SOLVING FOR 2023

NEUBERGER | BERMAN

OUR INVESTMENT PLATFORM

FIRM ASSETS UNDER MANAGEMENT $408bn

MULTI-ASSET STRATEGIES

	EQUITIES	FIXED INCOME	HEDGE FUNDS & LIQUID ALTERNATIVES	REAL ASSETS
PUBLIC MARKETS $299bn	**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** Options Global Macro Risk Parity Risk Premia	Commodities Diversified Real Assets Global REITs U.S. REITs Long/Short Real Estate – Almanac
	$110bn	$161bn	$25bn	$3bn
	PRIVATE EQUITY	**PRIVATE CREDIT**	**SPECIALTY ALTERNATIVES**	**PRIVATE REAL ASSETS**
PRIVATE MARKETS $109bn	Primaries Co-Investments Secondaries Specialty Strategies	Private Debt Credit Opportunities Special Situations Residential Loans Specialty Finance Private Placement European Private Loans	Hedge Fund Co-Investments Insurance-Linked Strategies Late Stage Pre-IPO SPACs	Private Real Estate – Almanac Real Estate Secondaries Real Estate Primaries & Co-Investments Infrastructure
	$77bn	$20bn	$5bn	$7bn

ESG INTEGRATION | GLOBAL RESEARCH CAPABILITIES | DATA SCIENCE

SOLVING FOR 2023

TEN FOR 2023

Each year, our investment leaders identify 10 key themes that they believe will be prominent in the markets over the next 12 months. The themes for 2023 are summarized below. A roundtable discussion of the themes begins on page 5.

MACRO: BACK TO THE "OLD NORMAL"

1 A YEAR OF PEAKS AND TROUGHS WITH A RETURN TO THE "OLD NORMAL"

We think the next 12 months are likely to see this cycle's peaks in global inflation, central bank policy tightening, core government bond yields and market volatility, as well as troughs in GDP growth, corporate earnings growth and global equity market valuations. But we do not believe this will mark a reversion to the post-2008 "new normal". We see structural forces behind persistently higher inflation—and therefore a persistently higher neutral interest rate, a higher cost of capital and lower asset valuations.

2 ADJUSTING TO HIGHER RATES CONTINUES TO DISRUPT

As rates rise and investors demand higher risk premia, the cost of capital goes up. This happens at some point in most cycles, but we believe the current adjustment is structural, and it is proving unusually large and rapid—raising the risk that it is disruptive. Many mortgage borrowers could be shocked when they refinance at 2023 rates. Many corporate capital structures built for a low-rate environment are in for a similar sharp adjustment. And with government debt exploding during the pandemic and "bond vigilantes" back on watch, some sovereigns may be forced into the kind of uncomfortable re-think recently forced upon the U.K. We think investors should be watchful for weak points that could cause broader disruption.

3 MORE DE-GLOBALIZATION

Manufacturing supply chains, commodity markets, financial systems, regulatory regimes, fiscal and monetary policy frameworks—we have seen them all become more integrated between 1980 and 2008, and more fragmented since. We see many and varied reasons, including the political backlash against the unequal outcomes of globalization; the shocks of the Great Financial Crisis and the pandemic; the waning internationalism of the U.S.; and increasing tensions as geopolitical blocs realign. We anticipate more landmarks on this journey in 2023, as it is driven by strong political, security and risk management imperatives.

4 REDOUBLED EFFORTS TO CLARIFY "ESG"

Environmental, social and governance (ESG) investing became increasingly politicized in 2022 as the crisis in Ukraine triggered strong outperformance from fossil fuel assets, and stoked fears that ESG investors were starving domestic energy providers of capital. To counter this politicization, we believe more clarity is needed on the distinction between investing processes and investing outcomes. ESG integration is a process designed to ensure that financially material ESG factors are considered, alongside others, in traditional investment analysis. Exclusions, sustainable investing and impact investing pursue a specific non-financial outcome, in a portfolio or in the real world, alongside managing financial return. We anticipate focus on this clarification from the industry and its regulators in 2023.

FIXED INCOME: THE RETURN OF MARKET DISCIPLINE

5 PERSISTENT INFLATION SUGGESTS PERSISTENT BOND MARKET VIGILANCE

We enter 2023 with high inflation and extreme levels of government debt. Against this background, we see bond investors standing up more strongly for their interests against policymakers. Markets are punishing policy inconsistencies between fiscal and monetary authorities within sovereigns; and excessive fiscal or monetary policy divergences between sovereigns. We think core government bond yields may be range-bound where policies are consistent, but potentially higher and more volatile where policies are inconsistent. Despite the pace of policy adjustment and attendant market rate moves, outside the U.K. central banks have so far not had to intervene to maintain market liquidity—but an emergent policy conflict remains a tail risk for bond markets in 2023.

6 ABILITY TO ABSORB HIGHER RATES LIKELY TO DOMINATE CREDIT

Over the course of a decade, many financial structures have been built around falling and ultimately near-zero rates, including a lot of debt structures. Floating-rate borrowers will need to adjust right away, but because we see structurally higher rates ahead, we think fixed-rate borrowers will eventually need to adjust, too. We do not anticipate a major uptick in defaults: the economy has historically been able to generate healthy growth with rates at these levels, balance sheets are generally strong and maturities are generally several years away, supporting a range of fixed income credit markets. That said, in our view, the sooner investors work higher-rates-for-longer into their credit analyses, the sooner they are likely to make what we regard as the necessary portfolio adjustments.

EQUITIES: WINNERS AND LOSERS

7 EARNINGS ESTIMATES RECALIBRATE AND FAVOR THE FITTEST

Much of the equity bear market of the first half of 2022 appeared to be due to the application of higher discount rates to largely unchanged future earnings estimates. Consensus earnings growth estimates for 2023 did not fall in the same way as real GDP growth estimates, perhaps because high inflation has supported nominal GDP growth. As inflation turns downward but remains relatively high as the economy slows, we think earnings estimates are likely to be revised down. We also think dispersion will increase, favoring companies that are less exposed to labor and commodity costs and have more pricing power to maintain margins, and use less aggressive earnings accounting. We believe this will translate into greater dispersion of stock performance.

8 MANAGEMENT TEAMS RE-FOCUS ON SHAREHOLDER VALUE

When equity investors demand higher risk premia and bond yields present a meaningfully higher return hurdle, one way to keep the cost of capital down is to re-focus on delivering tangible, near-term shareholder value. When the economic going gets tough, effective management teams typically start improving capital structures and balance sheets, spinning out lower-return divisions, acquiring strategic targets finding efficiencies, and engaging creatively with shareholders. In these conditions we tend to see the true potential of alignment between active shareholders and company management: 2023 could be a lively year in the boardroom.

ALTERNATIVES: CHALLENGES AHEAD, BUT OPPORTUNITIES FOR THE NIMBLE

9 MORE DISPERSION IN PRIVATE MARKETS PERFORMANCE

Private markets won't be impervious to the ongoing slowdown. Exits are more difficult in volatile public markets, and while private company valuations tend not to fall as far as public market valuations, we do think they are likely to decline. Such a challenging environment is likely to result in performance dispersion that tends to favor higher quality companies, especially where management has well-defined growth plans as opposed to relying on leverage and multiple expansion. It's also important to remember that private equity funds generally invest over multi-year periods, typically enabling new and recent-vintage funds with "dry powder" to seek opportunities as valuations decline through the slowdown.

10 A GROWING OPPORTUNITY SET FOR OPPORTUNISTIC INVESTORS

In a market downturn, liquidity providers can be selective across liquid and illiquid alternatives and niche opportunistic strategies as valuations decline—or even dislocate. Among liquid alternatives, we think global macro and other trading-oriented hedged strategies can continue to find opportunity amid volatility. We anticipate increasing opportunities to provide niche capital solutions at attractive or even stressed yields as debt structures are reworked. And on the illiquid side, we think private equity secondaries has become a buyers' market. Economic strains could also open up long-term value opportunities in inflation-sensitive real assets, in markets both liquid (e.g., certain commodities) and illiquid (e.g., real estate).

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ANTHONY D. TUTRONE
Global Head of Alternatives

ROUNDTABLE DISCUSSION

BACK TO THE "OLD NORMAL"

As 2022 ended, 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 2023.

Joseph Amato: As we head into 2023, the big question on many investors' minds is, "How deep might this economic decline be?" It's a difficult question because corporate and household balance sheets worldwide are generally less levered and in stronger shape than they would normally be at the turn of a cycle; and because high inflation has opened an historic gap between real and nominal GDP growth. Nominal growth is what builds nominal corporate profits: if that is running at 6%, it can mitigate the impact of the decline in real economic growth. Finally, we could see considerable divergence between flat or negative real growth in the U.S. and Europe on the one hand, and potentially strong positive real growth from China on the other. China faces difficult long-term headwinds from its aging population and real estate debt overhang, but it will start the year from a very low base due to its "zero-COVID" lockdowns. China could grow by 6% next year or by 3%—and the path it takes is likely to make a big difference to the global outlook. Even if we are spared a technically defined global or U.S. recession in 2023, the important thing is that conditions are likely to feel like a recession—indeed, a stagflationary recession—to many consumers and businesses.

"We likely face a year of cyclical peaks and troughs: peak inflation, peak central bank policy tightening, peak core government bond yields and peak market volatility; and troughs in real GDP growth, corporate earnings growth and global equity market valuations."

– ERIK KNUTZEN

Erik Knutzen: I think we can be relatively confident that the next 12 months will see the economy and markets settle into their new regime—and that this will mark a structural transition rather than a cyclical one. So, we likely face a year of cyclical peaks and troughs: peak inflation, peak central bank policy tightening, peak core government bond yields and peak market volatility; and troughs in real GDP growth, corporate earnings growth and global equity market valuations. But we don't think those peaks and troughs will mark the beginning of a path back to recent conditions. The pendulum will swing back, but not all the way.

Tank: Whenever there is rapid change, people often presume it will be followed by mean reversion. Not this time. We think higher inflation is structural, for all the reasons we've been describing over the past 18 months: deglobalization, China's economic reorientation, the shift to more accommodative fiscal policy and decarbonization. It follows that we think higher interest rates are structural, too. And this is not a particularly bold call: it's about a normalization after a decade of something deeply abnormal. I think the 2020s could end up looking like the 1990s in reverse. The 1990s started with high inflation and ended with low inflation, and the average was just over 3%—which is where the U.S. Treasury market's 10-year breakeven inflation rate got to earlier this year. The current estimate for the Federal Reserve's terminal rate is around 5.0%, close to the historical average going back to 1950.

Amato: Goodbye to the "New Normal" and welcome back to the "Old Normal". We got used to money being virtually free, but that was far from normal. What we are returning to is normal: an environment in which capital is appropriately priced to generate an appropriate return.

Knutzen: This new world is very unlike the past decade, when the world was swimming in low-cost capital.

Ashok Bhatia: We are already seeing this reverberate through financial markets. Fixed income yields have gone from near-zero to 12-year highs in little more than a year and, depending on whether you're looking at core government bonds, investment grade corporates or high yield, that now means a 4%, 6% or 8% hurdle rate for other investments.

Tank: The "bond vigilantes" are back. Markets are back in control, and that's probably for the better, on balance. But it's a very fragile environment in which to have markets asserting their influence again so aggressively.

"When financial conditions change so fast, as they have in 2022 with the strength of the dollar and U.S. Treasury yields, it's always prudent to look out for breakages somewhere in the system."

– NIALL O'SULLIVAN

Niall O'Sullivan: I'm thinking of Mark Zuckerberg and Warren Buffet: "Move fast and break things" and "Only when the tide goes out do you discover who's been swimming naked." When financial conditions change so fast, as they have in 2022 with the strength of the dollar and U.S. Treasury yields, we think it's prudent to look out for breakages somewhere in the system. And when the tide goes out fast you've got less time to grab your clothes! I think we'd agree that corporates are generally strong and that central banks are likely to step in to protect macro stability—but some entities and business models could be caught short and cause broader spillovers.

Amato: It's important for investors to be ready for nasty surprises. It's still not clear how embedded inflation might become in the labor market. The risk of a monetary policy mistake remains very high—whether that's a pivot too early by the Fed or a stumble from another major central bank as it tries to keep up with the Fed's hiking cycle. The strong dollar is causing strain all around the world. As a leveraged sector, real estate may have some still undiscovered weaknesses globally, but especially in China. The big decline in asset valuations may have caused damage in the alternative investment world that we're not fully aware of yet. And of course, there's the threat of escalation in Ukraine or over Taiwan. The list of things that could go wrong is a long one, and there will likely be others under the radar. Who would have pointed the finger at U.K. pension funds?

O'Sullivan: It's also concerning how this market fragility interacts with one of the other big issues of recent years: deglobalization. During the Financial Crisis, the Euro Crisis and again in the pandemic, monetary authorities worked in concert, making coordinated decisions on rates and providing swap lines. As the pressures of inflation cause us to lose some of that coordination, or even edge toward the weaponization of monetary policy, the risk rises of a breakdown in markets that spills over and spreads into the real economy.

Amato: This is an important dynamic. We got used to the world getting smaller and smaller for decades, especially since the fall of the Berlin Wall and China's accession to the World Trade Organization. Now it seems to be getting bigger again. Manufacturing supply chains, commodity and energy markets, financial systems, regulatory regimes and, as Niall says, fiscal and monetary policy frameworks, have all became more fragmented. The globalization genie is out of the bottle and very unlikely to get pushed all the way back in, but there are now many forces resisting it, and they are all very strong. My view is that the main force is growing political resistance to the uneven distribution of the value created by globalization: a technology- and knowledge-based economy that prioritizes free trade in goods, services, ideas and labor left enough people behind to forge an impactful coalition. China's recent policy re-orientation suggests that this eventually becomes a problem even for more centralized economies, so it's no wonder the world's market democracies are struggling to contain it. But it's not just about domestic politics. The on-shoring, near-shoring or simple diversification of supply chains following the fragility uncovered by the pandemic is about practical business decisions. The rise of new powers and blocs currently being tested in places like Ukraine and South East Asia has undermined the geopolitical pillars of globalization. I think we will see more of that in 2023, as it's a multidecade trend.

O'Sullivan: Are there any positives here? It's going to make global production less efficient and more labor-intensive, which is probably more favorable for Main Street jobs and wages than Wall Street returns, even after we account for the inflationary effect. But it's also going to be more capital-intensive—might that generate the escape velocity to put secular stagnation behind us?

"The list of things that could go wrong is a long one, and there will likely be others under the radar."

– JOSEPH AMATO

Anthony Tutrone: That's certainly part of the investment case for the energy and electrification transition, and the shift to sustainability in general. Energy independence is now a strategic and security goal for a lot of countries, as well as being an environmental imperative for the world at large. After two decades and more of low real rates and capital flows into asset-light technology businesses, higher inflation and higher rates combined with strategic and environmental imperatives may see those flows redirected into more asset-intensive investments such as renewable energy and electrification infrastructure.

Amato: There are challenges here, though, too. The U.S. Inflation Reduction Act sets out hundreds of billions of dollars of spending, investment and tax relief—but where will governments get their capital? With the prevailing populism and politicization of these issues, from the left and the right, the prospect of a carbon tax seems unlikely while trust in public-private partnership and the willingness of government to accept first loss is low.

The politicization of environmental, social and governance (ESG) investing is making these decisions more challenging for us, too, as stewards of private capital. I think our industry needs to make 2023 the year when it more clearly differentiates between the range of approaches to ESG and sustainable investing, and in practical terms that means more clarity on the distinction between investing processes and investing outcomes. ESG integration is a process designed to ensure that material ESG factors are considered, alongside many others, in traditional investment analysis.

It should not be controversial to consider labor relations and strategic plans for electrification when you're analyzing the stock of a major auto company—these are financially material risks. That is different from strategies that screen out specific sectors or companies, and it's different from sustainable investing and impact investing. These strategies pursue a specific non-financial outcome alongside managing financial risk and return, whether that outcome is the ethical or sustainability profile of stocks and sectors in a portfolio, or a social or sustainability impact in the real world. Clearer distinctions can help consumers better understand the investment products they are buying and may take some of the heat out of the political debate.

O'Sullivan: The invasion of Ukraine and the subsequent energy crisis has inflamed this debate. It would be helpful for the wider world to know that ESG is not about excluding entire sectors, starving critical domestic energy industries of capital or pushing for net-zero emissions right away. This year has brought home the political and practical difficulties of the energy transition. We believe pragmatic investment approaches recognize that today's world requires hydrocarbons for power, heat and food production, and strategies that explicitly focus on transition opportunities will become more prevalent than those based on immediate exclusion. Ultimately, however, we do think the environmental necessity of the energy transition is undeniable and the Ukraine crisis strengthens the energy-security argument, making this one of the most compelling investment opportunities in a generally low-growth, high-inflation world.

FIXED INCOME: THE RETURN OF MARKET DISCIPLINE

Amato: Speaking of where governments will find their capital, one of the more important incipient trends we've seen emerge in 2022 is the tough questions bond markets are posing to governments. Developed economies haven't faced this kind of market discipline for a long while.

Tank: We mentioned the potential for cracks to appear when things adjust so rapidly. The movement of risk onto government balance sheets, and the further explosion of public debt to fight the pandemic, have put sovereigns and currencies high on the list of markets to watch. With inflation bringing the bond vigilantes back out on patrol, inconsistent policy is more likely to be punished with a significant risk premium. Policymaking can be inconsistent in two ways: between the fiscal and monetary authorities within a country, as we've seen recently in the U.K.; and among sovereigns, as we see in Japan's outlier status on monetary policy, which is a divergence that has yet to be resolved.

Bhatia: Those risk premia can make a significant difference. We think the path of policy rates is close to being priced into many core government yield curves, and with consistent policy those markets could trade in a range over the coming months. But where policy is inconsistent, there could be substantial volatility as investors seek to price the uncertainty.

> *"We've had a decade of low and declining rates. That's a lot of time for them to become entrenched in the way capital structures are built and investment strategies are designed."*
>
> **– BRAD TANK**

Tank: The situation in the U.K. has shown how risk premia that arise in response to policy failures can spread quickly into the real economy, via mortgages, for example. We've had a decade of low and declining rates. That's a lot of time for them to become entrenched in the way capital structures are built and investment strategies are designed. Naïve risk parity strategies have already been caught out by rising rates and higher equity-bond correlations. Real Estate Investment Trusts (REITs) have been repricing for a persistently higher cost of debt. Many mortgage borrowers who were not stretched when paying 2021 rates could be shocked when they refinance at 2023 rates, and corporate capital structures built for a low-rate environment may be in for a similar sharp adjustment. As we said earlier, we think people should assume that the current rate structure persists. The sooner everyone from mortgage borrowers to high yield credit analysts factor that into their thinking, the better prepared they'll be, in our view.

Bhatia: We do not anticipate a major uptick in defaults in 2023, as balance sheet strength and maturities that are not due for several years support a range of credit markets, but the ability to adjust to structurally higher rates is likely to determine how investors assess and price creditworthiness.

EQUITIES: WINNERS AND LOSERS

Amato: As we speak, third-quarter corporate earnings season results suggest surprising resilience. Put that together with investors looking out for "peak inflation," and the stock market rally that got going in October could extend like the one we got in July, especially if analysts continue to pencil in $200-plus per share for the S&P 500 Index in 2023. If you're investing with a 12- to 18-month view, however, we would caution against getting sucked into what we regard as these bear-market rallies.

We think there is some meaningful equity market downside still to come because we see earnings estimates for 2023 as too high—not least because the quality of current earnings is quite poor, with the highest use of accruals in at least 30 years of history. I mentioned the divergence of real and nominal GDP at the top of this discussion, and it's possible that this is muddying the picture on where earnings are headed, because earnings are reported in nominal terms, not real. As the direction of inflation turns downward even as the level of inflation remains high, we think the challenges of persistent inflation will start to become clearer and we will see not only lower reported and estimated earnings, on average, but wider dispersion of earnings between companies. The fit and the not-so-fit are likely to fare very differently. Those less exposed to labor and

commodity costs, less exposed to rising rates through high debt levels and with more pricing power to defend margins are likelier to weather the conditions and find favor with investors, in our view. This is another aspect of the return to the "old normal". The market is no longer willing to pay up for profits that might arrive in 2099. We think it now wants real companies making real profits and promising real growth, with credible business plans and credible financing models.

O'Sullivan: If the past 10 years was "the decade of narrative," the next 10 years looks set to be "the decade of numbers." With low inflation and low rates all the way out along the yield curve, investors could afford to listen to stories as a lot of the potential for good earnings news far into the future automatically got priced into present valuations. Structurally higher rates favor those companies that are fittest today, however: investors need companies to deliver now—preferably via profits and cash flow.

Knutzen: On the Multi-Asset team we generally favor high-quality, low-beta U.S. large cap stocks at the moment, for similar reasons. But we're also considering the case for a more positive view on Japan equities. It is one of the cheapest developed markets in the world. While policy could shift early in 2023, the yen is likely to continue to be weak and the fiscal and monetary environment will still be relatively accommodative, supporting corporate earnings. The consumer and tourism are potential positives. And the longer-term shift to more shareholder-friendly corporate governance creates opportunities for stock picking and generally higher valuations.

> *"Private companies often have more flexibility to adapt operationally to the changing economic environment, and they can often adjust capital structures quickly, too, which can help to dampen the impact of rising rates."*
>
> **– ANTHONY TUTRONE**

Amato: It's a market to watch, for sure—it's a little difficult to take a clear view given the local policy uncertainty and the prevailing global recessionary winds. But I think Erik touches on a key theme for 2023 when he mentions the shift to shareholder-friendly corporate governance in Japan. Why do we see that in Japan after so many years of resistance? Because it has gotten harder and harder to achieve growth there. Well, the rest of the corporate world increasingly faces the same challenge in the current downturn. We've talked about the cost of capital going up and the higher hurdle companies face in trying to attract equity investors when bond yields are at 5% or more. One way to manage that is to re-focus on tangible, near-term shareholder value. A tough economic environment provides a natural incentive to start engaging with shareholders on creative ways to add that value. Anticipate a lot of work in boardrooms and at the top levels of management on improving capital structures and balance sheets, spinning out lower-growth divisions and reinvesting in higher-growth parts of the business, and acquiring strategic targets at opportunistic valuations.

ALTERNATIVES: CHALLENGES AHEAD, BUT OPPORTUNITIES FOR THE NIMBLE

Tutrone: If the theme in public markets is growing dispersion between winners and losers, much the same holds in private markets. Private equity and debt funds will not be impervious to the pain of the downturn. We've talked about how capital structures will need to adjust to structurally higher rates and less robust financing markets—and while many companies have hedged much of their interest rate risk, that will also cause difficulties in private equity. We've talked about public market earnings estimates being revised down—and private markets are likely to see that, too, if not to the same extent. And we've talked about ongoing volatility in public markets—that is likely to limit exits via Initial Public Offerings limited for some time.

All that being said, private companies have some advantages. They often have more flexibility to adapt operationally to the changing economic environment. Management can often adjust capital structures quickly, too, which can help to dampen the impact of rising rates: most debt is covenant-lite or even covenant-free, and private investors can inject equity more easily than either family owners or public owners.

So what does that mean overall? As in public markets, we think conditions will favor private companies with pricing power, lower labor and commodity costs, and moderate debt, and General Partners with a longstanding record of bringing value-additive industry skills and experience to their investments. We think dispersion between their performance and the rest will grow. Having flexibility at the company level is likely to be an advantage, and we think the same will be true at the level of the General Partner. In the simplest sense, that means being able to invest as valuations decline and volatility increases, because you hold significant cash as dry powder: this is likely the reason why, historically, we have seen fund vintages raised around the top of public equity market valuations often turn out to be among the best performers. It also means having the flexibility to invest in private equity secondaries, where we think there will be high demand for liquidity as both Limited Partners and General Partners look to raise cash. We also see a lot of opportunity for providers of specialist capital solutions, such as preferred stock in private companies that are adjusting their capital structures.

Knutzen: This theme of flexibility and tactical opportunities in volatile, potentially dislocated markets informs why we favor alternatives in the Multi-Asset team at the moment. We think real assets such as commodities, real estate and infrastructure remain important as potential beneficiaries of structurally higher inflation. But we also favor those specialist capital solutions and liquidity providers that Tony mentions, as well as global macro and other trading strategies that can seek opportunity from volatility and potentially bring diversification when conditions are difficult for market risk. Given our macro outlook of various economic challenges, potentially disruptive transitions and heightened risks, we believe 2023 will favor those who remain flexible, nimble and ready to deploy liquidity.

LOOKING BACK

Last November, our investment leaders identified their 10 key themes for 2022. As 2022 ends, we look back to see how well they anticipated the events of the year.

MACRO: ENTERING A NEW AGE

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

What we said: 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.

What we've seen: It has been a volatile cycle, for sure—but one that could be cut much shorter than we anticipated. After a 40-year absence of any recession caused by inflation, supply-chain imbalances or energy shocks, one looms on the horizon as we write. Central banks have signaled their willingness to act aggressively to get prices back under control, even to the extent of destroying jobs. We anticipated higher and more problematic inflation, and saw this generating volatility as central banks gradually calibrated their stance. The war in Ukraine unleashed inflation that was even more problematic than we expected: with low unemployment in many developed economies, this supply-led, cost-push inflation is feeding into stickier demand-pull inflation rather than lower consumption; meanwhile, fiscal authorities are often erring, as we anticipated, on the side of support via spending, tax cuts and energy market interventions. That has forced central banks to be more aggressive than they might have been without the shock of the war, threatening a premature end to the post-pandemic cycle.

GRADE: ★★★☆☆

2. INFLATION: HIGHER AND MORE PROBLEMATIC

What we said: 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.

What we've seen: Did we think 2022 would see U.S. inflation reach 9.1%, eurozone and U.K. inflation hit double figures, and prices rising at 3% even in Japan? No. But are the two major disruptions of the year closely related to our list of longer-term inflationary pressures? Yes. The consequences of China's "zero-Covid" lockdowns—slower growth, lower exports, continuing supply-chain disruptions—have offered an extreme foretaste of the potential impact of the country's domestic economic reorientation. The weaponization of commodities in the war in Ukraine has given us a punishing insight into the potential interim costs (as well as the strategic imperative) of the energy transition. And central banks' subsequent hawkish turn has indeed been a major source of market volatility in 2022.

GRADE: ★★★★★

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

What we said: 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.

What we've seen: Politics and geopolitics have been a key factor in the economy and markets. China's lockdowns have had an impact on domestic and global growth. War in Ukraine has sent commodity prices and inflation soaring. Second-order political effects are building, from short-term price caps and windfall taxes in European energy markets to the far-reaching spending and investment-tax reforms of the U.S. Inflation Reduction Act. In the immediate term, fiscal and monetary authorities often appear to be acting at cross purposes—and the result is likely to be more persistent inflation and volatility.

GRADE: ★★★★★

4. NET-ZERO GOES MAINSTREAM

What we said: 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.

What we've seen: Investing for the net-zero transition, and indeed investing with regard to ESG factors in general, has hit the mainstream this year—if not in the way we anticipated. The Ukraine crisis has put energy security, and by extension reliance on fossil fuel imports, at the top of the political agenda. It arguably provides another strong argument in favor of the net-zero transition. But it has also raised questions about the potential fragility created by cutting fossil fuel use too hastily. Moreover, as ESG has risen up the political agenda, it has become polarized, to the extent that some U.S. states have passed or proposed legislation to curb or even effectively prohibit it. We said it would be "increasingly imprudent to ignore climate policy risks in portfolios." We have never said those risks all point in the same direction, and we think this year's developments illustrate the point very well.

GRADE: ★★★☆☆

FIXED INCOME: RATES ADJUST, INVESTORS EMBRACE FLEXIBILITY

5. AN ORDERLY ADJUSTMENT FOR BOND YIELDS AND SPREADS

What we said: 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.

What we've seen: We anticipated persistent inflation in 2022 but, largely due to the impact of the Ukraine crisis, the levels exceeded our expectations. As a result, government bond yields rose further and faster than we expected. Short rates and short-dated yields went from historic lows to 14-year highs in a matter of months. The move was orderly, however—although a shock in the U.K. gilt market may be a foretaste of debt sustainability issues ahead. High yield spreads widened in an orderly fashion, and primary markets remained open and liquid, presenting value opportunity relative to our default outlook. The reappearance of yield in fixed income markets has created the tactical environment we anticipated, as well as a vastly improved one for fixed investing in general.

GRADE: ★★★☆☆

6. INVESTORS PURSUE A MORE FLEXIBLE APPROACH TO SEEKING INCOME

What we said: 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.

What we've seen: During 2022 to the end of October, high yield bond indices generally lost two to three times the value of loan indices on the way to their low points. Short-duration investment grade and high yield bond indices also fell two to three times as much as their respective full-market indices. This points to the advantages investors would have had if they entered the 2022 with a holistic focus on relative risk-adjusted yield and spread across several markets. It also reflects the tactical environment that emerged as meaningful yield reappeared in fixed income markets through the course of the year. Looking into 2023, as the rate-hiking cycle peaks and high yield, investment grade corporate and even some core government bond markets begin to look more attractive, investors may return to less exotic fixed income markets for strategic, buy-and-maintain yield opportunities. These markets may also begin to offer more diversification against equity risk once again.

GRADE: ★★★★☆

EQUITIES: REFLATIONARY THEMES

7. A REFLATION TAILWIND FOR VALUE AND CYCLICAL STOCKS AND REGIONS

What we said: 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.

What we've seen: Value has outperformed growth, because of its shorter duration. And emerging markets have underperformed, as we anticipated, due to the deteriorating macro environment and strong dollar. But inflationary expansion did not support cyclical stocks or small caps: we got the inflation, but the impact of the Ukraine crisis made it so high, and the central bank response to that was so hawkish, that markets quickly priced for economic contraction rather than expansion. We were already cautious on equity market valuations, particularly in growth and technology but, after Russia's invasion of Ukraine in February, our view on the broader earnings outlook also became more cautious than it was at the end of 2021.

GRADE: ★★☆☆☆

8. WITH STRETCHED MARKET VALUATIONS, INCOME BECOMES MORE IMPORTANT

What we said: 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.

What we've seen: Value has outperformed this year, as we anticipated, because of its more attractive valuations and shorter duration; equity income, whose cash-now-versus-cash-tomorrow profile also exhibits short duration, has outperformed, too. "Cash now" has lower economic risk attached to it as well as lower interest rate risk, and cash-generative companies are often in traditionally defensive businesses. As a result, equity income benefitted from the additional tailwind of the deteriorating macro environment, particularly after Russia's invasion of Ukraine in February.

GRADE: ★★★★☆

ALTERNATIVES: NO LONGER ALTERNATIVE

9. A BIGGER MENU OF NON-TRADITIONAL DIVERSIFIERS FOR INVESTORS

What we said: 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.

What we've seen: In a year where traditional stock and bond markets both declined dramatically, and inflation hit levels not seen since the 1970s, investors benefited from exposure to a broad array of alternatives and focused efforts on increasing portfolio diversification for the future. Allocations to inflation-sensitive assets, particularly commodities and commodities-related equities were among the few positive performers during the year, even as public real estate struggled. Hedged strategies, particularly less-correlated approaches such as global macro and market neutral, were in many cases beneficial components of portfolios. Private markets strategies, especially new and recent vintages with meaningful dry powder, are beginning to provide diversification against public equity exposure: the declining valuations that have hit public market allocations are providing investment opportunities for these strategies.

GRADE: ★★★☆☆

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

What we said: 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.

What we've seen: While private equity dealmaking has slowed in 2022, it has done so from a very high 2021 base and arguably less than one might have anticipated, given the current economic headwinds. That appears to be due to a combination of abundant dry powder and perceived opportunities to make operational and strategic enhancements to assets that are now available at cheaper valuations. A Reuters analysis of Dealogic data suggested that private equity investors spent almost 40% more on "take-private" deals in the first half of 2022 than the first half of 2021, for example: many large public companies are now cheap enough to become targets, and investors believe there is growth that can be unlocked more easily under private than public ownership. Similarly, PWC's *Deals 2022 Midyear Outlook* and PitchBook's *U.S. Private Equity Breakdown Q3 2022* note "a steady pace of carveouts and divestitures in 2022," as companies seek to adjust to the tougher economic climate by selling lower-growth divisions. These divisions are often being picked up by private equity investors that see the growth potential under more dedicated private ownership. Such transactions typically require what Pete Witte, Lead Analyst for Global Private Equity at EY, called, in August, "the 'roll-up-your-sleeves' approach" to value creation; he added that the private equity industry "is better prepared for this than at any other time in its history," having invested heavily in operating capabilities. Leverage appears to be coming down in these new deals: data from the Centre for Private Equity and MBO Research (CMBOR) in July suggests that buyout capital structures in the first half of 2022 were as conservative as at any point in the past decade; while PitchBook notes that all four take-private deals announced since July have used non-bank financing, which tends to require a larger equity cushion, with one of those deals apparently having a 53.1% equity contribution—"a far cry from the LBO playbook that regularly featured a 70/30 debt-equity split."

GRADE: ★★★★☆

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