

Investment Outlook 2022

Easing off the accelerator, nowhere near the brake

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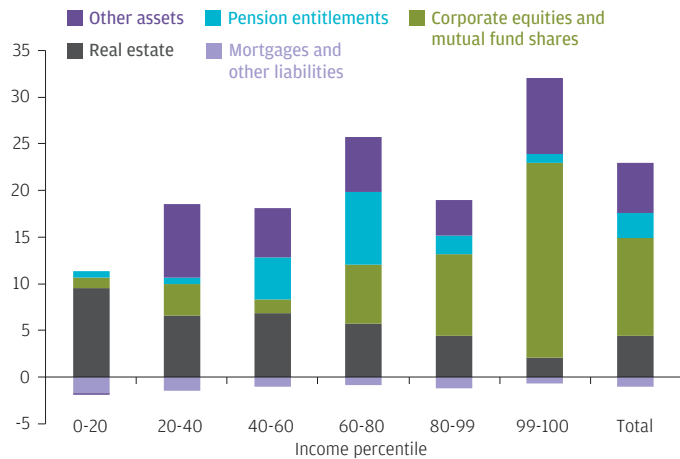
After the re-opening surge in 2021, growth in 2022 will moderate and central banks and governments will begin to remove stimulus. But we are far from worried about an abrupt stop in either economic activity or policymaker support.

The demand outlook is firm...

In the developed world, demand is firing on multiple engines. The outlook for consumer spending appears particularly strong. Households are still sitting on considerable savings that they accumulated during the Covid lockdowns, although the rise in savings pales in comparison to the improvement in household balance sheets which has arisen from the strong asset price increases in the last few years. Since the start of the pandemic, US household net worth in aggregate has grown by 22%. And contrary to popular opinion it is not just higher income households that have benefited (**EXHIBIT 1**). Looking back to the Global Financial Crisis, it took seven years after the start of the recession for net worth to have grown this much.

Exhibit 1: Consumers have experienced a massive wealth increase
CHANGE IN US CONSUMERS' NET WEALTH BY INCOME PERCENTILE

% change between Q4 2019 - Q2 2021



Source: US Federal Reserve, J.P. Morgan Asset Management. Data as of 19 November 2021.

Governments have also set in train multi-year spending plans. While enhanced unemployment benefits and other short-term forms of stimulus are being removed, spending on infrastructure is being ramped up, not least to facilitate the transition to low carbon technologies.

This supportive outlook for government policy may be called into question by a number of political events in 2022. French President Emmanuel Macron will be looking to secure a second term in the spring, while Italy will also host presidential elections. And at the time of writing it seems highly likely that Biden will lose control of the House, Senate or both at the midterm elections in November, drastically limiting his ability to enact domestic legislation. Losing legislative control proved a pivotal moment under both the Obama and Trump administrations.

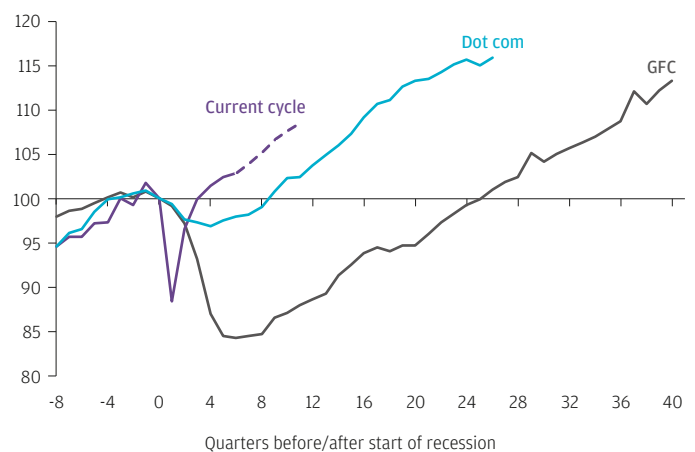
While these events have the potential to generate short-term volatility we expect the economic recovery to underpin political stability in both France and Italy. In the US Biden should have already passed his multi-year spending packages so stimulus to the economy will be ongoing. And we do not expect him to divert his attention to aggressive foreign policy in the way that President Trump did.

Overall our assessment is that relative to the last cycle, this shift in government behaviour shouldn't be underestimated, particularly for somewhere like the eurozone, which in the last cycle saw growth severely hampered by painful government austerity.

Again, in contrast to much of the last decade, companies now appear keen to invest. The challenges of the pandemic have forced companies to employ new technologies, while investment intentions may also reflect reshoring activity as firms replace labour with capital. All of this activity bodes well for future productivity.

Exhibit 2: The recovery in investment may support productivity
DEVELOPED MARKET REAL INVESTMENT

Index level, rebased to 100 at start of US recession



Source: J.P. Morgan Securities Research, J.P. Morgan Asset Management. Forecasts are from J.P. Morgan Securities Research. GFC is Global Financial Crisis. Periods of "recession" are defined using US National Bureau of Economic Research (NBER) business cycle dates. Data as of 19 November 2021.

...the problems are in supply

We are not concerned, therefore, about a shortage of demand in 2022. Our concerns are whether supply can keep up. The past year has seen a myriad of supply problems. The just-in-time global supply chain, which was an efficient and cost-effective corporate solution before the pandemic, has been sorely challenged.

Most central banks are assuming these supply challenges will ease in 2022, and inflation concerns alongside them.

We caution against such a benign view. Goods and energy inflation - responsible for much of the recent spike - should at some point ease. But it may not be for some months yet. High energy and raw material prices are, in our view, unfortunately necessary to force the transition to a low carbon economy (see **The pains and gains of the energy transition**).

Key production hubs in the emerging world are still rolling out vaccines and need periodic restrictions to contain the virus. The most important of these - China - is likely to retain its "zero tolerance towards Covid" policy until at least after the Winter Olympics in February. With policymakers in some of the emerging world also having to respond to higher inflation with higher interest rates, the emerging world may not be on track for a sustainable "post-Covid" recovery until the second half of the year. We remain optimistic, however, about the medium-term prospects for growth in Asia (see **Change in China**).

While goods price inflation will eventually ease it may be replaced by rising service sector inflation as consumers turn to spending on experiences rather than “stuff”.

Central banks are assuming that service sector inflation remains low which relies on the assumption that the current tightness of the labour markets will be temporary. They believe that as Covid concerns fade, discouraged workers will return to the jobs market. Digging into the details we are not so convinced. In the US, there are currently 10.4 million job vacancies, which is well above the 7.4 million currently registered as unemployed. It is hoped some of these vacancies will be filled by the 3.0 million people that have left the labour market since the pandemic. However, a relatively large proportion of these individuals – roughly 1 million – are over the age of 55 and may not come back given the gains in savings and wealth already discussed.

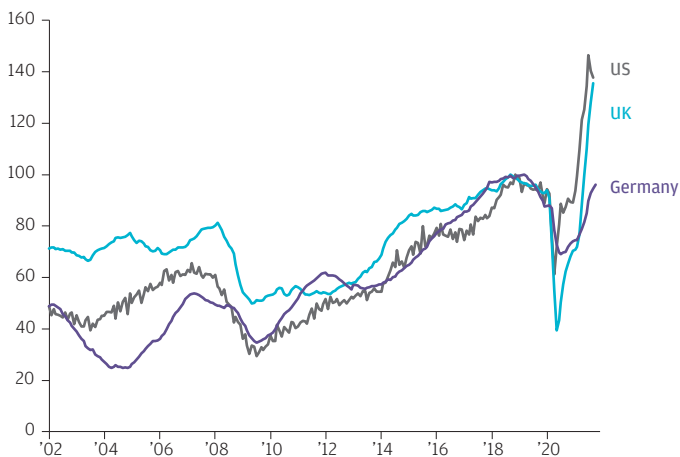
Migrant workers are another important – but unknown – factor. We simply don’t know how many people that decided to return to their place of birth during the pandemic will eventually return. This trend seems to be causing particular challenges for certain labour markets, such as the UK.

In the eurozone, it is more difficult to discern what’s happening in real time in the labour market because data is less readily available. But we note that by next spring, when the majority of wage negotiations have been completed, headline inflation will have been consistently high. There is more collective bargaining and inflation indexation in the eurozone than elsewhere, so these wage negotiations will be key to watch as they could potentially challenge the notion that the eurozone is stuck in a Japanese-style zero-inflation trap.

Exhibit 3: Tight labour markets may cause persistent upward pressure on wages

JOB VACANCIES

Indexed to 100 at pre-pandemic peak



Source: BLS, Deutsche Bundesbank, ONS, Refinitiv Datastream, J.P. Morgan Asset Management. UK vacancy data is a three-month average as published. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

The upside of higher wages – particularly in the face of rising energy and food costs – is that they will support consumer spending and underlying growth. Firms should then be able to pass on higher costs and maintain margins. In the short term, therefore, higher underlying inflation is unlikely to trouble corporate earnings and stocks (see **Earnings won’t be eaten by costs**).

Central banks are unlikely to slam on the brakes

The key risk to markets is that central banks start to worry about mounting inflation pressure and slam on the brakes. We don’t see that as likely, however. Through the course of 2021, central banks have been very clear that they are not willing to take any risks with the recovery. Strategically, they would much rather be proven wrong for having tightened too late, than too early.

Exhibit 4: Central banks are expected to withdraw stimulus very slowly

CENTRAL BANK	ASSET PURCHASES	TOTAL HIKES BY END 2022
FEDERAL RESERVE	Ends in June 2022	25bps
EUROPEAN CENTRAL BANK	Tapered but maintained throughout 2022	0bps
BANK OF ENGLAND	Completed in 2021	65bps

Source: J.P. Morgan Asset Management. Expectations of the Market Insights Strategy Team. As of November 2021.

EXHIBIT 4 details what we expect the key developed market central banks to do in 2022. To be clear, the table shows what we think central banks *will* do, not what we think they *should* do. In our view, this level of tightening will ultimately leave central banks behind the curve, such that eventually they will have to raise rates by more in the years beyond 2022. This is a key difference to how markets are currently priced. We expect a higher terminal rate. If market expectations align with our view through the course of 2022, we would expect longer-term government bond yields to rise. Equity markets should be focused in the intervening period on strong earnings. If we’re wrong and the central banks tighten more quickly, then it is likely to be because growth is even stronger than we are expecting.

Overall, we’re optimistic on nominal growth, and more so than the market consensus. However, with valuations where they are today, we still need to be selective about where we’re putting our money to work (see **Finding value in value**).

EARNINGS WON'T BE EATEN BY COSTS

When assessing the outlook for corporate earnings ahead, it is clear that businesses will be facing stubborn cost pressures. Higher wages, higher energy prices and supply chain bottlenecks that raise input costs all look likely to persist well into 2022 in some shape or form, although the impact of these factors will not be felt evenly. Take the US economy as an example, where wages account for just under 30% of corporate costs in aggregate. In the manufacturing sector, wages account for only around 20% of corporate costs, while the input costs of materials account for just under 50% of total costs. In comparison, wages are roughly half of corporate costs in the education and healthcare sectors, while input costs for materials in these sectors account for less than 10% of total costs. The drivers of cost pressures, not only the overall level, will be very relevant when considering the profitability of different sectors.

To defend earnings from higher input costs, corporates have two main options to protect their margins. They can find efficiency gains, for example by reducing the amount of raw materials that are wasted during a production process, or they can pass higher costs onto their customers. The third-quarter 2021 earnings season was encouraging on this front: despite higher input costs, margins are hovering around record levels across developed markets.

The strength of demand was a key factor behind the resilience of margins in 2021. Covid-19 disruption and worker shortages (among other factors) have clearly created supply-side pressures, but the impact of the skew towards goods spending should not be underestimated. If the global supply chain for goods was a hosepipe, not only would the pipe have shrunk in diameter, but also the amount of water being forced through it would have increased substantially. The result has been a sharp uptick in core goods inflation, which is effectively evidence of corporate pricing power. **EXHIBIT 5** highlights that, while US businesses are increasingly occupied by inflation, it is not coming at the expense of sales.

Exhibit 5: Firms are concerned about inflation but it's not yet hindering sales

US NATIONAL FEDERATION OF INDEPENDENT BUSINESS SURVEY: MOST IMPORTANT PROBLEM?

% of respondents, three-month moving average



Source: National Federation of Independent Business, Refinitiv Datastream, J.P. Morgan Asset Management. Data as of 19 November 2021.

We are optimistic about the prospects for demand to remain strong in 2022, allowing companies to maintain margins even in the face of elevated costs. As discussed, consumer balance sheets look very healthy. And while government transfers will be much less generous going forward, labour markets appear ready to pick up much of the slack with encouraging signs of wage growth, particularly in the US and the UK. There may also be specific aspects of the current environment that are making it easier for companies to pass costs onto consumers. **EXHIBIT 6** highlights how companies have been confident enough to raise prices. Given the rapid and broad nature of the rise in input costs, they are less fearful of being undercut in the knowledge that their competitors are likely facing exactly the same issues.

Exhibit 6: Businesses are passing higher costs onto their customers

US NATIONAL FEDERATION OF INDEPENDENT BUSINESS SURVEY: PRICES AND WAGES

% of respondents, three-month moving average



Source: National Federation of Independent Business, Refinitiv Datastream, J.P. Morgan Asset Management. *Guide to the Markets UK & Europe*. Data as of 19 November 2021.

That said, corporate pricing power will vary, both across and within sectors. Margins tend to be much more volatile in cyclical sectors relative to defensives given the higher sensitivity to the health of the economy. If we are right that growth remains robust over the next 12 months, the outlook for margins in cyclical sectors appears especially healthy. We would also expect that the relative performance of companies within sectors will be increasingly differentiated based on companies' relative pricing power, highlighting the importance of bottom-up stock selection.

We do not believe that our constructive view on earnings for 2022 is fully reflected in analyst estimates today. Consensus estimates currently expect developed market earnings to grow by just over 7% in 2022. This forecast appears relatively undemanding in an environment where we expect above-trend economic growth and supportive policy, despite significant cost pressures. From a sector perspective, we focus on cyclical areas of the market where earnings are more closely linked to economic growth, and where earnings estimates still have further catch up potential to the broad market. Financials and industrials are two areas of opportunity that stand out on these metrics.

TAPERING WITHOUT TANTRUMS

Back in 2013, the US Federal Reserve (the Fed) created a bout of market volatility in what became known as the “taper tantrum”. The question now is whether markets are in for a similarly rough ride as asset purchases cease in 2022.

Our central expectation is that markets will avoid another taper tantrum. On aggregate, we expect global stocks to be resilient for three reasons:

- **First**, and perhaps most importantly, despite elevated inflation we expect central banks to remain incredibly cautious in how they take their foot off the accelerator. Tightening will be gradual, flagged well in advance, and only in reaction to strong economic activity. In other words, interest rates across the government bond curve will remain highly “managed”.
- **Second**, we expect developed world economic growth and corporate earnings to be resilient in the face of modestly rising interest rates. Households have insulated themselves from higher interest rates, in part due to lower debt levels as pandemic savings have helped consumers reduce credit card debt. In addition, the impact of rising interest rates on mortgage payments is unlikely to be as painful as in years gone by. For example, the proportion of outstanding UK mortgages that are fixed is now around 80%, up from 50% just five years ago. And more than half of fixed rate UK mortgages are fixed for five years. Similarly, US households, which traditionally fix on long-term rates, are well set. The average 30-year fixed rate on offer in 2021 has been around 3%. While the interest rate sensitivity of the household sector

has improved, the interest rate sensitivity of government cash flows has deteriorated markedly. However, we don’t think higher policy rates will lead to fiscal austerity curtailing economic growth. Governments will simply accept consistently higher debt.

- **Third**, emerging markets - which were the stocks most affected in 2013 (**EXHIBIT 7**) - are better prepared this time around. Tapering and higher US rates could still lead to a stronger dollar and less global liquidity, which may impact some emerging markets that are more reliant on external financing. However, India’s current account position has improved since 2013, and China, Taiwan and South Korea - which together with India make up nearly 75% of the MSCI Emerging Markets index - have strong current account positions and low external debts, and so should be less vulnerable. Therefore, we expect that if tapering proves a challenge for emerging markets this time around it is likely to be felt more in areas of emerging market debt than in emerging market equities.

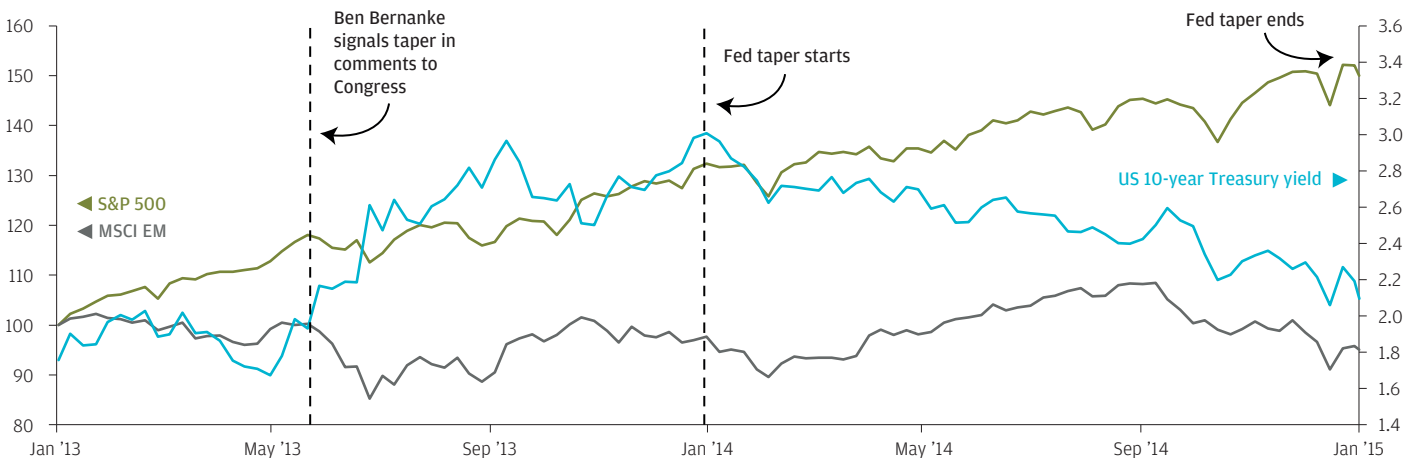
If we’re right, and bond yields drift higher gradually rather than experiencing a rapid spike, and if earnings growth remains strong, then rising yields shouldn’t be a problem.

That’s not to say there aren’t any areas of concern. The key difference between today and the last time the Fed tapered is that valuations for some stocks are much higher now than they were back then. The forward price-to-earnings (P/E) ratio for the S&P 500 was 14x in the middle of 2013, compared with over 20x now.

Exhibit 7: The 2013 ‘taper tantrum’ was mostly disruptive for EM

S&P 500 VS. MSCI EM PERFORMANCE AND US 10-YEAR TREASURY YIELD AROUND THE PREVIOUS FED TAPER

Index level, rebased to 100 at Jan 2013 (LHS); % yield (RHS)

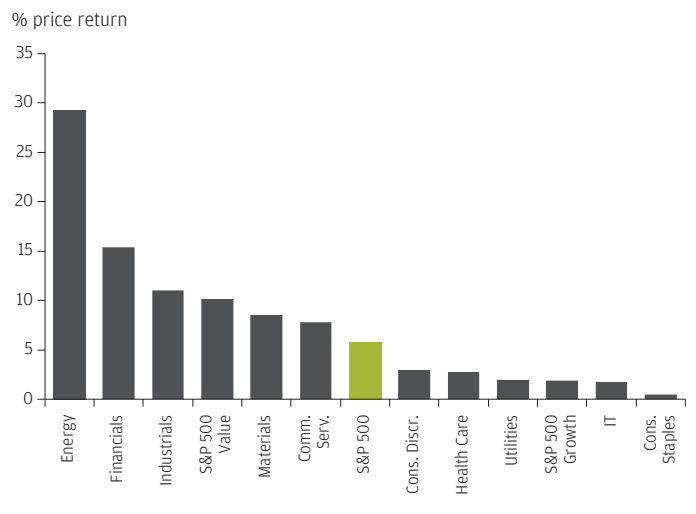


Source: MSCI, Refinitiv Datastream, Standard & Poor’s, J.P. Morgan Asset Management. S&P 500 and MSCI Emerging Markets (EM) are both total return in US dollar. Data as of 19 November 2021.

Extremely elevated valuations are concentrated in some growth segments of the market, which may be more vulnerable to rising rates, particularly if bond yields were to rise more quickly or more sharply than we anticipate. Growth stocks have had a “good pandemic”, in that the nature of the recession was good for their earnings. Technology companies, for example, benefited from all the home office equipment being purchased and the rapid adoption of cloud computing. But valuation uplift has also played a key role in their spectacular returns, and zero rates has undoubtedly been part of this valuation uplift. Therefore, some stocks and sectors do look more vulnerable to the risk of a more rapid repricing of bond yields, as we saw in the first quarter of 2021, when US 10-year Treasury yields rose from 0.9% to 1.75% (**EXHIBIT 8**).

Exhibit 8: A spike in bond yields may challenge growth stocks, but benefit others

S&P 500 SECTOR AND STYLE PERFORMANCE IN 1Q 2021



Source: Refinitiv Datastream, Standard & Poor’s, J.P. Morgan Asset Management. Data as of 19 November 2021.

THE PAINS AND GAINS OF THE ENERGY TRANSITION

While the scale of the recent spike in energy prices was surprising, elevated energy and raw material prices are something we may have to get used to as part of the transition to a lower carbon world. Countries accounting for around 70% of global CO2 emissions and GDP have pledged to reach net zero emissions by 2050. Reaching this objective will require a dramatic shift in the production and use of global energy.

EXHIBIT 9 details how the global energy mix would need to change for the world to reach net zero by 2050: the share of fossil fuels would need to decrease from around 80% today to 20%, while the share of renewables will have to increase from around 12% to more than 60% over the same period. Phasing out coal is a key priority but served to be one of the most contentious areas of discussion at COP26.

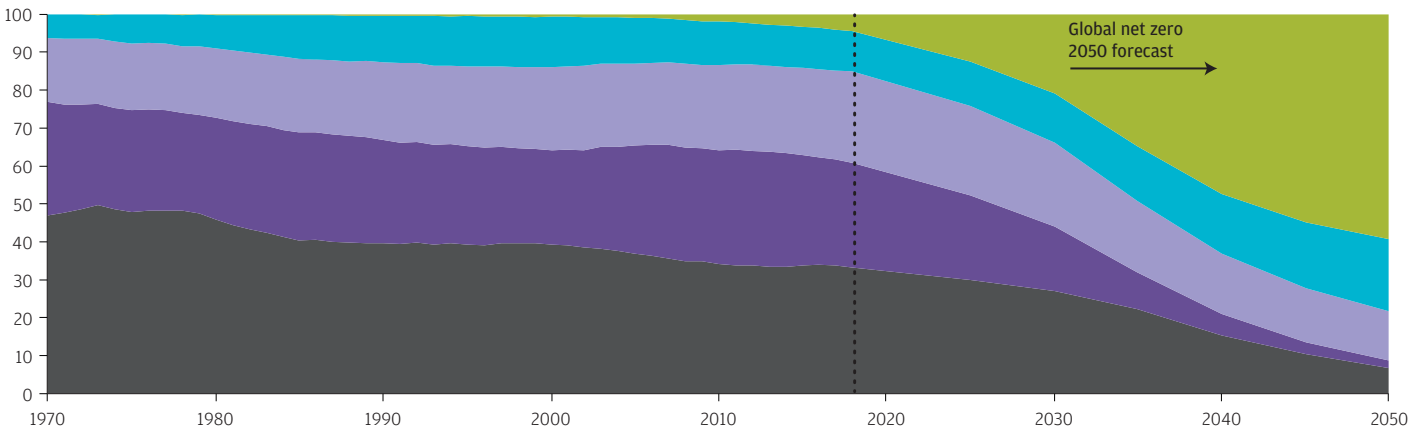
For renewable energy to replace fossil fuels in the energy mix, global investment in clean energy and energy efficiency will need to triple by 2030 to USD 2.3 trillion per annum (**EXHIBIT 10**). Until renewables can play a greater role, there will still be significant demand for oil, and especially gas, because many of the countries that are shifting away from coal are turning to natural gas to temporarily bridge the gap.

Exhibit 9: The energy mix has to change dramatically if net zero is to be achieved

GLOBAL ENERGY MIX

% of primary energy consumption

Oil Coal Gas Nuclear and Hydro Renewables

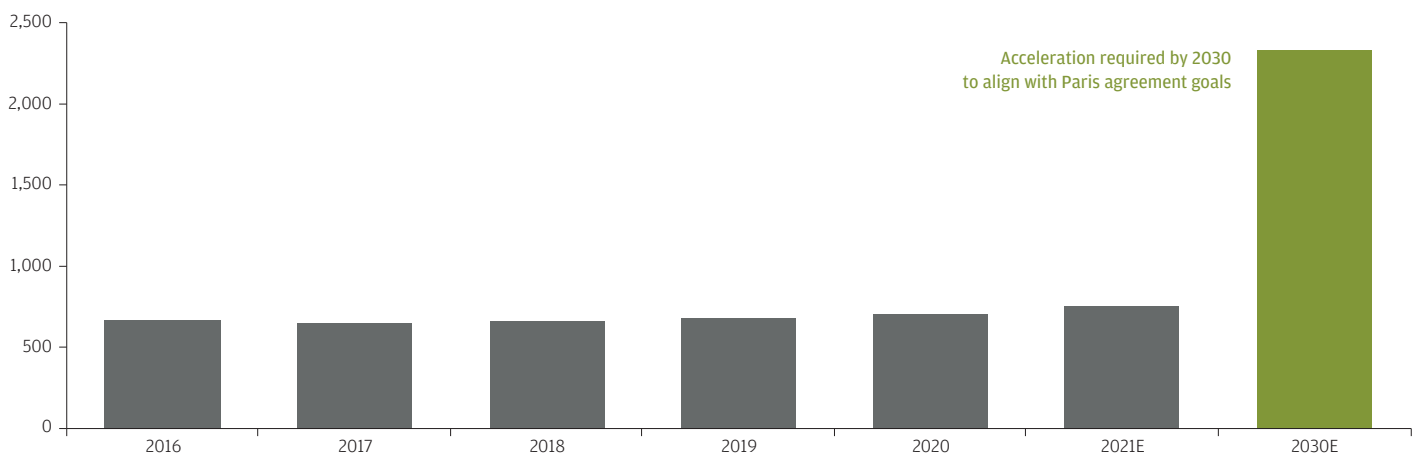


Source: BP Energy Outlook 2020, J.P. Morgan Asset Management. Forecast is based on BP's scenario for global net zero emissions by 2050. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

Exhibit 10: Massive investment is required to facilitate the transition

GLOBAL INVESTMENT IN CLEAN ENERGY AND ENERGY EFFICIENCY

USD billions



Source: International Energy Agency (2021), World Energy Investment 2021, J.P. Morgan Asset Management. 2030 forecast based on annual average investment needs in the electricity sector for 2026-2030 in the International Energy Agency's "net zero emissions by 2050" scenario. For illustrative purposes only. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

While fossil fuel energy demand is still likely to rise over the next decade, supply is increasingly constrained by the lack of investment in new capacity. Capital spending on new fossil fuel projects is historically low and likely to remain so as funding for these projects is curtailed, in part due to investor preferences and also because of the regulatory levers that are increasingly being pulled to reduce the capital available to fossil fuel producers. As a consequence, fossil fuel energy prices could remain elevated in the coming years. We would argue that high fossil fuel prices are a necessary evil to drive consumers towards alternative energy sources.

The implications for investors are wide-ranging but we'll focus here on what it means for traditional energy companies and renewables.

A forward P/E ratio of 10x for the global energy sector suggests investors are focused on the long-term challenges for the sector. In the short term, there is value if earnings are resilient given high energy prices. Investors should focus, however, on those companies that have credible transition plans in place and have already announced net zero emissions goals. These companies are best placed to take advantage of the short-term windfall of high fossil fuel prices but are protecting themselves from long-term "stranded asset" risk.

In the long run, given the exponential demand for renewables, the renewable energy sector is generally expected to perform well, although there are some concerns that future growth is already priced in, with the global clean energy sector trading on a forward P/E of 40x. Earnings delivery in the coming years will need to be very strong to justify the high multiple, although history suggests that this is possible. An investor that avoided four of the largest US technology giants five years ago given an average 12-month forward P/E ratio of 34x, would have since missed out on average cumulative returns of around 400%.

While the growth prospects of the renewables sector in the coming decades certainly justify attention, it is not the only sector benefiting from the energy transition. Better investment options may be found in sectors that provide low carbon solutions through improved efficiency, such as sustainable construction, sustainable food and water, sustainable transport, and recycling.

From a regional perspective, developing countries are generally considered as the most at risk from the energy transition since they have a higher CO₂ emission intensity of GDP than most developed countries and they are also generally more reliant on coal and other fossil fuels, both in terms of production and in their energy mix.

However, as with developed markets, we believe that it is also important in emerging markets to look beneath the surface. For example, China is the biggest coal producer in the world but it is also the largest rare earths producer, and the market for critical minerals and rare earth should exceed that of coal today by 2040. In addition, China is already the world's biggest producer of solar panels and electric cars, and in 2020 it built more windfarm capacity than the whole of the rest of the world combined.

In conclusion, investors need to understand the complexities of the energy transition. It is much more complicated than "sell traditional energy, buy renewables", or "sell emerging markets, buy developed world assets". Stock selection is more critical than ever as ranking assets, particularly on a forward-looking basis, is not easy.

The energy transition will transform the investment landscape beyond equity markets. In 2021 the global green bond market surpassed the USD 1 trillion milestone and is likely to grow steadily in the coming years as a preferred funding source for many green investments. On the opposite side, the energy transition will also create new risks to take into consideration, such as those associated with stranded assets.

Finally, alternatives will also be at the heart of the energy transition as a large part of the investments deployed to ensure the transition will be allocated to infrastructure projects, while emissions offsetting solutions, such as forest management, will also be necessary to reach net zero.

CHANGE IN CHINA

Chinese equities have fallen sharply since February and we believe the recent decline represents a compelling investment opportunity for long-term investors. The decline has been caused by three main issues:

- 1. Education** – The Chinese authorities announced in July that companies providing private tuition for children need to convert to non-profit organisations. Some investors have since become concerned that a similar fate could befall other sectors. We believe fears that China may force other large industries to become non-profits are misplaced. Ultimately, the authorities in China know that in order to achieve their growth targets and to continue increasing the prosperity of Chinese citizens they need a flourishing private sector with companies that are allowed to make profits and are incentivised to invest in growth and innovation. In our view this announcement relates to their ambition to make sure that opportunities for prosperity and jobs are available to the broad population, not merely those that can afford private tuition.
- 2. Regulation** - Regarding the regulation of other sectors, particularly the tech sector, several headline-grabbing interventions have worried some investors. For example, the under 18s have been barred from playing online video games for more than three hours per week. Does this really justify the extent of the sell-off in some of the large Chinese gaming companies? The under 18s account for only about 6% of domestic gaming revenue at one of the largest online gaming providers in China, and yet the share price has fallen by more than 30% since its peak last February. We believe the long-term earnings growth outlook remains robust. Likewise, for other companies, we believe new regulations may somewhat slow the pace of profit growth but should not prevent earnings from still rising significantly in coming years.

3. Property - Most recently, there have been concerns about Chinese property developers, with some suggesting that excessive leverage and speculation in the sector could trigger a “Lehman Brothers moment”. When we analysed this possibility, we found that the exposure of the large Chinese banks to the most at risk property developers would not be large enough to cause a 2008-style banking crisis. It is important to remember that financial stability remains a key Chinese policy goal. We believe that the authorities do wish to cool the property market, but that they have both the ability and the incentive to prevent potential spillover effects into the property market from becoming systemic. It wouldn’t make sense for the authorities to trigger a property price crash in pursuit of financial stability.

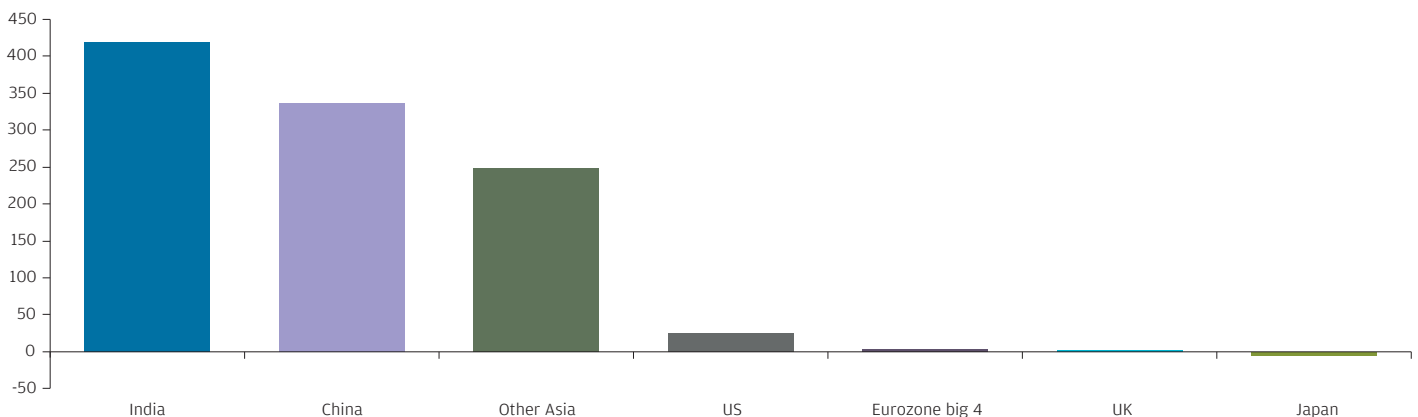
Ultimately all these interventions relate to Beijing’s goal of “common prosperity”. We think the aim is to ensure that Chinese growth over the coming years is more inclusive and sustainable, which we would not expect to be bad for the economy, corporate profits or the stock market in the long run.

In fact, more inclusive growth, leading to a continued expansion in the size of the consumer class in China, is one of the things that excites us the most. The Chinese middle and upper income groups are forecast to expand by over a third of a billion people by 2030. That’s about as many people as currently live in the US.

Exhibit 11: China’s growing middle class creates compelling growth opportunities

ESTIMATED CHANGE IN THE ‘CONSUMER CLASS’ BY 2030

Millions of people



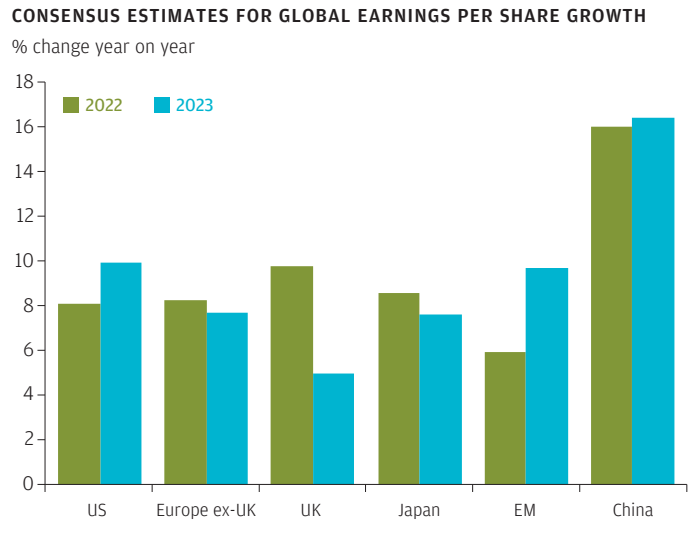
Source: Brookings Institute, J.P. Morgan Asset Management. Change in ‘consumer class’ is the change in the number of people from 2020 to 2030 living in a household and spending at least USD 11 per day per person. Other Asia includes Bangladesh, Indonesia, Pakistan, Philippines and Vietnam. Eurozone big 4 includes France, Germany, Italy and Spain. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

We are not therefore overly concerned about the recent slowdown in Chinese growth. In part the slowdown reflects China’s “zero tolerance to Covid” policy, in which stringent lockdowns are imposed at the first sign of infections. This policy is likely to remain in place, and potentially crimp demand, until after China hosts the Winter Olympics in February. But, as we have seen in the West, demand is likely to be merely delayed, not lost. We also expect Beijing to stop what was a deliberate tightening in credit and fiscal policy. Fiscal policy could become moderately more supportive, which alongside the catch up in demand, should enable China to grow by around 5% in 2022.

We expect growth to be slower than in the past but also more sustainable. China’s ambition is to double GDP between 2020 and 2035. That goal is achievable. The increase in Chinese GDP by the end of 2035 would then be broadly equivalent to the 2020 GDP of the UK, Germany, France, Italy, Spain and India combined. GDP per capita should increase from USD 10,000 per person to around USD 20,000 per person. And remember, there are 1.4 billion people in China. That’s a lot of extra spending for companies and investors to benefit from.

We therefore see the recent set back in Chinese stocks as an opportunity for medium-term investors. MSCI China trades on a forward P/E ratio of about 13x compared with over 20x for US equities. So Chinese equities aren’t expensive. Even if the P/E ratio just stays where it is, the projected expansion in the economy should drive company earnings significantly higher over the coming years, helping to lift Chinese stocks.

Exhibit 12: Earnings growth and low valuations support the outlook for Chinese stocks



Source: FTSE, IBES, MSCI, Refinitiv Datastream, Standard & Poor’s, TOPIX, J.P. Morgan Asset Management. MSCI indices are used for Europe ex-UK, EM and China. UK is FTSE All-Share, US is S&P 500 and Japan is TOPIX. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

FINDING VALUE IN VALUE

The outperformance of growth vs. value stocks, which has been a prevailing trend throughout the last decade, was further catalysed by the rapid rise of online sales and the acceleration in the digital transition sparked by the pandemic. The restrictions imposed on mobility benefited technology stocks, which are by far the largest sector weighting in growth indices. In contrast, the financials and energy sectors - two key components of value indices - suffered hugely from the cratering in economic activity. Low interest rates and flat government bond curves exacerbated the dispersion.

The pandemic therefore leaves us with the widest valuation gap between growth and value in history. **EXHIBIT 13** shows that in 2020 the ratio between the trailing P/E of MSCI World Value vs. MSCI World Growth index reached its most extreme level, with value trading at just 42% of growth valuations - a gap even wider than the tech bubble in 2000. While history isn't always a good indicator of the future, it is worth noting that when looking at data going back to 1975, value has always outperformed growth over the next five years when value has traded at less than 60% of the growth valuation.

We have seen glimmers of a recovery in value's relative performance as economic growth and inflation expectations rebounded thanks to the reopening of economies. But these periods were fleeting and value's time to shine was put on hold by the Delta variant, which weighed on growth forecasts and in turn expectations for when interest rates would rise.

For value to sustainably outperform growth we need to see consistent above-trend growth and growing conviction that central banks will be able to raise rates materially away from the zero bound.

Exhibit 13: There remains a massive valuation gap between growth and value stocks

MSCI WORLD GROWTH AND VALUE TRAILING P/E RATIOS



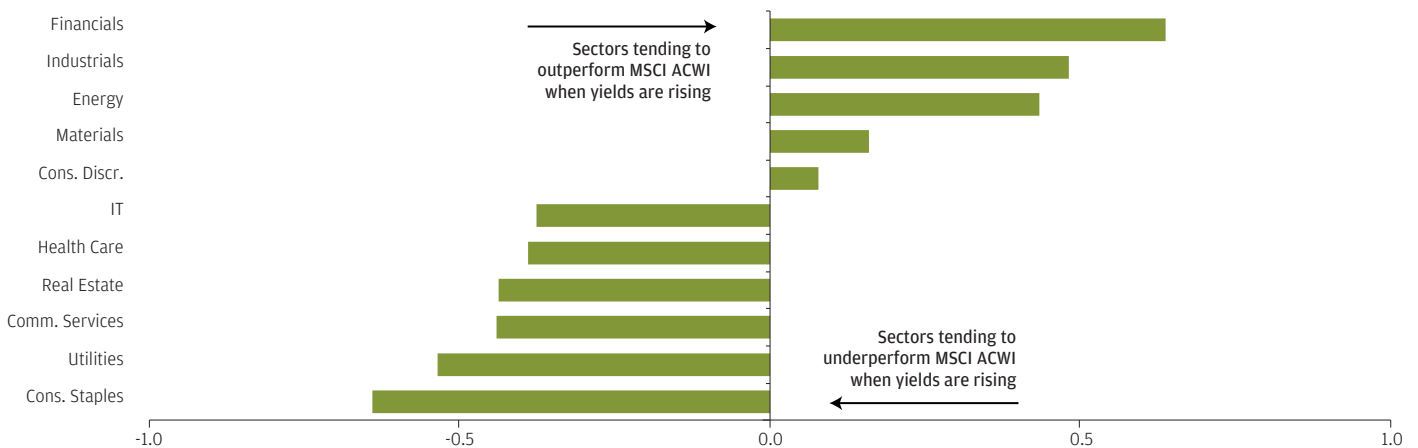
Source: MSCI, Refinitiv Datastream, J.P. Morgan Asset Management. Trailing P/E ratio is the price to 12-month trailing earnings ratio, as published by MSCI. Data as of 19 November 2021.

As already discussed, our core macro scenario for 2022 is for a gradual rise in long-term interest rates. **EXHIBIT 14** shows the correlation between US Treasury yields and the relative performance of each global MSCI sector. We can see that rising yields tend to benefit some sectors while hampering others. Financials and energy, two of the biggest value sectors, have strong positive correlations with rising Treasury yields. Other cyclical sectors, such as industrials and materials, tend to have a positive correlation but find themselves with reasonably similar sector weights in both the value and growth indices.

Exhibit 14: Rising bond yields will contribute to performance rotation

CORRELATION OF MSCI ACWI SECTORS TO US 10Y TREASURY YIELD

10y correlation of sector rel. performance with US 10y Treasury yield

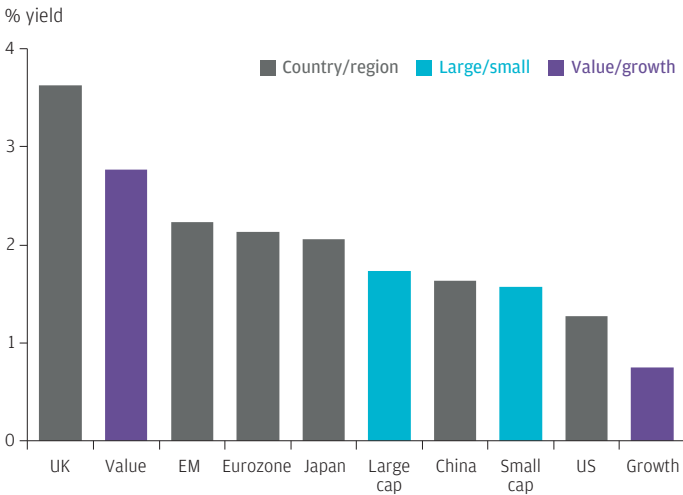


Source: MSCI, Refinitiv Datastream, J.P. Morgan Asset Management. Correlation of sectors is calculated between the six-month change in US 10-year Treasury yields and the six-month relative performance of each sector to MSCI All-Country World Index. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

The income opportunity may also entice investors back to value stocks. **EXHIBIT 15** shows that at a time when yields offered by government bond markets remain low and the search for income is still crucial for investors, value can offer an attractive income opportunity.

Exhibit 15: Value stocks are better placed to provide income

GLOBAL DIVIDEND YIELDS



Source: MSCI, Refinitiv Datastream, J.P. Morgan Asset Management. Value and growth as well as size indices used are for the MSCI All-Country World universe. *Guide to the Markets - UK & Europe*. Data as of 19 November 2021.

This doesn't mean that investors should abandon growth altogether. Some tech stocks in particular will be supported by structural trends, such as digital and technological transformation, with the implementation of revolutionary new technologies likely to become even more important in helping to ease the climate transition. But investors must remain wary of stocks trading on high valuations that have been primarily driven by the plentiful liquidity conditions that central banks have provided. In a world where the tide of liquidity begins to turn, these names are likely to struggle the most.

In summary, investors should avoid recency-bias. The performance of growth stocks dominated the last cycle. But the macro backdrop looks more akin to the 2000s cycle than the post-Global Financial Crisis cycle. We should remind ourselves that in the 2000s cycle, it was value that outperformed.

CENTRAL PROJECTIONS AND RISKS

Our core scenario is for growth to remain robust and inflation to remain above target, but not be sufficiently worrying to warrant a rapid and disruptive withdrawal of monetary stimulus. However, we remain in an unusual environment, and it's as important as ever to keep an eye on the risks to our central view.

The virus is still causing disruption though the combination of vaccines and better treatments make us more confident that the economic consequences will be more limited and temporary. Our key risks to the central scenario therefore revolve around how the supply side of the economy behaves. In the upside scenario supply bottlenecks, both in goods and labour markets, are resolved allowing for a 'goldilocks' period of strong growth, low inflation and ongoing monetary accommodation. The downside scenario by contrast would be that supply side concerns worsen, leading to an unpleasant mix of weak growth and higher inflation.

	DOWNSIDE	CENTRAL	UPSIDE
MACRO	<p>WEAK GROWTH, DISRUPTIVE INFLATION</p> <p>Supply problems intensify, holding back growth and leading to further upward pressure on global goods prices.</p> <p>In developed markets severe labour shortages lead to a sharp increase in wages and unit labour costs, which alongside other cost pressures weigh on corporate earnings.</p> <p>Energy prices continue to rise due to insufficient supply response by Opec+ and US shale.</p>	<p>STRONG GROWTH, ABOVE TARGET INFLATION</p> <p>Nominal growth in developed markets remains above trend. Pent-up consumer demand is released, focused on service sector spending. Labour markets are tight, which feeds wage inflation, only partially offset by productivity.</p> <p>Inflation remains high in the first half of the year as energy price increases filter through and supply chain disruptions are prolonged by elevated demand. Inflation moderates later in the year but stays above pre-Covid norms.</p>	<p>ROBUST GROWTH, INFLATION FADES</p> <p>Supply problems ease. In the developed world, workers are enticed back into the labour market, easing labour shortages.</p> <p>Emerging markets begin a gradual recovery, easing supply challenges but without putting undue pressure on global demand. Energy prices retreat and goods prices cool as spending tilts to services. Productivity is strong, helped by capex.</p> <p>Inflation fades back to target.</p>
POLICY	<p>Monetary: Central banks are forced to tighten policy more than in our central scenario to anchor inflation expectations, even though growth is slowing.</p> <p>Fiscal: Rising rates and higher inflation discourage further active fiscal policy to support growth.</p>	<p>Monetary: The Fed ends quantitative easing mid year, as planned. The emphasis remains on slow and gradual normalisation. The ECB tapers through 2022 but doesn't raise rates. The BoE raises rates to 0.75% over the year. Dovish central banks, in the face of resilient growth and inflation, lead to increasing perceptions that they will need to do more later.</p> <p>Fiscal: US lawmakers agree on another fiscal package. Although part funded, the spending is front loaded. European recovery fund disbursements turn into actual projects and activity.</p>	<p>Monetary: Central banks remain accommodative for longer. The tightening cycle is even more gradual.</p> <p>Fiscal: Low interest rates, and robust growth and tax receipts, reduce the pressure on government cash flows, encouraging easier fiscal policy and more government investment in areas such as low-carbon infrastructure.</p>
MARKETS	<p>Fixed income: Bond markets are challenged by tighter policy despite weakening growth. Spreads widen on weaker growth. Emerging market debt is vulnerable to tightening financial conditions.</p> <p>Equities: Stock markets experience a correction on weaker growth and less accommodative policy. Commodities outperform.</p> <p>Currencies: The dollar appreciates on the back of market volatility.</p> <p>Alternatives: Real assets provide some inflation protection. Hedge funds, particularly macro strategies, provide potential protection against falling equity and bond markets.</p>	<p>Fixed income: 10-year Treasury yields rise to between 2.0%-2.5%. Carry assets outperform core government bonds.</p> <p>Equities: Earnings growth offsets moderate P/E compression to lift equity markets. Value outperforms on higher bond yields and P/E compression of growth stocks.</p> <p>Currencies: The dollar and sterling strengthen as bond yields rise but downward pressure builds as the global recovery broadens.</p> <p>Alternatives: Private equity performs well. Real assets provide some inflation protection and withstand moderately higher rates. Hedge funds, particularly macro strategies, provide diversification.</p>	<p>Fixed income: Core government bond yields stay broadly where they are. Carry assets outperform.</p> <p>Equities: Strong earnings growth, and valuations that don't decline, help equity markets end the year even higher. Growth stocks perform better than in our central scenario, while value still rises on higher earnings.</p> <p>Currencies: The dollar weakens as growth broadens by geography.</p> <p>Alternatives: The environment is particularly strong for private equity and private credit.</p>

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