GO







The asset manager for a changing world

Daniel Morris, chief market strategist, co-head investment insights centre Andrew Craig, co-head investment insights centre Nieck Ammerlaan, content manager - investment insights Christine Bosso, coordinator

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