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Adapt and thrive

Insurers seek opportunity in the changing world

ICBH0922E/M-2433455-4/41

2022 Global Insurance Report

ICBH0922E/M-2433455-1/41

11th
Annual Global Insurance Report

370
Senior executives surveyed

26
Markets

US$28T
Assets under management

Source: BlackRock Global Insurance Survey, June-July 2022.

Navigating this report

Foreword

01 Market backdrop
Risks and concerns

02 Forward planning
Future-proofing your SAA

03 Strategic trends
Technology and sustainability

Navigating this report

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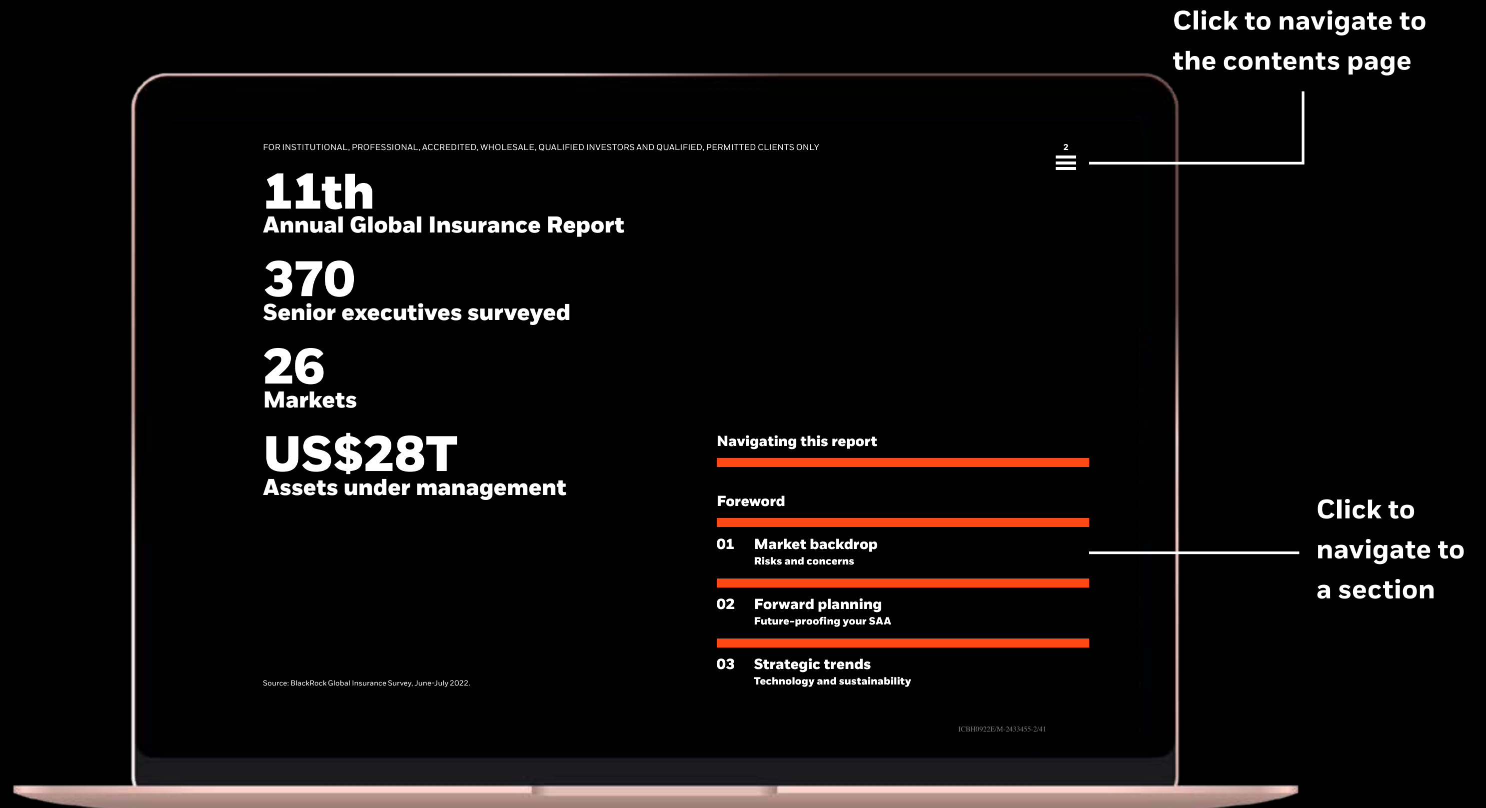


Foreword

Charles Hatami
Global Head of BlackRock's Financial Institutions Group and Financial Markets Advisory

Inflation, liquidity, and market volatility: these are insurers' key concerns in 2022. Respondents to our 2021 survey identified geopolitical risk as their biggest macroeconomic concern. That proved prescient. Russia's invasion of Ukraine has exacerbated the pandemic-induced pressure on the prices of food, fuel, and other commodities.

Unsurprisingly, insurers have overwhelmingly identified inflation as this year's biggest risk—one that affects both assets and liabilities. Given the dramatic shifts in bond and equity valuations, liquidity and asset-price volatility are also seen as serious market risks. How is this environment shaping insurers' investment decisions? Over three-quarters of respondents plan to review their strategic asset allocation (SAA)—a rational response to new conditions and a judicious acknowledgment that assumptions may now be different. The interplay between assets, liabilities, and business objectives will need to be balanced, and insurers recognize that a robust, forward-looking risk framework can help in constructing a resilient portfolio.

When we combine the survey results with the views of industry CIOs we spoke to, three key areas emerge as insurers look to the future:

1. Diversification—insurers are increasingly open to investing in new asset classes, and alternatives remain key;
2. Sustainability and climate objectives—insurers plan to incorporate these further into their portfolios; and
3. Technology—its integration in all aspects of an insurance company's business model.

Diversification is the cornerstone of portfolio construction, and its relevance and importance have risen exponentially as markets have shifted. Consequently, survey respondents highlighted fixed income products as core portfolio components, particularly as rising interest rates may offer new opportunities in credit. Insurers continue to seek greater exposure to private markets, which offer the potential for attractive risk-adjusted and diversifying exposures, especially in the context of higher outright yields.

Our survey identified sustainability and technology as the two strategic trends most likely to accelerate. At BlackRock, we often see that sustainability goals are embedded in the investment strategies and SAAs of the insurers we work with, with the intent to capitalize on new opportunities in asset classes such as fixed income and alternatives. Furthermore, the insurance companies surveyed continue to strengthen their commitments to net zero—85% said they were likely to commit to specific climate objectives within the next two years.

In both their insurance and investment operations, the majority of insurers are using predictive analytics, artificial intelligence, machine learning, and automation. These technologies are no longer "emerging" but increasingly core. In our view, for those who don't adopt holistic solutions, there will be a need to integrate add-on components.

All in all, the investment landscape has become much more complex. This new environment requires innovation, resources, and scale, which all take time to build. We are proud to partner with insurers worldwide to deliver global advisory, technology, and investment solutions—all through an integrated service model.

We would like to thank everyone who participated in the survey. We hope that our findings prove insightful and look forward to engaging with you on these topics. Now is no time for complacency—the insurance industry is adapting in order to thrive.

01 | Market backdrop

Risks and concerns

> “As long-term liability-driven investors, we can reinvest through the cycle and are not forced sellers of assets. Lower unrealized gains on liquid assets and lower market liquidity reduce the flexibility to reposition portfolios. This bears watching because insurers keep growing their private-asset allocations, and hedging derivatives absorb more collateral.”
>
> **Francesco Martorana**
> Group CIO, Generali

01 Market backdrop

2022 backdrop: macro risks and sustainability

As the pandemic and war have set inflation soaring, central banks have had to consider their response. Combating supply-driven inflation requires a different approach to the demand-driven problems of the past.

For insurers, inflation and recession are front of mind for our survey respondents. Geopolitical risk's low ranking may seem strange given its top spot last year, but we believe geopolitical concerns are now simply embedded in the backdrop.

Nor is geopolitics the only "embedded" risk. The survey results demonstrate insurers' appetite to integrate sustainability into their investment strategy. This echoes the result of our 2021 survey, in which the vast majority of respondents (95%) stated that climate risk would have a significant impact on portfolio construction and SAA.

> **"We certainly deem inflation a significant risk over the short and medium term. Accordingly, we have increased our allocation to real assets over the past year, particularly renewable infrastructure and real estate, given their inflation-hedging attributes."**
>
> **Kim Rosenkilde,** CIO, SingLife

2022 backdrop: market risks

When it comes to market risk, inflation, asset-price volatility, and liquidity are almost tied in importance as the most serious market risks for the survey respondents.

> **"Liquidity has been a major challenge for markets in 2022. Volatility in interest rates and risk assets has affected liquidity in all asset classes, with a lack of depth to transfer risk, even in government bonds. Rate hikes and central banks' balance-sheet reductions have reduced macro liquidity, as have risk-averse dealers. Meanwhile, diminished supply and high funding costs have dampened price discovery in primary markets."**
>
> **Peter Gailliot,** Global CIO, Financial Institutions Group

As allocations to illiquid private markets have increased over recent years, risk frameworks have become more sophisticated. Liquidity is now better understood, and so insurers are more attuned to the liquidity risks in their public bond portfolios.

> **"Market liquidity is materially lower today than it has been since before the global financial crisis. This makes us more inclined to earn an 'illiquidity premium' in private markets since investors may not be receiving the same degree of public market benefit as they have historically."**
>
> **Anthony Grandolfo,** CIO, GE Capital

02 | Forward planning

Future-proofing your SAA

"Our SAA is a continually evolving process, and our eligible universe has expanded—we want to increase the number of asset classes we can invest in as it gives us greater access to diversification. We don't want to be beholden to legacy asset classes and forced to ride the waves of economic volatility. Consequently frameworks need to adjust—even experts fall into misconceptions about the likelihood of movements."

Michael Eakins
CIO, Phoenix

The new approach: what needs to change

Faced with 2022's elevated risks, the bulk of respondents plan to review their SAA. Although insurers typically review this every one to three years, market conditions point to reviews sooner rather than later.

The pivot in markets is not seen as a short-lived phenomenon that can be addressed tactically; most insurers who answered our survey do not intend to review their tactical asset allocation (TAA). Instead, they see shifts in the longer-term assumptions that drive SAA. Risk frameworks also need an overhaul: almost half intend to review risk-appetite thresholds.

We are not, however, seeing a flight to safety. Some 68% intend to maintain current risk profiles—suggesting that current risk levels are appropriate when combined with the right portfolio-construction and risk-management framework.

Being dynamic will be key. The industry knows it must be proactive, so how should insurers act?

> **"We have introduced a dynamic SAA approach that considers medium-term positioning relative to the long-term SAA—recognizing market regime changes relative to long-term assumptions. Our current market views are identifying opportunities as investors adjust expectations for both growth and inflation."**
>
> **Mark Konyn,** Group CIO, AIA

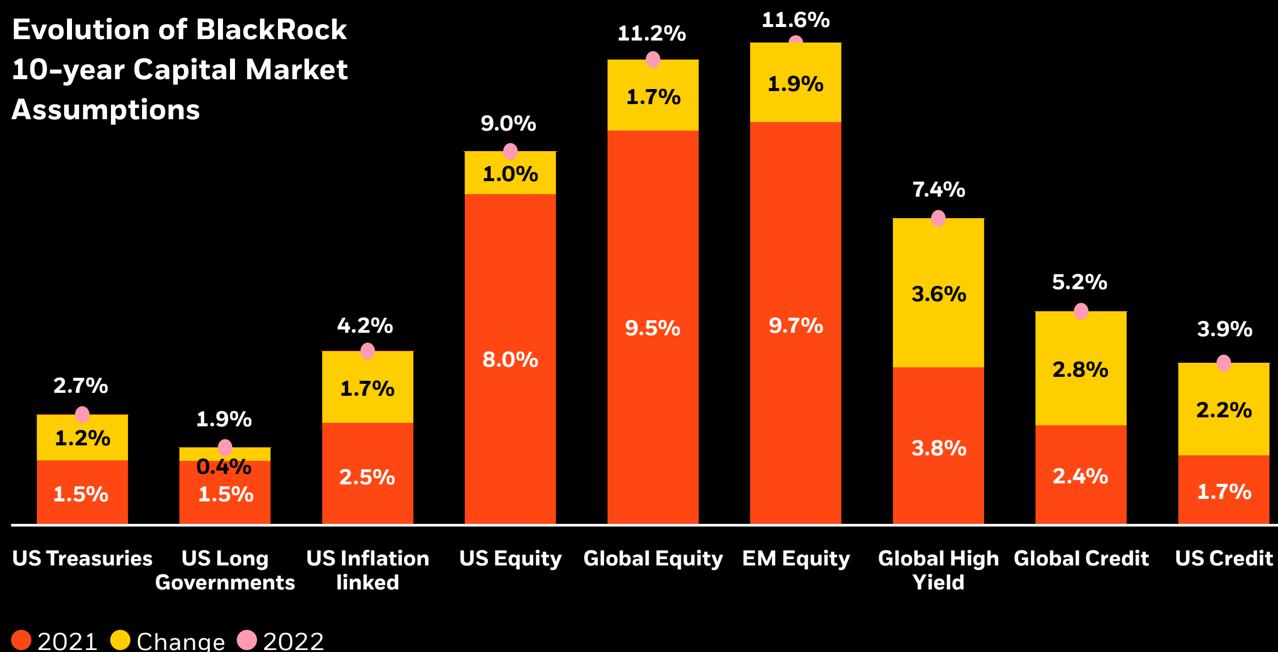
In a new era of volatility, enterprise strategy relies on cutting-edge analytics

Mark Azzopardi
Global Head of Insurance Solutions

As this year's supply shocks have rippled through the global economy, inflation has surged and liquidity conditions have tightened. Through 2022, assets have repriced, spreads have widened, yield curves have shifted upwards (but have also flattened), and equities have fallen. Term and illiquidity premia have increased.

Our survey indicates that insurers plan to respond to these developments by re-examining SAA. What this means in practice will depend on the interplay between assets, liabilities, and business objectives.

At BlackRock, our portfolio-construction frameworks are underpinned by a broad set of capital-market assumptions based on rigorous modelling and economic insight. We believe that the "Great Moderation" is coming to an end. Given spread widening and the new monetary-policy environment, we see the most significant movements on a relative basis in risky credit and government bonds. Over recent years, we have



This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise—or even estimate—of future performance. Forecasted future performance is not a reliable indicator of future results. Indices are unmanaged and used for illustrative purposes only. They are not intended to be indicative of any fund or strategy's performance. It is not possible to invest directly in an index.

Source: Capital Market Assumptions, BlackRock Investment Institute, August 2022. Data as of 30 June 2022 and September 2021.
Notes: Return assumptions are 10-year total nominal arithmetic returns. US dollar return expectations for all asset classes are shown in unhedged terms. Asset return expectations are gross of fees.
Representative Index proxies: Bloomberg Barclays Government Index, Bloomberg Barclays Long Government Index, Bloomberg Barclays US Credit index, MSCI Developed US Gross TR Index, MSCI World ex US, MSCI Developed ex China, Bloomberg Barclays US Government Inflation-Linked Bond Index, Bloomberg Barclays MBS Index, Bloomberg Barclays US Corporate High Yield 2% Issuer Capped Index, Bloomberg Barclays Global Aggregate Credit Index ex USD. We use BlackRock proxies for private market assets.
We use BlackRock proxies for selected private markets because of lack of sufficient data. These proxies represent the mix of risk factor exposures that we believe represents the economic sensitivity of the given asset class

also factored in increases in both inflation and macroeconomic risk premia.

Claims inflation rates are at their highest levels for several years. The property and casualty (P&C or General) insurers are perhaps the most obviously affected by the new inflationary environment. These firms' liabilities are indirectly linked to inflation, and the extent to which this inflation sensitivity can be managed is an important consideration. This is particularly relevant for complex commercial insurance and reinsurance structures—which could see significant unanticipated increases in both the severity and frequency of claims due to embedded leverage to the inflation rate.

In matching the asset-liability management (ALM) strategy with business risk appetite, it is crucial to consider how to manage various types of inflation on a whole-portfolio basis. There are also significant implications for capital-allocation decisions; given the level of the real yield curve, balancing underwriting and investment risk will be an important area of focus. Our recent experience in P&C portfolio construction suggests that the most significant area of SAA reappraisal is likely to be the split between credit-risky and government bonds.

Insurers providing nominal guarantees against run-off liabilities will remain focused on matching guarantees while meeting liquidity requirements. Although the tightening of monetary conditions will impact prices of government debt, such firms will benefit from higher yields as they will help deliver the required guaranteed return, as well as increase the investment income for shareholders. Firms writing new business will look to maintain competitive advantage by differentiating their SAA; we expect particular focus on the balance between credit-risky and risk-free assets. In risky credit, the balance between regions can change significantly in light of the emerging economic outlook. Market volatility also allows firms with more advanced analytical infrastructure the opportunity to capture competitive advantage through managing their SAA and risk allocation.

Evolving the SAA is fundamentally important as structural shifts play out in the economy. A successful SAA is likely to combine analytical capability with enterprise objectives and translate these into practical and actionable outcomes.

Regime shift

Volatility of US real GDP and core CPI inflation, 1965-2022[1]

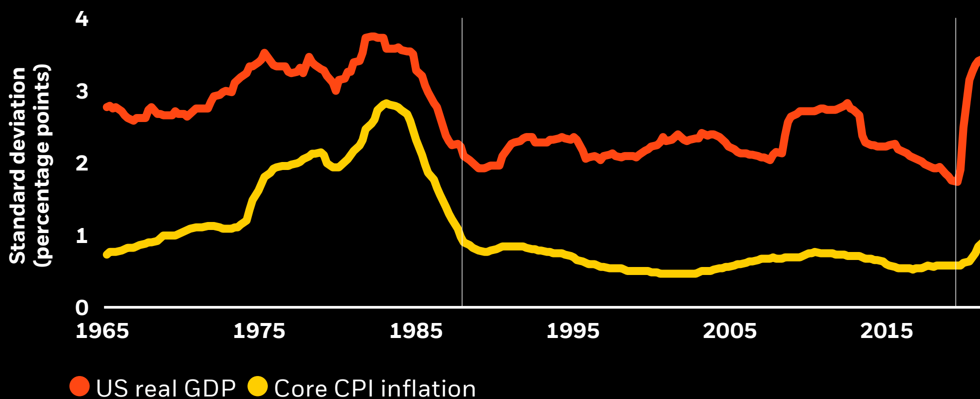


Chart takeaway: The pandemic upended an unusual period of mild volatility in output and inflation

Source: [1] Source: BlackRock Investment Institute (BII). US Bureau of Economic Analysis and US Bureau of Labor Statistics with data from Haver Analytics, March 2022. Note: The chart shows the standard deviation of the annualized quarterly change of US real GDP and the core Consumer Price Index.

Changes to asset allocation: a new approach emerges
Despite all the uncertainties, insurers in the survey are holding steady in their asset allocation—at least for now. And although they plan to review SAA, most intend to maintain their current allocations to the major asset classes.

The only meaningful changes are an increase in derivatives and other hedging strategies. With volatility a concern, insurers are perhaps motivated to employ further risk-management techniques to protect policyholder funds.

As survey respondents are perhaps looking to adopt a barbell strategy by increasing exposure to cash and private markets, their focus appears to be on diversification and portfolio resilience.

> **“Rather than prompting big shifts across asset classes, the new environment is leading us to rethink how each asset class is managed. A multipolar global order and regionalization raise questions about geographical diversification. Beta will be less relevant; more active and high-conviction strategies will be critical, including private assets.”**
>
> **Francesco Martorana,** Group CIO, Generali

Asset allocation: fixed income assets

Fixed income is the area in which respondents are most likely to keep overall asset allocations unchanged (59%). But there is considerable dispersion within the asset class.

Green, social and sustainable bonds are expected to see the largest increase; 43% of insurers who answered the survey plan to increase allocations here.

The next-largest increase is to government bonds and agency bonds. But certain respondents are looking to increase their allocations to high-yield corporate bonds. This continued preference for high yield shows that appetite for risk remains—even as insurers are keeping their fixed income allocation steady overall.

> **"We believe there is value to be found in the private market, through assets enabling the innovation at scale of cleaner energy technologies; and in the fixed income credit market, with the emergence of new financial instruments to be added to existing green or transition bonds, such as sustainability bonds linked to climate KPIs. Through our investment activities at AXA, we aim to strongly contribute to developing more resilient societies."**
>
> **Jean-Baptiste Tricot,** Group CIO, AXA

Asset allocation: risk assets and private markets

Insurers' sustained appetite for risk comes through clearly. While the majority of respondents are leaving their allocations unchanged, sizeable minorities are increasing their exposure across the spectrum. To maintain exposure to private markets, assets must be continually reinvested as capital is returned to investors.

The notable exception is commodities—the survey indicates that 54% of insurers would consider increasing their exposure. Commodities can provide a natural inflation hedge, so the rising allocation to the asset class shows how insurers are innovating to adapt to the new environment.

Survey respondents appear keen to include a broader range of assets, in recognition of their strong diversification properties.

> **"We have allocated approximately 35% of our new money to private assets over the past five years. We expect to continue to grow that allocation into the future, focusing on asset classes with strong underwriting processes, protective covenants, and proven risk-adjusted returns to provide downside protection in a decelerating economy."**
>
> **Jayson Bronchetti,** CIO, Lincoln

Private markets and structured products
Insurers who answered the survey plan to increase their allocation to private markets by 3% on average over the next two years.

> **"Private market valuations are not immune to volatility in a regime of higher volatility. Selectivity is more important than ever before."**
>
> **Vivek Paul,** Head of Portfolio Research, BlackRock Investment Institute

The survey identified that insurers are planning to adopt bespoke structured solutions within their private market portfolios. Currently 37% of respondents use these bespoke solutions, which include repackaged vehicles, collateralized loan obligations, and rated notes, but 57% are considering investing in them in the next 12 months.

At BlackRock, we see that structured solutions have become a common tool for insurers to allocate to private market strategies. We see structured solutions as an operationally efficient and capital-efficient tool for insurers to gain exposure to a previously hard-to-access asset class.

> **"While structured solutions can offer significant benefits from an ALM perspective, our approach to this broad category of assets has been to be very selective. Our investment activity in this space will focus on what we assess to be the true economic return on risk."**
>
> **Timothy Schmidt,** CIO, Prudential Financial Inc.

Asset allocation and nimbleness: ETFs

Last year's survey identified exchange-traded funds (ETFs) as an increasingly popular tool for insurers to help manage liquidity and seek to enhance yield. This year, half of our respondents again cite these factors as reasons why they plan to increase ETF usage.

In volatile times, ETFs can be seen as an effective portfolio-construction instrument. They can offer instant diversification compared with purchasing individual investments and may also provide access to a wide range of markets—from specific economies to broader asset classes, even including commodities.

One important aspect of ETFs in the current climate is their high liquidity. With liquidity a major market concern identified in the survey, ETFs have begun to look especially attractive to insurers.

Insurers turn to ETFs

Carolyn Weinberg
Global Head of Product, iShares and Index Investments

Insurers face a wide range of considerations when constructing their fixed income portfolios: liability, regulatory, capital, and accounting-driven requirements, all set against higher inflation and slower economic growth. In this challenging environment, institutional investors, including insurers, are turning to bond ETFs seeking transparency, access, liquidity, and portfolio efficiency. Eight of the ten largest US insurers use bond ETFs, with five adopting them after the volatile markets of March 2020.[1] In EMEA, over 2022 to date, we have seen 17 insurers use ETFs for the first time.[2] This growing adoption of ETFs is one reason we recently forecast that global bond ETF assets under management (AUM) would reach US$5 trillion by 2030.[3]

We see three drivers that support the continued pace of adoption of bond ETFs by insurers, reaffirmed by this year's survey results:

- Managing liquidity and efficiency in response to recent market stress;
- Sourcing yield and return in dynamic, low-cost, and scalable vehicles; and
- Improving regulatory and accounting frameworks, particularly in the US.

Liquidity and efficiency

Liquidity continues to be a challenge, particularly in 2022 as the shifting macro backdrop has accelerated volatility. Despite the tendency for bid-ask spreads to widen in individual corporate bonds, the efficiency and liquidity of ETFs has meant consistent trading with relatively tight bid-asks. In Europe, for example, investment-grade ETFs benchmarked against the Bloomberg Euro Aggregate Corporate Total Return Index Value Unhedged index maintained an 8-basis-point bid-ask spread while spreads in underlying bonds were about 35 basis points.[4] In the US, this phenomenon has helped drive trading volumes, which have increased by 25.5%, relative to a 17.3% increase in AUM.[5]

Sourcing yield and return

With interest rates rising across major economies, insurers could look to public markets to generate yield and income—the yield on the US 10-year Treasury note recently surpassed 3.5% for the first time since 2011.[6] The ETF is an efficient access vehicle with its on-exchange liquidity and typically tighter bid-ask trading spreads that enables insurers to invest easily not only in investment-grade corporate markets, but also in "non-core" allocations such as high yield, leveraged loans, and emerging market debt in a scalable way.
The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results.

Improving regulatory and accounting frameworks

As the bond ETF market has grown and evolved, becoming an integral part of the fixed income ecosystem, regulators and policymakers have recognized the need to modernize rules and practices applicable to these ETFs, treating them more like bonds than "equities". Recent changes in guidelines from the National Association of Insurance Commissioners have allowed for bond treatment of bond ETFs, further enabling insurers to adopt and implement ETFs in their portfolios.

Source: [1]S&P Global Intelligence, BlackRock analysis of filings with the National Association of Insurance Commissioners (NAIC) and the Securities and Exchange Commission (as of April 2022). [2] Source: BlackRock—New users are defined as investors allocation to ETFs in 2022 following at least 3 years on non-usage. [3] Source BlackRock, estimated May 2022. [4] Source: OneTick. Based on bid/ask spreads of UCITS/European registered euro corporate bonds ETF vs. a basket of underlying euro corporate bonds over Q2 2022. [5] Source: Bloomberg based on US-domiciled universe of fixed income ETFs, indicates 5yr annualized growth rate from 2017-2021.
[6] Source: TMUBMUSD10Y Index between 04/03/2011 and 09/06/2022. Notes: On 06/14/2022 TMUBMUSD10Y Index reached a high of 3.501%—the last time this threshold was breached was 04/03/2011 when the TMUBMUSD10Y Index reached a high of 3.546%.

03 | Strategic trends

Technology and sustainability

“

For the correct integration of sustainability risks, we see technological investment as fundamental. It seems impossible to imagine an adaptation to regulations or a strategic positioning in this area that does not involve IT developments.”

Eduardo Martínez de Aragón
Deputy General Manager of Investments, VidaCaixa

Strategic trends: sustainability and technology

Two strategic trends emerge as themes set to accelerate within the insurance industry over the next two years: approximately two-thirds of respondents identify technology, and almost as many point towards sustainability as a driver for decision-making.

One striking change from last year is that mergers and acquisitions (M&A) are a priority for just 20% (down from 36%). Perhaps elevated market uncertainty and financing costs are creating higher barriers for corporate activity. Nevertheless, insurers should remain mindful of M&A threats—at BlackRock we see no reduction in this activity.

The priority for tech spending is clear: asset and liability management (ALM). Insurance companies typically consider both sides of their balance sheet, so having a holistic view can be helpful in determining portfolio composition and constructing a robust SAA. Meanwhile, integration of private markets is a priority for well over half our respondents. With liquidity identified as a concern in public markets, the illiquidity premium available in private markets appears increasingly attractive.

> **"We will invest in technology as we prepare for the new regulatory regime. Reporting requirements will most likely change so we will need to adapt our capability there. From an ALM perspective we are considering the integration of quantitative simulation and risk management methods."**
>
> **Mr. Iwao Matsumoto,** Managing Executive Officer, Sumitomo Life Insurance Company

Q.14 | Thinking specifically about investment management over the next 24 months, where will you be prioritizing your tech and infrastructure investments?

%	Priority
68%	Integrated Asset and Liability Management
54%	Compliance with regulatory needs and reporting requirements
53%	Integrating public and private markets data and reporting
48%	Increased operational efficiency and reduced cost
44%	Multi-asset risk management
34%	Strategic balance-sheet steering
33%	Building out sustainability and ESG capabilities
28%	Integration of new risk types, such as Climate Risk
17%	Integrated Asset Allocation (SAA, TAA) solutions and processes

Source: BlackRock Global Insurance Survey, June-July 2022. Respondents selected up to five responses.

All roads to net zero are paved by technology

Kunal Khara, Global Head of Financial Institutions for the Aladdin business
Antonio Baldaque da Silva, Global Head of the Aladdin Sustainability Lab

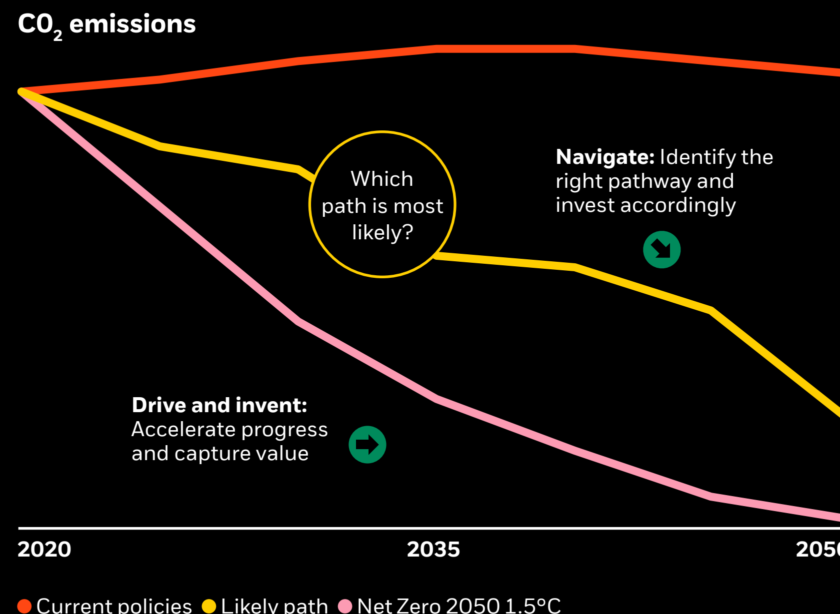
Last year, we highlighted burgeoning investments in climate risk technology across data, analytics, and platform integrations. In the short amount of time since then, many survey respondents have continued to harmonize data across multiple sources, unify investment processes, and position portfolios for net zero—with some companies even incorporating sustainability factors into their SAA frameworks.

But while the transition is here, the recent (and growing) impact of climate change has manifested higher losses for insurers—requiring a greater focus on underwriting and pricing risks. It's a focus now clearly exhibited in this year's survey: a majority (62%) not only recognize sustainability as a top-four major trend and 88% plan to join industry initiatives (like the Net Zero Asset Owner Alliance) in the next two years.

Technology, in these instances, will help to continue breaking down barriers in operationalizing transition plans and ESG initiatives.

The transition is already under way—but its trajectory is uncertain

Measuring and modelling that trajectory as accurately as possible will be key to success, whether navigating, driving, or investing.



Source: NGFS for Enacted policies action Net Zero 2050 curves as of February 2022, BlackRock for "Which path is most likely?" curve is for illustrative purposes only and not based on actual data.

At BlackRock we see insurance investors as much more sophisticated today in their ability to leverage ESG information. But our clients tell us that more needs to be done in ensuring consistency and coherence, all the way from regulatory disclosure and reporting to evaluating investment allocations. We continue to build and deploy new sustainability data and analytics across public and private markets—and are now starting to map the net zero transition as it unfolds across technologies, sectors, and regions.

Much of the momentum for the transition to net zero has been uneven. BlackRock's role will continue to be to help clients understand, navigate—and, if they choose to—drive—the transition to a low-carbon economy.

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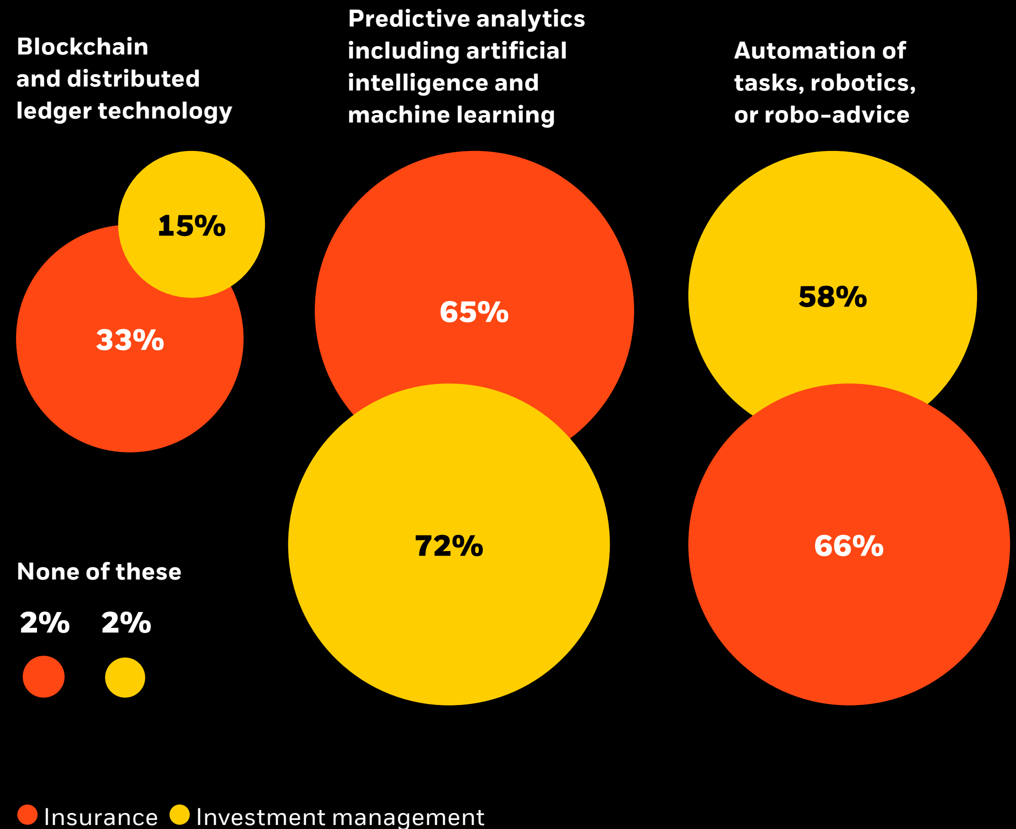
Emerging technologies have already emerged

So-called "emerging" technologies—blockchain, predictive analytics, artificial intelligence, and machine learning—now appear to have "emerged" and are commonplace throughout the industry. Ninety-eight percent of our survey respondents are using at least one of these methods in both their insurance and investment-management operations.

> **"Technology and proprietary tools are pivotal to our investment process. There is no other way to deliver the combination of scale and customization required to manage money on behalf of insurance companies, with all the complexity that entails."**
>
> **Adam Cohen,** Head of EMEA Insurance Asset Management

Q.15 | Is your firm using any of the following emerging technologies for your insurance or investment management?



Source: BlackRock Global Insurance Survey, June-July 2022. Respondents selected yes/no for each item

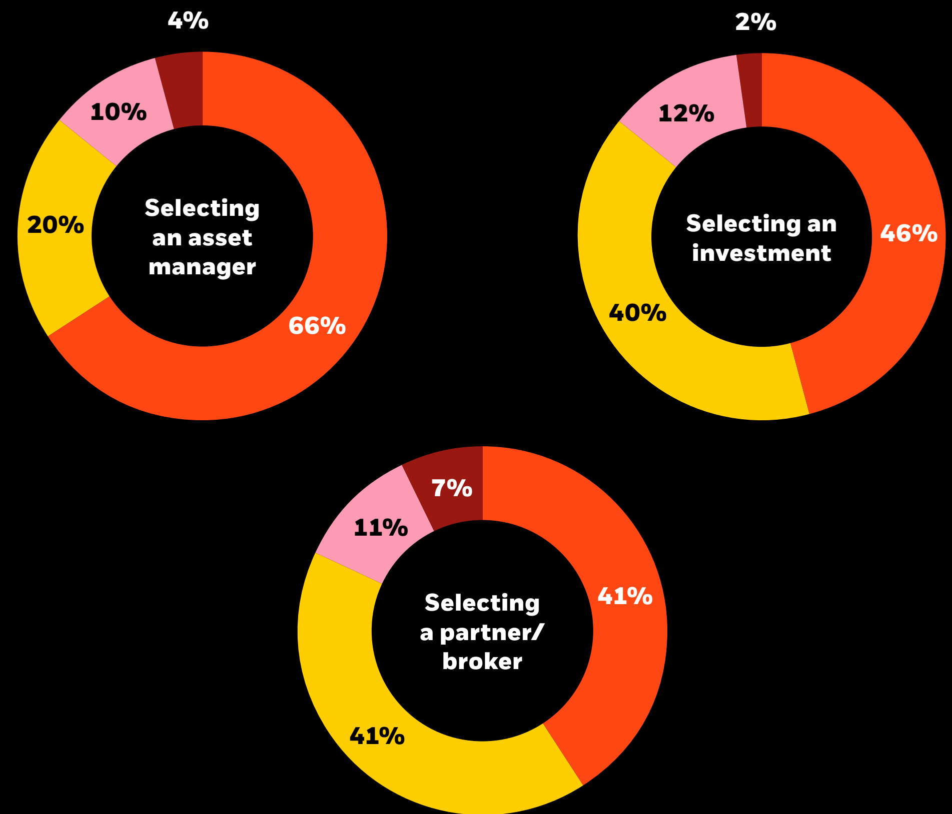
S as an equal part of ESG

While climate is a key focus of insurers' ESG efforts, our survey results show that social criteria remain important.

The survey results demonstrate the importance of diversity, equity, and inclusion (DE&I) within the respondents' investment decision-making and processes. Specifically, 86% consider DE&I in some way when selecting asset managers; more than 80% consider DE&I at least some of the time when selecting partners, vendors, or brokers; and 86% of respondents take DE&I into account at least some of the time when selecting investments.

> **"Sustainability and embedded DE&I considerations are already important to our investment process—but the question we need to ask ourselves as an industry is what different decisions are we making based upon the responses? This is an important area and we see real value as a driver for decision making and out-performance but there is still much more work to be done."**
>
> **Ashish Dafria,** CIO, Aviva Life

Q.16 | To what extent do you factor in DE&I objectives to your investment decision-making and partnership selection?



Source: BlackRock Global Insurance Survey, June-July 2022. Respondents selected one response per question.

ESG and sustainability considerations: still a high priority

A large majority of respondents were either likely or very likely to take action in the next two years as it pertains to their sustainability ambitions. Company engagement produced the clearest consensus, with over 90% of insurers saying that they would probably increase the number of issuers with which they engage.

> **"We have recently added ESG criteria as an essential part of our investment decision-making. We would like to make investment decisions on both the financial return and the contribution to sustainability (as hard constraints with no harm to sustainability)."**
>
> **Larry Zhang,** CIO, Fosun Insurance Group

At BlackRock, we are aligned with the Global Impact Investing Network's definition that impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Over 90% of respondents are likely to increase their allocations to impact investments.

> **"We will consider increasing our allocations to early-stage growth in the alternative-energy space. These are not defined as impact investments, but we believe some of these technologies will have an impact."**
>
> **Randy Brown,** CIO, SLC Management

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The value of investments and the income from them can fall as well as rise and are not guaranteed. Investors may not get back the amount originally invested.

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The report summarises the results of a survey of senior representatives of global insurance companies by an external agency on behalf of BlackRock, complemented with a series of online and telephone interviews. The gathered data and opinions provided by specific insurers are indicative in nature only and do not represent a scientific or exhaustive study of the state of the insurance industry and insurers' asset allocation and investment intentions. Data sets may be incomplete or inconclusive and third-party opinions should not be construed as forecasts or indicative of any future intention. BlackRock does not endorse or necessarily agree with the third-party opinions expressed in this report. The information and opinions contained in this material are derived from proprietary and non-proprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy.

Survey disclosures

The BlackRock Global insurance survey was conducted between June and July 2022. Responses were entirely anonymous. Respondents were asked to attest their familiarity with their organization's investment portfolio and demonstrate to what extent they were responsible for making investment decisions on behalf of the company. Respondents who did not have the necessary expertise or responsibilities were excluded from the sample.

Respondents were required to specify the size of their company's global investable assets in US dollars by selecting from a range of options. Responses that indicated a size of less than $1bn were excluded from the sample. Global investable assets were defined as financial assets that make up the investment portfolios (both asset backing and surplus), including cash, fixed income, equity and alternatives.

The final sample contained responses from 370 industry professionals. Using the information provided, BlackRock has estimated that the survey responses represented approximately $28trn investable assets.

Survey responses have not been edited in any way and represent solely the opinions of the respondents. Any opinions expressed reflect our survey and interview results as at the end of August 2022.

They are not intended to be a forecast or guarantee of future results. The global sample size is all 370 respondents throughout, comprising 154 in Europe, 111 in Asia Pacific, 74 in North America and 31 in Latin America.

Throughout the document, some numbers or percentages may not add up to 100 due to rounding or because we asked insurers to provide more than one answer.

Capital Market Assumptions Methodology

Please note that certain parts of the methodology may not directly apply to the material.

Uncertainty and optimisation
By incorporating uncertainty we recognise that mean expected returns for assets are estimated with error rather than assuming they are known, as is the case with mean variance techniques. A key benefit is that we can allow for different conviction levels in return expectations. We consider the distribution around the mean, effectively reducing the weight placed on our mean (central) estimate. Distinguishing between uncertainty and risk is important. We define uncertainty as the range of outcomes for the mean and risk as the range of outcomes around the mean. The amount of uncertainty we take into account for each asset classes depends on a number of criteria. They include the back-tested predictive power of our asset class return models, the historic volatility of assets and the desire for diverse portfolios when optimising.

Uncertainty in mean returns feeds in to our stochastic simulations, that give a range of potential return pathways from five years out to the long term. When constructing portfolios, these simulated pathways and our mean return uncertainty enable us to use robust optimisation techniques that generally lead to less concentrated portfolios compared with those portfolios resulting from mean variance optimisation. It also gives flexibility to focus on certain upside or downside scenarios when constructing portfolios to fit client needs.

Stochastic engine
We use Monte Carlo simulation to create random distributions informed by historical return distributions and centred on our expected returns. The engine simulates thousands of return pathways for each asset, representing the range of possible outcomes over a five-to 30-year time horizon. We leverage BlackRock's risk models to ensure we respect co-dependencies between asset returns. The range of scenarios incorporate our work on incorporating uncertainty in return expectations. The Black-Littermanmodel (1990) –a well-known model for portfolio allocation -combines long-and medium-term views in a single-period setting. Our model uses a Kalman filter –an algorithm that extracts insights about potential future paths by bringing together a number of uncertain inputs -to extend this approach into a multi-period setting. This allows us to capture the variation of expected returns over time under various scenarios —from economy-related to market sentiment driven. A large part of these variations is not predictable. Constructing portfolios that are robust to, or can exploit, these variations is a major challenge for investors. The ability to calibrate the engine with asset class views with uncertainty at arbitrary time horizons, and to evolve this uncertainty stochastically, drives the dispersion of return outcomes. Highlighting the uncertainty that investors face when building portfolios helps ensure ostensibly precise return expectations do not lead investors to concentrated portfolios.

Simulated return paths support a broader range of applications, such as asset-liability modelling. Stochastically generated return scenarios enable investors to move with ease beyond mean-variance and optimise portfolios against their individual needs. Investors can place more emphasis on the tails of the distribution or focus on the path of returns rather than just the total return. They can incorporate flows in or out of the portfolio over the course of the investor's time horizon or place more emphasis on scenarios that are challenging for the investor's business beyond their portfolio. Investors with complex asset-liability matching requirements, such as insurers, typically rely on stochastic simulations of returns to assess and construct portfolios.

Interest rates
We derive our expected returns for government bonds by mapping out the yield curve at multiple time horizons in the future. This is based on estimating (1) the short rate, and (2) model implied term premia. Estimates of short rates are based on market data in the near-term and on macroeconomic informed data in the long-term. More specifically, in the long-term, we assume investor views about long-run inflation and real growth, coupled with changing preferences as to savings and risk aversion, will determine expectations for short rates (the "long run short rate"). Model implied term premia are computed from a model based in the affine term structure class of models (Adrian, Crump and Moench, 2013) describing the yield curve using the first five principal components of yield. The model implied term premia from the affine term structure model are further calibrated to market implied term premia, with the relative weights dependent on the relevant time horizon.

Equities

We put estimates of the equity risk premium (ERP) at the heart of our approach to setting return expectations. Changes in equity valuations are driven by both expected cash flows – earnings and dividends – and the ERP. Forming expected returns by looking solely at valuations – typically the price-to-earnings ratio – can miss the full picture, in our view. Our work finds that linking expectations for future interest rates and the ERP can be more telling for expected returns rather than attempting to find a fair value for the price-to-earnings ratio alone. This allows us to incorporate our views of the structural drivers of interest rates into expected equity returns –as well as other asset class returns. We also use bottom-up analyst earnings forecasts and the relationship between margins and the economic cycle to formulate our earnings expectations (using an augmented discounted cash flow model). We find corporate profit margins not only converge to long-term averages but do so at a faster pace when an economy reaches full capacity. We assume in future the ERP will mean-revert to levels observed in the post-1995 period. Our projections for risk-free rate, or “long-run short rate”, are described in the Interest rates methodology section.

Credit

Our model for credit asset (excess) returns is anchored on two key elements: 1) our estimate of credit spreads at a given horizon and 2) our estimates of loss due to defaults and downgrades over the horizon. The first component is projected in a consistent manner with our view of real GDP growth, as implied by BlackRock’s factor-augmented vector autoregressive macroeconomic model (Bernanke, Boivin and Eliasz, 2004) and the link between credit spreads and equity volatility. Our approach attempts to avoid overfitting, yet retains the ability to explain a high proportion of the variance in credit spreads and passing cross-validation tests against more complex approaches. The second component is estimated based on our outlook for spreads, the duration of the asset and an assumed credit rating transition matrix which captures rating migrations and defaults across multiple credit cycles. We currently base our transition matrix on Moody’s long-run transition data. We aim to further develop our model by directly modelling transitions based on macroeconomic conditions in order to better capture cycle dynamics and the respective variation in losses due to credit events. In addition to making our estimates of credit spreads consistent with our macroeconomic views, the our new credit (excess) return model allows the flexibility of calibrating our expected returns to various credit rating compositions which may prevail over the entire time horizon.

Private markets

The private market return models can be grouped into two categories – equity and debt. The equity models — relevant for core real estate and private equity buyouts — are based on an accounting statement framework. We estimate earnings growth and future valuations, which are used in conjunction with observable private and public market data (current valuations, financing cost, leverage, etc.) to model the evolution of the capital structure over time and infer equity returns. Estimated earnings growth and future valuations are linked to components of our public market return expectations for equity, rates, and credit spreads. Crucially, they also consider the unique dynamics of each asset class, such as the changing occupancy rates for real estate. Returns for private market debt —infrastructure debt and direct lending —are estimated using a ‘build up’ approach. The total return is a build-up of underlying public market returns (risk-free rates, corporate credit spreads) and private-market specific return drivers such as the public-private spread, losses due to default and downgrades, leverage and borrowing costs. Unlike most public debt markets, infrastructure debt and direct lending are modelled as ‘buy and hold’ investments, in line with how investors access these asset classes. Accounting for fees in private equity is challenging due to limited data, a wide variety of clauses that allow funds to adjust fees over time and the variety of fees involved (management, carried interest, fund expenses, transaction costs). We take a conservative approach that incorporates slightly higher fees than some industry surveys suggest. We use Preqin data to look at feet net of fee free cash flows for funds, add back estimated fees, aggregate cash flows and net asset values to create our gross returns –our goal to make private equity returns more comparable to public equity beta-plus-alpha returns. We then net out fees when creating and optimising portfolios. These steps are necessary to account for carried interest, which changes over time and depends on fund performance.

Capital Market Assumptions Disclosure

BlackRock's Long-Term Capital Market Assumption Disclosures

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