SOLVING FOR 2022

NEUBERGER BERMAN

OUR INVESTMENT PLATFORM

FIRM ASSETS UNDER MANAGEMENT $437bn

MULTI-ASSET CLASS SOLUTIONS

PUBLIC MARKETS $351bn

EQUITIES	FIXED INCOME	HEDGE FUNDS & LIQUID ALTERNATIVES	REAL ESTATE
FUNDAMENTAL Global U.S. EAFE / Japan Emerging Markets – China Thematic Strategies MLPs **QUANTITATIVE** Global U.S. Emerging Markets Custom Beta	Global Investment Grade Global Non-Investment Grade Emerging Markets Municipals Multi-Sector Currency	**FUNDAMENTAL** Hedge Funds Liquid Alternatives **QUANTITATIVE** Commodities Options Global Macro Risk Parity Risk Premia	Global U.S. Long/Short – Almanac
$133bn	$189bn	$26bn	$3bn

PRIVATE MARKETS $86bn

PRIVATE EQUITY	PRIVATE CREDIT	SPECIALTY ALTERNATIVES	PRIVATE REAL ESTATE
Primaries Co-Investments Secondaries Specialty Strategies	Private Debt Credit Opportunities Special Situations Residential Loans Specialty Finance European Private Loans	Insurance-Linked Strategies Late Stage Pre-IPO SPACs	Private Real Estate – Almanac Real Estate Secondaries
$65bn	$12bn	$4bn	$5bn

ESG INTEGRATION | GLOBAL RESEARCH CAPABILITIES | DATA SCIENCE

TEN FOR 2022

The heads of our investment platforms identified the key themes they anticipate will guide investment decisions in 2022. These 10 themes are summarized below and discussed in more detail in their roundtable discussion beginning on page 5.

MACRO: ENTERING A NEW AGE

1 THE START OF ANOTHER LONG CYCLE—BUT ALSO A MORE VOLATILE ONE?

We are moving from the recovery phase of the current cycle to its middle phase. But what kind of cycle is it likely to be? The previous cycle was the longest in history and it ended only due to the exogenous shock of the pandemic. If anything, we believe that the willingness of fiscal and monetary authorities to support the cycle is even greater today. Inflation and new redundancies built into supply chains could introduce more business-cycle and market volatility, but we think we could be in for another long expansion.

2 INFLATION: HIGHER AND MORE PROBLEMATIC

After 40 years of declining inflation and interest rates, the direction of travel appears to be changing, due to new central bank policy priorities, China's strategic reorientation, the energy transition, pressures in supply chains and labor's increasing bargaining power in negotiations over the spoils of growth. The tilt toward supply-side, cost-push inflation in this dynamic will likely pose a challenge to central banks. How central banks choose to navigate a changing inflation environment will likely generate market volatility in the coming year.

3 A NEW AGE OF POLITICIZED ECONOMIES—AND NOT JUST IN CHINA

China's ongoing strategic reorientation of its economy explicitly elevates social and political objectives such as "common prosperity" and "internal circulation" over outright growth. But this is not just a China story. Worldwide, political and monetary authorities now have more tools, more capacity and more willingness to direct economic activity than ever before—in pursuit of climate, social equality, political, geopolitical and security goals, among many others. That likely means higher taxes. As the role of markets in resource allocation diminishes, we could also see more supply-and-demand mismatches, inflation and volatility.

4 NET-ZERO GOES MAINSTREAM

The 26th United Nations Climate Change Conference of the Parties (COP26) wrapped up as our themes went to press. Many countries went into COP26 lagging in their commitments, but impetus appears to be growing. The European Union's "Fit for 55" legislative agenda sets an aggressive standard. Just as important, the private sector is pressing ahead: we see critical mass in corporate net-zero pledges and plans, and in signatories to asset managers' and asset owners' net-zero initiatives. It will become increasingly imprudent in our view to ignore climate and climate policy risks in portfolios.

FIXED INCOME: RATES ADJUST, INVESTORS EMBRACE FLEXIBILITY

5 AN ORDERLY ADJUSTMENT FOR BOND YIELDS AND SPREADS

Core government bond yields remain low, particularly relative to current inflation; and credit spreads, in our opinion, are priced for perfection. We think the direction of travel in 2022 is up and wider, respectively. Finding income with modest or no duration will continue to be the priority, in our view, but major market disruption or significant credit issues appear unlikely. We believe a more tactical fixed income investment environment is developing.

6 INVESTORS PURSUE A MORE FLEXIBLE APPROACH TO SEEKING INCOME

Faced with a combination of low and rising rates and tight credit spreads, investors are likely to double down on their search for short duration, floating rate, and less correlated sources of income. They may complement this with more tactical positioning, whether that be in interest rate risk exposure, asset allocation or into narrower, niche, but attractive markets. The opportunities likely to draw attention range from short duration credit, loans and collateralized loan obligations (CLOs) to China bonds and European corporate hybrid securities. We believe a mix of these short-duration, less-correlated and tactical sources of income could pay dividends in the year ahead.

EQUITIES: REFLATIONARY THEMES

7 A REFLATION TAILWIND FOR VALUE AND CYCLICAL STOCKS AND REGIONS

We think inflationary expansion is likely to support cyclical over defensive sectors, value over growth stocks, smaller over larger companies and non-U.S. over U.S. markets. That pattern was interrupted after Treasury yields hit their peak in March 2020, but could reassert itself as yields start to edge up again—particularly if this is accompanied by a weaker U.S. dollar. This environment would normally bode well for emerging markets, but substantial headwinds mean we tend to favor only specific opportunities, such as leading companies in India's innovation sectors.

8 WITH STRETCHED MARKET VALUATIONS, INCOME BECOMES MORE IMPORTANT

The story of value underperformance is well known. But income, as a subset of value, has fared even worse over the past decade. There are three sources of equity returns: multiple expansion, earnings growth and compounded dividend income. Multiples appear stretched, and earnings have been growing above trend—which suggests to us that income may be more reliable over the coming year. Over the past 50 years, income has accounted for around 30% of equity total returns. Moreover, in an inflationary environment with low but rising rates, equity income is also a way to get short duration and inflation exposure into portfolios at relatively attractive valuations.

ALTERNATIVES: NO LONGER ALTERNATIVE

9 A BIGGER MENU OF NON-TRADITIONAL DIVERSIFIERS FOR INVESTORS

Investors face high valuations in many growth markets, combined with rising yields and diminished diversification benefits from core bonds, and the potential for inflation running above recent trend levels. This appears likely to encourage all types of investor to make larger, more diverse allocations to alternatives, liquid and illiquid, as well as assets that can mitigate the impact of transitory and secular inflation, such as commodities and real estate. Individual investors may have the ability to make the most notable move, as private equity and debt products become more accessible to them.

10 EXECUTION RISK, NOT MARKET RISK, WILL LIKELY DETERMINE SUCCESS

Valuations are high in current private equity deals. However, while starting valuation can be a strong determinant of long-term public equity returns, the relationship has not been so strong in private markets. We think that could be especially true with today's deals, from venture to buyout. Whereas historical vintages often relied on buying cheap and applying leverage, we see that today's average deal is comprised of more than 50% equity, and depends for its potential returns on successful operational and strategic enhancements, and merger-and-acquisition (M&A) "roll-up" programs.

JOSEPH V. AMATO | PRESIDENT AND CHIEF INVESTMENT OFFICER—EQUITIES

ERIK L. KNUTZEN, CFA, CAIA | CHIEF INVESTMENT OFFICER—MULTI-ASSET CLASS

BRAD TANK | CHIEF INVESTMENT OFFICER—FIXED INCOME

ANTHONY D. TUTRONE | GLOBAL HEAD OF ALTERNATIVES

SUZANNE F. PECK | HEAD OF INVESTMENTS—PRIVATE WEALTH MANAGEMENT

CIO ROUNDTABLE

ENTERING A NEW AGE

As 2021 drew to a close, the leaders of our investment platforms gathered to talk about the evolution of the investment environment over the past 12 months and the key themes they anticipate for 2022.

Brad Tank: We are now settled into this new business cycle, so let's think about what kind of cycle it's going to be.

After the disruption of the Great Financial Crisis (GFC), a lot of commentators expected a phase of short, volatile business cycles. There were events like the crisis in Greece and the wider eurozone or the emerging markets and commodities downturn in 2015 that, in previous decades, might have tipped the balance. But nothing knocked the global economy off course, and the record-breaking expansion may well have persisted without the exogenous impact of the pandemic. There has been a trend toward longer cycles in developed economies, due in part to the shift away from manufacturing to services, and to more efficient, globalized, just-in-time supply chains. But the most important new element was the post-GFC ability and willingness to support the cycle with substantial monetary and fiscal policy interventions. That included emergency measures, such as Mario Draghi's "whatever it takes" extension of the European Central Bank's mandate, but also measures that far outlived the emergency, from zero rates and quantitative easing (QE) to President Trump's late-cycle corporation tax cuts. When the pandemic hit, we doubled down with those new tools. QE was extended to all kinds of assets and fiscal policy now appears to be limitless—or at least, the global bond market appears pretty accepting of it, so far. That suggests to me that the base case is another long cycle, backed by a central bank and fiscal policy "put option."

Joseph Amato: I think the big caveat is that everything is happening much faster in this cycle. Hitting the trough and achieving the recovery was a much shorter process than in previous recessions. And while there is generally a mid-cycle feel to things now, there also seems to be a lot of late-cycle bubbles and substantial inflationary pressures.

We're also thinking harder about one of the themes from last year: "Supply chains become shorter and more diversified." We've seen that in corporate decision-making. As you've written, Brad, one of the reasons we are likely on course for higher inflation in this cycle is because companies are taking long-lasting action to tackle a transitory—but extremely disruptive—supply-and-demand crunch. If you open two or three locations across Asia to take the slack of your big one in China, or you re-shore production, or you start carrying more "just-in-case" inventory, that is likely to eat into earnings for a time, exacerbate inflation, and potentially bring back some pre-1980s volatility to the business cycle.

Erik Knutzen: For some of the reasons Joe outlines, I think we could be in for a long expansion, supported by central banks and fiscal stimulus when necessary, but with heightened volatility. And I mean volatility in economic activity and data, volatility in politics and policy, feeding through into volatility in financial markets.

Tank: I agree there are reasons to expect that kind of volatility over the short term, and that could extend through the coming year. But longer term, I believe that the central bank and fiscal "put option" continues to be a volatility dampener—at least until markets stop believing in it. What could cause a loss of faith? A crack-up in inflation and rates could be a threat, or a bubble bursting. This time last year, we did not see a threat of substantial reflation. We thought 5% was the ceiling and that the peak would be in the second or early third quarter. Well, we just got the September reading and it's up again, to 5.4%. It's higher than we expected, and stickier than we expected.

"How do central banks respond to this inflation? Their policy tools are less effective against supply bottlenecks or rising wages."

– ERIK KNUTZEN

Knutzen: This is why the inflation question is so critical. And it's not only a question of transitory or secular, but also how much is driven by supply-side, cost-push factors as opposed to demand-pull factors. Right now, I believe it's both: pent-up spending meets broken supply chains. Over the medium term, however, the new and significant inflationary dynamics are likely to be supply-driven. Joe mentions "just-in-case" supply chains. There's the sustainable energy transition, where we could see more supply crunches before we get full capacity with renewables. China used to export disinflation to the rest of the world with its low-cost workforce, but that really faded out a decade ago and its more recent strategic orientation appears to cap the end of that era. And China's "common prosperity" theme could be reflected globally: the tussle between labor and capital for the spoils of growth tends to go through 20- to 30-year cycles, and profits have outgrown wages since the early 1980s. There are political, structural and demographic reasons to expect labor to capture more over the next generation.

How could central banks respond to this kind of inflation? Their policy tools are less effective against supply bottlenecks or rising wages. They can only step in to dampen demand. But demand isn't the problem, and dampening it could risk triggering recessions. Over the longer term, capex, technology, automation and general productivity enhancements should be the answer. But over the next year, cost-push inflation and how monetary authorities respond to it are likely to be a key source of potential risk.

Suzanne Peck: One could make a list: the energy transition, China's "common prosperity" objective, President Biden's "human infrastructure" fiscal program, the E.U. "Next Generation" fund and environmental program, re-shoring essential supply chains, the required investments in productivity enhancement, the role of central banks. Underneath, there's a real sense that government has a dramatically enhanced role in the economy. That suggests more regulation and more taxation for both corporations and investors. From the standpoint of the taxable wealth management client, that reinforces a point we have been making for some time, which is the key role of tax-efficient investment strategies that take systematic advantage of opportunities for tax-loss harvesting and tax deferral.

"Government now has a dramatically enhanced role in the economy. That suggests more regulation and more taxation. From the standpoint of the taxable wealth management client, that reinforces the key role of tax-efficient investment strategies."

– SUZANNE PECK

Tank: Absolutely, and it goes further. One of the big lessons of the current inflation spike is that government interventions have dampened the role of market price signals in the allocation of resources. Wages are rising and there are vacancies across many sectors, but, in the U.S., the labor participation rate is well below the pre-pandemic level. Energy prices have spiked, but demand is still there, because governments have spent decades supporting and subsidizing energy consumption: gasoline, for example, has tended to become cheaper and cheaper for the U.S. consumer over the long term, so price spikes have less real impact on demand. Many consumers can afford higher fuel taxes, but governments won't go there. The irony is that the corporate and financial sectors have often led governments on climate change. Compare the commitments made by the Net Zero Asset Managers Initiative, the Net Zero Asset Owner Alliance, and a huge range of companies, with the foot-dragging on Paris Agreement commitments leading up to COP26. We are advocates of market solutions, but the substantial decisions will likely be made in Washington and Brussels, and they fear the political side effects of market medicine when it comes to sustainability.

Amato: This underlines the importance of identifying and managing these potential risks in portfolios. Sustainability-related investments, even if they can potentially deliver long-term growth, could present short-term costs. But the consumer, political, regulatory and investment agenda can change very quickly, and the more they are driven by politics, the more volatile progress is likely to be. It could mean more supply-and-demand mismatches, inflationary episodes and sudden repricing of assets. Adam Smith's famous "Invisible Hand" has become the conspicuously visible hand of government in Europe and the U.S.—and China's visible hand is becoming especially assertive.

FIXED INCOME: RATES ADJUST, INVESTORS EMBRACE FLEXIBILITY

Amato: Alongside the reversal of 30 or 40 years of deregulation and government removing itself from the economy, we may also be at the end of 40 years of declining inflation and interest rates. What could this mean for the many investors, both institutional and individual, who rely on long-duration assets?

Anthony Tutrone: Might the withdrawal of central bank asset purchases be the catalyst to kick yields up?

Tank: Our view is that rates are on their way up. But the pace of the adjustment is as important as the direction. We believe it will be gradual and orderly. It's worth remembering that we are into November and we still haven't reached our year-end target for the 10-year Treasury yield—with inflation above 5%. It felt like we might blow through it back in March, but demand for fixed income assets is overwhelming, and that is keeping yields low, curves flat and credit spreads, in our opinion, priced for perfection. Finding income with modest or no duration will likely continue to be the priority, in our view, and credit selection should take over from the early-cycle, "credit-beta" play, but market disruption or significant credit issues appear unlikely.

Faced with this combination of low and rising rates and tight credit spreads, investors are likely to double down on their search for short duration, floating rate, and less correlated sources of income. They may complement this with more tactical positioning whether that be in interest rate risk exposure, asset allocation or into narrower, niche, but attractive markets. What does that mean, specifically? We think we'll see more attention on short duration credit, loans, collateralized loan obligations (CLOs) and securitized investments, for income with modest duration. Opportunities such as taxable municipal bonds, local-currency emerging markets debt and China bonds could provide less correlated income for those able to move in those directions. And the tactical opportunities might include corporate hybrid securities in Europe or bank capital securities in the U.S. We believe a mix of these short-duration, less-correlated and tactical sources of income is likely to pay dividends in the year ahead.

Amato: It's notable that you mention China bonds for their attractive yields and diversification benefits. At the same time, China is the one major market where we are starting to see disruption and significant credit issues. Our local team covering the A-Share equity market emphasizes the continuity in the government's recent regulatory announcements, but they also note that the new articulation of those goals will create new winners and losers. Sustainable energy and 5G connectivity are likely to receive a strong tailwind, but other types of infrastructure and especially real estate now face headwinds, as do some other sectors, from private education to e-commerce.

Knutzen: Our colleagues in China have written about how important it is to understand that it is a policy-driven market. That policy is evolving—but it doesn't suddenly make China an uninvestable market. It's about allocating to the opportunities that the authorities have identified as priorities.

"We believe a mix of these short-duration, less-correlated and tactical sources of income is likely to pay dividends in the year ahead."

– BRAD TANK

Tank: For fixed income investors, it's a complex but interesting opportunity set. We do think the government is likely to ring-fence Evergrande, thereby containing much of the volatility in the high-yield property sector. Spreads in investment-grade corporates and financials are tight, due to a flight to quality, but China's monetary and fiscal policies are now moving in a more accommodative direction than in most developed markets, and that could support China government bonds, offering attractive yields and the potential for spread-tightening against developed market government bonds.

EQUITIES: REFLATIONARY THEMES

Amato: In equities, generally speaking, we think the reflationary environment is likely to lend support to sectors such as Materials, Energy, Industrials and Financials over Consumer Staples, Healthcare and Communication Services, as well as value over growth stocks. Longer-duration growth stocks have been recovering since Treasury yields hit their peak in March 2020, but as yields start to edge up again, value is likely to reassert itself. If we get a weaker U.S. dollar over the coming years, which is the Equity Team's core scenario, that could add impetus to these dynamics.

"For really attractive opportunities, we think the value style is more interesting, and especially equity income as a subset of value."

– JOSEPH AMATO

Knutzen: Our Asset Allocation Committee (AAC) follows through on that with its latest regional market views. We generally favor non-U.S. developed and emerging equity markets over U.S. large caps, which reflects that reflationary, weaker-dollar outlook. Within emerging markets, however, we downgraded our view on China to neutral while upgrading India to an overweight, particularly its technology and innovation sectors, which we see as emerging as centers of development to rival others in Asia.

Amato: I think emerging markets face significant challenges. They have fewer fiscal resources to battle the economic impact of the pandemic. It has generally had less access to vaccines, which has meant either higher incidence of COVID-19 or greater and longer-lasting reliance on lockdowns and social restrictions. They are also generally more exposed to supply-chain disruption, inflation risk and the slowdown in China. There are pockets of opportunity, but I believe emerging markets as a whole are not the clear opportunity they would usually be at this stage of a cycle.

For really attractive opportunities, we think the value style is more interesting, and especially equity income as a subset of value. The price-to-book ratio of the S&P 500 Dividend Aristocrats Index relative to the broad S&P 500 remains 18% below its long-term average and has only just started to recover from its trough during the pandemic.[1] Moreover, while there is strong correlation between high starting valuations and the subsequent 10 years' total return, the more important dividends are as a proportion of a portfolio's total return, the weaker that correlation becomes. That's worth noting if you're concerned about market valuations.

Income is also interesting if you believe we are in an environment of structurally higher inflation. Global dividend growth has been highly correlated with U.S. inflation: dividends tend to grow faster than inflation, because they are generally paid out as a ratio of nominal earnings. That is why, over the past decade of subdued inflation, declining rates and outperforming growth stocks, European and U.S. dividend growth have been very subdued. Since 1945, S&P 500 dividends have grown

[1] Credit Suisse Research, as of November 1, 2021.

by 6.5%, annualized, and have never grown by less than 2.2% during any 10-year period, making the past decade very unusual and suggesting a lot of catch-up potential. In addition, the relative stability of traditional income stocks' earnings and dividend growth has tended to make them much less sensitive to changes in interest rates than the growth stocks that are now so dominant in large-cap indices, and that could be advantageous in a rising-rate environment.

Knutzen: This is really important for investors to bear in mind when they think about the challenge of dampening portfolio volatility and introducing some inflation exposure while also trying to avoid introducing a lot of interest-rate sensitivity. Increasing the traditional government bond allocation raises portfolio duration. Instead of that, dividend income may have a role to play here.

Amato: That may be one reason why flows into developed market dividend-focused funds appear to have picked up quite sharply since the spring of this year.

ALTERNATIVES: NO LONGER ALTERNATIVE

Knutzen: Let's dive further into that question of how to diversify a portfolio against the potential downside risk in equities at a time of low and rising core government bond yields. Inflation adds another layer of complexity: many investors are looking for assets that can diversify potential downside equity risk, mitigate the impact of inflation, or both. Moreover, some assets have been effective against short-term inflation spikes while others have done a better job of outperforming more persistent inflation. The result is that we see many investors lengthening their menu of alternatives and allocating more to them.

China bonds were effective diversifiers during 2020, while also offering attractive yields. Idiosyncratic and uncorrelated strategies are in demand, but selectivity is important. We've been talking about how government involvement in the economy is dampening market price signals: that appears to be a key reason why many macro hedge funds have struggled, alongside some of the classic market-neutral styles. Merger activity is creating opportunities for event-driven strategies, on the other hand, and Hurricane Ida and Germany's summer floods might have opened up value in insurance-linked strategies. On inflation, we are seeing interest in commodities to mitigate short-term spikes, and private and listed real estate to absorb the longer-term trend.

Peck: Individual investors talk about similar challenges and responses. They are increasingly willing to consider illiquid assets, as the asset management industry creates new fund structures to make them more accessible. There is growing recognition that giving up some liquidity, which we often don't need, can meaningfully boost potential portfolio returns or yield profiles. There is also more awareness of the range of opportunity that exists outside the public markets. One interesting knock-on effect is a blurring of the lines between public and private markets. That is significant: if you regard private equity as part of your overall equity bucket rather than part of a separate alternative or illiquid bucket, you may allocate more—particularly when there is such an attractive relative-returns case.

Tutrone: I think there are two key reasons to take a closer look at private markets right now. The first is that it's an abundant source of opportunistic investments; and the second is that execution risk, not market risk, is most likely to determine success. Within our private credit business, for example, we have been structuring preferred stock capital solutions for private companies. These investments have the potential for near-private equity return profiles, but mostly in the form of contractual returns, and at less than half the valuation multiple of the same company's common equity. Why such an attractive risk-reward profile? Because these private companies need capital to pursue growth opportunities, but their owners don't want to dilute their common equity or increase financial leverage: preferred stock fills that gap between debt and common equity.

> ***"There are two key reasons to consider private markets right now. First, it's an abundant source of opportunistic investments. Second, execution risk, not market risk, is most likely to determine success.***
>
> **– ANTHONY TUTRONE**

Those growth opportunities relate to the other point about execution risk. We see a meaningful tilt toward high-growth companies across the industry and in our own portfolios. In our co-investments, the proportion of companies projecting annual revenue growth in excess of 10% has more than doubled over six years, to around two thirds of our deals. Moreover, the equity in the average private equity deal is now more than 50%. As a result, generating private equity return opportunities is no longer about buying cheap and heaping on leverage: it requires earnings growth. Private assets, like public assets, aren't cheap anymore. That's one reason why the focus is now on the execution plan for taking advantage of growth opportunities. The main difference between public and private investing is that there is much more you can do as a private owner to ensure that the risk you take is business execution risk and not valuation risk. We believe that, in today's environment, the ability to tilt the playing field in that way is meaningful.

LOOKING BACK

Last November, the heads of our four investment platforms identified the key themes they anticipated would guide investment decisions in 2021.
As the year draws to a close, we review and give ourselves a grade out of five for each one.

MACRO: THE WORLD AFTER THE CORONAVIRUS

1. A RETURN TO EARLY-CYCLE DYNAMICS—BUT NO SUBSTANTIAL REFLATION

What we said: Following many years of late-cycle dynamics, the coronavirus pandemic caused a deep recession that has set a low base from which to rebound. We now face early-cycle dynamics not seen for a decade—above trend-line GDP and corporate earnings growth, declining unemployment and rock-bottom interest rates. In addition, we see limited drivers of substantial inflation before 2022, and, without significant continuing fiscal stimulus, no clear change in the underlying causes of secular stagnation.

What we've seen: Like many other investors, we have been surprised by the strength of the economic indicators and must acknowledge that some have printed higher than we would have expected from mere year-on-year base effects. While its size and scope remain under debate, U.S. President Biden's fiscal plans seem likely to be the "significant continuing fiscal stimulus" that we thought necessary to generate structural rather than transitory, low base-effect inflationary pressure. The biggest surprise, however, has been the sheer scale and breadth of the supply-and-demand mismatches that have pushed inflation higher well into the second half of the year, the effects of which look likely to extend higher inflation into 2022 and beyond.

GRADE: ★★☆☆☆

2. POPULISM IS HERE TO STAY

What we said: The end of Donald Trump's presidency is not the end of political populism or its causes, in our view, in the U.S. or more broadly. This likely means continued political and geopolitical volatility, but perhaps more importantly, it also makes additional fiscal stimulus more likely, as governments pursue borrow-and-spend policies seeking to address the causes of populist discontent. The efficiency and effectiveness of these policies will likely be key in assessing the likelihood of avoiding secular stagnation.

What we've seen: The U.S. has rejoined a number of multilateral agreements and institutions, as expected, but it has also taken some foreign-policy decisions that have upset traditional allies; and at home it is pressing forward with bold fiscal stimulus packages and a new, "Buy American" industrial strategy. China, in a series of major announcements, has doubled down on an explicitly autarkical economic policy and state financing of the manufacture of critical technologies such as semiconductors. Tensions over Taiwan have become the major geopolitical concern of the year. In Europe, right-wing populist governments in the east continue to pose challenges to the wider E.U., Brexit continues to cause friction in the west, and a more free-spending coalition looks likely to be leading Germany soon. Latin America is experiencing a surge in support for populists of both the right and the left. In the U.S. and Europe, we see a shift in the way that fiscal and monetary policies are being articulated, away from the idea that they should be broadly beneficial and toward more explicit social equality-related targets.

GRADE: ★★★★★

3. ACCELERATED DIGITAL TRANSFORMATION PUTS DOWN ROOTS

What we said: During the coronavirus crisis, many consumers and businesses have fully embraced working, shopping and accessing services from home. The case for digitalization and automation in factories, warehouses, offices, homes and other workplaces has been strengthened. Some of this is likely to spring back once the pandemic eases, but in our view the trends have not only accelerated but permanently transformed many consumer and business practices. During 2021, we will move firmly into the world of 5G connectivity, the Internet of Things and cloud computing.

What we've seen: Evidence of a desire to continue working from home after the pandemic is mixed. Policy statements from major employers are also mixed, with most appearing to embrace hybrid working. At this stage, it seems likely that there will be substantially more remote working in 2022 than there was in 2019. Gartner's June 2021 *Forecast Analysis: Remote and Hybrid Workers Worldwide* estimates that 47% of knowledge workers will be working remotely by the end of 2022, up from 27% pre-pandemic, and that "organizations will be forced to bring forward digital business transformation plans by at least five years as a survival plan" for this environment. The latest Gartner Forecast: *Public Cloud Services, Worldwide, 2019-2025,* as of September 2021, estimates 26% growth in end-user spending on public cloud services in 2021, which is already up from its forecasts earlier in the year, and comes on top of already rapid growth during the pandemic. "Industry 4.0," "smart factory" and "smart warehouse" momentum appears strong, too. ABI Research's August 2021 report, *Modern Fulfillment Trends: Warehouse Robotics, Handheld Devices and Wearables,* points to this industry's efforts to "ramp up its automation efforts considering the increased order volume and labor shortages fueled by the pandemic."

GRADE: ★★★★☆

4. SUPPLY CHAINS BECOME SHORTER AND MORE DIVERSIFIED

What we said: Geopolitical uncertainty, economic populism and simple wage and cost convergence have been shortening global supply chains for more than a decade already. The coronavirus pandemic added further impetus to this trend. The ongoing transformation of supply chains can reduce companies' and industries' exposure to disruption risk, but at some cost to investors and consumers.

What we've seen: When we looked back at this for our Mid-Year Update in July, we had already seen a semiconductor shortage due in part to U.S. auto manufacturers shifting away from mainland China's suppliers, and a growing body of survey evidence that business leaders were moving supply-chain resilience and transparency to the top of their agenda. The second half of the year delivered a stubbornly persistent spike in inflation, as recovering business and consumer demand met with supply chains still beset with pandemic-related problems. This seems likely to increase the urgency of supply-chain re-organization, and that prospect is an important aspect of one of this year's themes: "Inflation: Higher and More Problematic." The only real question appears to be the ultimate scale of this re-organization. McKinsey, in *Risk, resilience, and rebalancing in global value chains*, published in August 2020, estimates that it is feasible to shift between 16% and 26% of world trade to different countries over the next five years—equivalent to almost $5 trillion of exports each year.

GRADE: ★★★★☆

FIXED INCOME: STATIC YIELDS, VOLATILE CURRENCIES

5. LOW YIELDS AND FLAT CURVES DEMAND OPPORTUNISM IN CREDIT MARKETS

What we said: As with every recession, the 2020 coronavirus recession caused credit spreads to widen. Rapid and substantial central bank intervention made this an exceptionally short-lived phenomenon, however, leaving investors with a highly complex mix of early- and late-cycle characteristics, and default and valuation risks. We think this demands a flexible, "go-anywhere" approach to credit, backed up by the ability to make relative value assessments across fixed income sectors, broad expertise and nimble decision-making.

What we've seen: The mix of early- and late-cycle characteristics has arguably been clearest in fixed income markets so far this year, where a rapid, 80-basis-point rise in U.S. Treasury yields in the first four months left credit markets virtually unscathed. Spreads in both investment grade and high yield markets actually tightened as investors scrambled to offload interest rate risk. Tighter spreads do increase the need to seek out some extra capital appreciation through tactical allocation. In addition to sector-rotation opportunities such as tactical allocation between CCCs and "fallen angels" in the high yield universe, 2021 has continued to see credit issuer selection making large contributions to portfolio performance. We have noticed new issues quickly re-pricing, in both directions, based on investors' assessment of credit fundamentals. The flexibility to seek out long-term relative value and short-term tactical trades across the full range of credit markets has been a key source of incremental return opportunities in an environment of rapidly rising Treasury yields and spreads grinding tighter. We think this is likely to continue as long as investors assume, as we do, that central banks stand ready to keep a cap on investment grade yields as we head deeper into a mid-cycle credit environment.

GRADE: ★★★★☆

6. MACROECONOMIC DYNAMICS WILL BE EXPRESSED THROUGH CURRENCIES

What we said: The major central banks have signaled their intention to maintain low interest rates a long way out on the yield curve. With rates volatility suppressed, worldwide growth and inflation differentials are more likely to be expressed through currency markets. Heightened currency volatility and the end of persistent U.S. dollar strength would strengthen the case for dynamic currency hedging.

What we've seen: Central banks could not prevent a run-up in longer-dated nominal yields in the early part of the year, which coincided with a New Year rally for the U.S. dollar and a continuation of the secular decline in currency market implied and realized volatility. At the end of March, however, the upward trend in Treasury yields stalled, before reversing sharply in the second quarter. This appeared to be due largely to anticipation that the Federal Reserve (Fed) would adopt a slightly more hawkish stance to remove some concern about overheated inflation from the market. The third quarter brought substantial supply-and-demand mismatches that fed into higher and more persistent inflation than many market participants had expected, leading to another upswing in yields. Quiet bond markets were not a feature of 2021, therefore—although, despite the ups and downs, the 10-year Treasury yields remains below our year-end target. We do think that central banks will work to prevent an unruly rise in yields in 2022, while currency markets may now be shifting attention to the U.S. twin deficits and the eventual costs of fiscal stimulus, which could lead to a period of dollar weakness and higher currency volatility.

GRADE: ★★☆☆☆

EQUITIES: CYCLICAL OPPORTUNITIES, LONG-TERM THEMES

7. SECULAR GROWTH STOCKS ULTIMATELY PREVAIL OVER CYCLICAL RALLIES

What we said: Early-cycle dynamics will likely favor cyclical stocks initially as economic growth accelerates, but ultimately, we believe the looming backdrop of secular stagnation—characterized by low rates, low growth and low return outlooks—will lend support to quality growth stocks and long-duration assets. Nonetheless, if 2020 has taught us anything, it is humility—it remains important to diversify across style factors.

What we've seen: As we expected, given the very strong early-cycle flavor of so much of the economic data, cyclical stocks pulled ahead of both defensive and growth stocks early in the year. As U.S. Treasury yields increased their upward momentum in the first quarter of the year, cyclical stocks pulled ahead of higher-quality and growth-oriented stocks, partly due to investors seeking out more explicit exposure to the short-term economic recovery, and partly due to concerns about the interest-rate risk of growth companies' longer-dated earnings projections. What surprised us is the sheer strength of the economic data and the speed with which value stocks re-priced: by mid-June, returns to U.S. large-cap value were more than twice those to U.S. large-cap growth. Since then, growth has staged a comeback, but with Treasury yields on the way back up, it is not clear how long that will last. Inflationary dynamics could persist beyond the end of 2021, and that is reflected in this year's equity themes.

GRADE: ★★★☆☆

8. A THEMATIC APPROACH CAN HELP TO UNCOVER LONG-TERM GROWTH

What we said: In a low-growth world, a thematic approach can help identify genuine long-term growth opportunities. The coronavirus crisis has accelerated some key themes, especially the digital transformation of the economy, while also showing how these themes transcend regions and sectors. We believe thematic investing is about finding quality companies exposed to secular growth themes: it must be driven by in-depth research, especially when large-cap growth stocks are trading at such stretched valuations.

What we've seen: While we would have acknowledged, at the end of 2020, that base effects would ensure that the world was unlikely to be "low-growth" over the next 12 months, the extent to which it has turned out to be high-growth has surprised us. The corollary to that has been marked outperformance by value and cyclical stocks. Moreover, stocks associated with portfolio strategies focused on secular, technology-related themes such as next generation connectivity and mobility have tended to underperform growth indices as well as value indices, in some cases due to the duration of their earnings projections and in others due to the strong performance they experienced during the height of the pandemic crisis. Nonetheless, the fundamentals underpinning the transformational trends to which these stocks are exposed arguably remain strong, even if other forces are determining stock market pricing now. We still expect the shadow of secular stagnation to assert itself eventually, re-igniting appetite for reasonably priced secular growth opportunities—but elevated growth and inflationary dynamics could persist beyond the end of 2021.

GRADE: ★★☆☆☆

ALTERNATIVES: RESILIENCE FOR GROWTH, NIMBLENESS FOR VALUE

9. RESILIENT GROWTH WILL BE IN FAVOR—BUT IT WON'T COME CHEAP

What we said: We have seen the coronavirus crisis accelerate the trend for private equity to favor businesses with resilient growth prospects and executable plans to add value. This translates to favoring sectors such as software, technology and health care. By region, it manifests as a tilt toward growth markets such as China. Valuation is the biggest risk in our view, which will likely need to be mitigated by implementing significant strategic and operational improvements to accelerate potential earnings growth.

What we've seen: Data from providers such as Preqin indicate that the sector tilt of global private equity deals continues to favor traditionally higher-growth industries, and we see this tilt to higher growth in our own co-investment programs. During the first six months of 2021, and including investments still pending,[1] 65% of the companies to which we committed co-investment capital were projecting annual revenue growth of 10% or more; six years ago, that proportion was just 26%. There is also a notable downward trend in the proportion of private equity exits being made to other private equity firms. We think that is because, after many years in private equity managers' hands, these businesses are fully valued and have little scope for further operational enhancement. By contrast, we would argue that these finely tuned and well-managed companies are perfect for strategic corporate acquirers and the public markets.

GRADE: ★★★★☆

10. A CONTINUING ROLE FOR OPPORTUNISTIC AND IDIOSYNCRATIC STRATEGIES, LIQUID AND ILLIQUID

What we said: Next year will likely bring an unusual mix of early- and late-cycle dynamics, and ongoing pandemic and policy questions. Any resulting volatility or uncertainty is likely to create windows of opportunity for liquid strategies such as equity long/short, distressed and short-term trading strategies, but also for less liquid strategies such as private equity secondaries, opportunistic credit and structured equity. Idiosyncratic and uncorrelated strategies such as insurance-linked securities and macro trading could help lend stability to portfolios during any periods of increased volatility.

What we've seen: Recovery dynamics meant that the year started well for liquid alternatives, and with the sole exception of the Latin America Index, all the benchmark HFRI indices of hedge fund performance, as reported by HFR, were in positive territory at the end of September, the latest available data. For many strategies, however, performance stalled in the third quarter. The HFRI Fund Weighted Composite Index was up by 10.1% in June, but gave some basis points back thereafter. Equity Hedge and Event Driven strategies started particularly well, but then struggled. This appears to be largely due to the overwhelming macro inflation and supply-chain disruption that characterized the economy and markets as the year progressed: among the best performers were the Equity Hedge Energy/Basic Materials and Macro Commodity Indices, which had both outperformed the S&P 500 Index, year-to-date at the end of September. In addition, the Relative Value Yield Alternatives Index had outperformed the S&P 500 Index, at 27.71%—in our view reflecting underlying themes of the search for non-Treasury sources of income. The year was also a difficult one for insurance-linked strategies, given large losses associated with Hurricane Ida and Germany's summer floods.

GRADE: ★★☆☆☆

[1] Please note there can be no assurance that any pending transaction will close.

All information is as of September 30, 2021 unless otherwise indicated.

INDEX DEFINITIONS

The **S&P 500 Dividend Aristocrats Index** measures the performance of S&P 500 companies that have increased dividends every year for the last 25 consecutive years. The Index treats each constituent as a distinct investment opportunity without regard to its size by equally weighting each company.

The **HFRI Fund Weighted Composite Index** is a global, equal-weighted index of single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or $10 Million under management and a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds. The HFRI strategy indices are sub-indices of the HFRI Fund Weighted Composite Index.

FIRM HEADQUARTERS

New York
800.223.6448

REGIONAL HEADQUARTERS

Hong Kong
+852 3664 8800

London
+44 20 3214 9000

Tokyo
+81 3 5218 1930

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1290 Avenue of the Americas
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