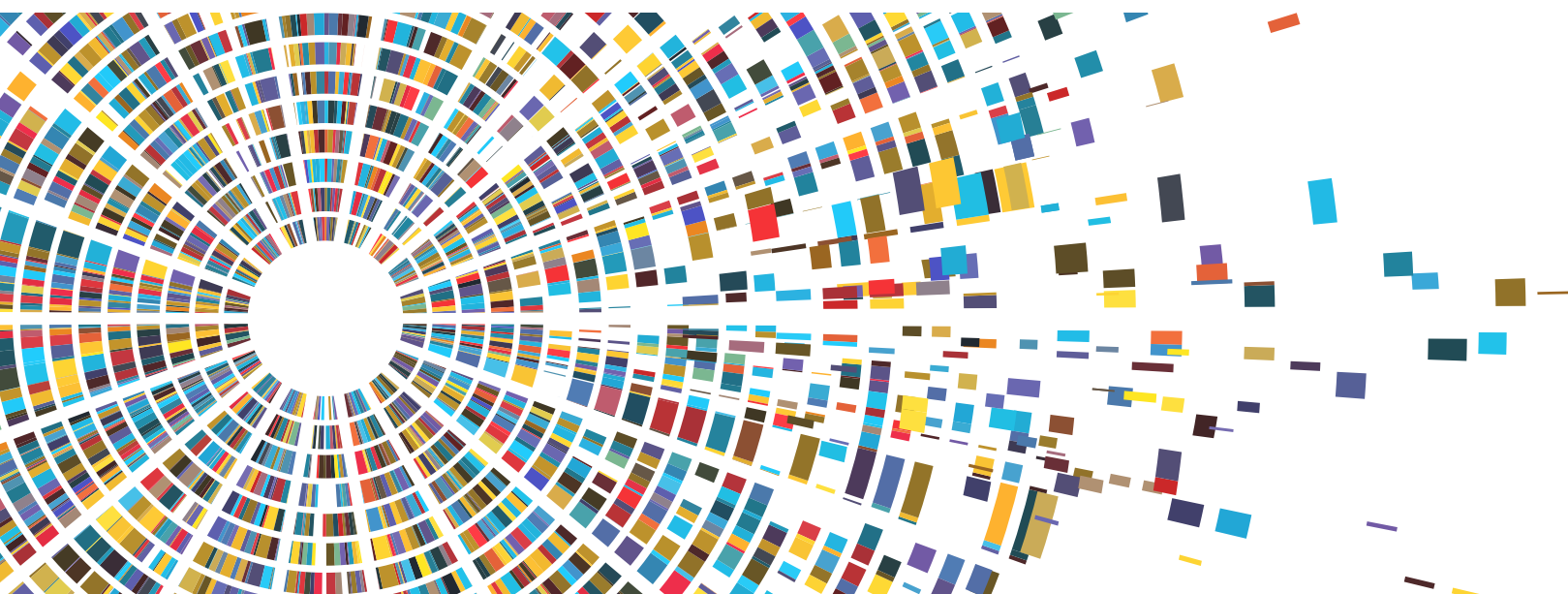




**Asset
Management**



GSAM INSURANCE REPORT

Ready, Set, Reset

July 2020

INTRODUCTION

The first quarter of 2020 began very differently than how it ended. Last year was an exceptional year for the global economy, notably the remarkable rise in equities—one of the best since the initial recovery from the Global Financial Crisis. Fear of an overextended economic cycle and a tone of general optimism had *initially* set the backdrop for this year's GSAM Insurance Asset Management Report.

In mid-January, this began to unravel. Reports of a novel coronavirus spreading globally had unprecedented implications beyond anything that could be foreseen or understood. Deemed a global pandemic, COVID-19 shaped the remainder of the last two quarters and beyond. A vast percentage of the world was held in self-quarantine and all non-essential businesses were temporarily closed in efforts to slow the virus' spread. Governments and central banks have also been exceptionally quick to respond. These factors have created an unprecedented set of events, and the impacts continue to be uncovered and realized.

This year's report looks at market insights and trends, including continued progress in global Environmental, Social and Governance (ESG) implementation across the industry. The report also incorporates insights from various insurance industry leaders, as well as other topical findings. The title, *Ready, Set, Reset*, underscores insurers' investment strategies amidst tumultuous times, and the ways in which their approaches evolve in anticipation of other market events and continued unknowns.

The ninth annual report released by GSAM Insurance Asset Management incorporates the views of 273 Chief Investment Officers (CIOs) and Chief Financial Officers (CFOs) representing over \$13 trillion in global balance sheet assets, which accounts for around half of the global insurance industry.

EXECUTIVE SUMMARY

KEY TAKEAWAYS

- 1** In our pre-COVID Survey, CIOs indicated a continuation of recent trends: increases in private equity, private credit and securitized assets funded with reductions in cash, governments and hedge funds. Recent conversations indicate these trends continue, if not accelerate; the Survey tilt towards commercial mortgage loans and real estate assets will pause and need to be re-underwritten.
- 2** CIOs described negligible long-term changes to their investment strategies as a result of market volatility and unprecedented world events. Most had already reduced their portfolio risks as a result of expensive valuations and anticipated credit cycle concerns.
- 3** The events of 2020 allowed CIOs to accelerate decision-making in order to be nimble and capitalize on market dislocations. For most, this involved no change to governance, but rather enhanced communication and collaboration across the entire institution.
- 4** Despite market events and recent volatility, CIOs believe the “public-to-private” trend will persist. CIOs cited illiquidity premiums, diversification benefits and financial repression in public markets to be among the factors sustaining this theme.

FACTS AT A GLANCE

- 95%** of insurers believe there are hurdles to overcome as ESG continues to be implemented across investment strategies.
 - 60%** of respondents reportedly invest in insurtech, accounting for a 14% increase year-over-year, led by Asia Pacific insurers.
 - 58%** of insurers respondents use ETFs in their investment portfolios. This year-over-year increase can be attributed to continued adoption from European insurers.
-

CONVERSATIONS WITH INSURANCE CIOs

Eric Kirsch

Aflac

“We are staying within the parameters of our strategic asset allocation and are in a position to take advantage of good relative value opportunities that arise from this market disruption.”

As Global CIO of Aflac Inc., Eric Kirsch has oversight for all investment and strategic portfolio management in both the United States and Japan. Despite the inherent differences in these places and their markets, Eric finds that COVID-19 has had a similar psychological impact in both regions. As we all manage through this difficult period, Eric was most surprised by the global cohesiveness of the reaction. “From the beginning, we were all monitoring what was happening in China, with businesses closing and families staying home, and initially, we did not react here in the United States. Fast forward to March, with increased public awareness of the developing pandemic, combined with stringent stay at home policies, we naturally began to understand the devastating economic impacts resulting in the market crash.”

Despite market volatility and unknowns, Eric describes Aflac’s long-term investment strategy as largely unchanged. “Over the past few years, we defensively positioned our investment portfolio through a number of de-risking exercises as we expected a changing credit cycle. With the capital of Aflac in a good position, we are staying within the parameters of our strategic asset allocation (SAA) and are in a position to take advantage of good relative value opportunities that arise from this market disruption.” In order to exploit disruptions,

which can often be short-lived, the insurer has placed emphasis on its governance processes without compromising its diligence approach to enhance efficiency of speed to market. Thus in today’s unprecedented world, if markets continue to dislocate, Aflac stands ready to act.

Capitalizing on investment opportunities traditionally less in scope is only half of the equation. The global pandemic has taught us all the different ways in which business can be successfully conducted. For Aflac, this potentially signifies opportunity and different ways to participate in, “private structured assets, public and private equity markets, and even reconsider how we lend money to companies who re-engineer their businesses accordingly.”

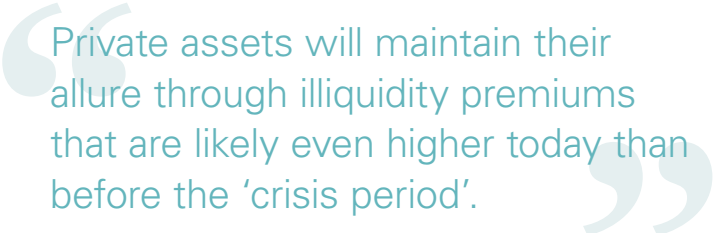
Eric believes there is a longer road to recovery than is currently accounted for, given the novelty of a global pandemic. “Psychologically, all investment risks have not yet fully been factored in. We do not yet know the eventual impact on the economy, small and large businesses, and those impacts on markets including equities, credit spreads and defaults.” In Eric’s opinion, because we just do not know what this unprecedented pandemic holds in store, there is likely more volatility ahead. Base case and recovery scenarios continue to be founded on past precedent, but without this, a go-forward is indeterminate.

Pascal Christory

AXA

Like others in a similar role to the Group Chief Investment Officer of a global insurer, Pascal Christory, with guidance from 9 local CIOs, is responsible for setting the global investment strategy and managing AXA Group's asset portfolio. Now more than ever, the role of investments, particularly in their ability to generate cash flow, is heightened in the operating function of the business.

During March, when markets fell and the economic impacts of coronavirus began to materialize globally, Pascal held daily calls with local CIOs to ensure that the investment strategies implemented across regions were agile, efficient and well-coordinated. As a means to ensure consistency, the short-term strategy involved, "reviewing entirely the credit exposure—the main bulk of AXA's assets—considering the impact of the COVID-19 on different sectors, companies and geographies." While relying on existing interest rate hedges and equity protection overlays to mitigate the impact of market shocks on the balance sheet, AXA continually looked to exploit market dislocations. Quick to react, AXA picked up high grade assets at wide spreads. In particular, Pascal noted, "it was very surprising to see AAA CLOs trading at 350bps+ of spread. It didn't last long." AXA's tactical allocations were precise and rigorous as the insurer continually refined its de-risking plan to weather the volatility. AXA's portfolios are typically managed within a global investment universe, which allowed the company to take



Private assets will maintain their allure through illiquidity premiums that are likely even higher today than before the 'crisis period'.

advantage of significant dislocations between U.S. dollar credit and Euro credit in March.

Despite these shorter term opportunities and a "lower-for-longer" market sentiment, AXA still considers public fixed income to be the mainstay of the portfolio in the long term. On this same theme, Pascal believes it is "too early to say" whether the trend from public-to-private assets, highlighted year-over-year in our GSAM Insurance Reports, will persist in the medium term, "as this crisis more severely impacts small and medium enterprises which represent a big chunk of the private universe." Regardless, Pascal considers that, "private assets will maintain their allure through illiquidity premiums that are likely even higher today than before the 'crisis period'." There are new responsible investing opportunities for AXA to contribute further to society, namely senior housing and hospital financing, a health dimension which has emerged as a key theme of responsible investing post-COVID crisis.

As the world gradually re-opens, Pascal theorizes the recovery path to be akin to a "check mark", indicating a slow but steady return. Pascal is managing the entirety of the AXA portfolio in unprecedented times, adapting its investment strategies to benefit from temporary dislocation while keeping the fundamentals stable. Despite past and potential future volatility, the overall long-term investment thesis of AXA remains unchanged.

Kazuyuki Shigemoto

Dai-ichi Life



“While we continue reducing our holdings of domestic listed equities, we think it is a good opportunity to invest into private assets.”

Mr. Kazuyuki Shigemoto recalls that over the last 20 years, Japanese interest rates have maintained historical lows. After thorough market analysis, he believes interest rates will continue to stay low in the long run. Prior to the market events of the first half of 2020, when developed market debt generated higher yields, Japanese insurers, including Dai-ichi Life, increased investments in the foreign/non-yen developed market debt, which generated a fair level of return on a hedged basis. “Today however, economies continue to struggle, and the opportunity is less appealing to invest in other developed country’s interest rates.” Shigemoto-san’s greatest concern is that the “lower-for-longer” trend carries on.

Despite the concern for “lower-for-longer”, Dai-ichi Life sits in a unique position compared to many other global life insurers. With large holdings of domestic equities and short duration assets, Dai-ichi Life remains committed to reducing domestic equity and increasing the duration of its assets against its liabilities. As a result, “We did not change our attitude about controlling our positions. We just need to accept the higher volatility and higher costs for hedging our positions.” While “lower-for-longer” will not prompt the insurer to increase its overall allocation to equities, Dai-ichi Life plans to accelerate its allocation to private assets. “While we continue reducing our holdings of domestic listed equities,

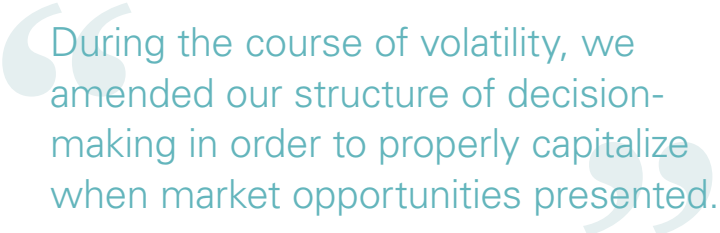
we think it is a good opportunity to invest into private assets. In particular, we increased our allocation to private equity and infrastructure assets as part of our investment strategy.” Despite his confidence in private equity and infrastructure, Shigemoto-san is tentative on private debt, particularly as it relates to the current market conditions. Regarding private debt, he remains cautious about the financial condition of many smaller companies—that make up the bulk of the private debt market—as sales and net income are declining and access to capital is more difficult to source.

Going forward, Shigemoto-san closely watches reported data, in particular that of the United States and China. As China began to re-open its economy, Shigemoto-san studies the recovery of retail sales and production as other economies and countries may follow similar developments. While he considers a U-shape recovery to be the most probable case, Shigemoto-san reiterates the “trade-off between recovery and speed.” He is cautious that if the world is re-opened too quickly, there is potential for a second dip, and if not quick enough, there is potential for a very stagnant, L-shaped recovery.

Shigemoto-san will continue along the long-term investment strategy of Dai-ichi Life, committed to an increase in private assets while remaining hedged against future volatility as we continue to face many unknowns.

Mark Konyn

AIA Group



During the course of volatility, we amended our structure of decision-making in order to properly capitalize when market opportunities presented.

Mark Konyn, Chief Investment Officer at AIA Group Limited, found the onset of COVID-19 to be a period marked by volatility and general uncertainty in both the markets and the world. While he categorized the financial response as “unprecedentedly swift, with scale and speed beyond reasonable expectations,” he was most surprised by the severity of COVID-19’s impact and reaction in the United States. Despite the profound uncertainty of this global event, including a potential for second wave, Mark and his team predict the recovery to resemble a “check mark”, theorizing a slow but steady return to normalcy.

Mark noted that there are no remarkable changes to the short- or long-term investment strategy at AIA, despite the unprecedented nature of world events. Instead, Mark believes the biggest impact to be the insurer’s newly realized ability to make tactical decisions at very short notice; “During the course of volatility, we amended our structure of decision-making in order to properly capitalize when market opportunities presented.” Mark and his team did not circumvent governance, but instead, worked in supercharge to align all key decision makers across the entire organization. Going forward, he believes that this structural change will prove particularly advantageous as his team will continue to prioritize short-term, tactical opportunities on their investment agenda.

As an organization, AIA continues to remain most concerned in the long term about the continuance of low interest rates. With a “public-to-private” allocation trend marked across the industry, Mark indicated that his investment strategy is reliant on the “relativity of where we see opportunities. Due to financial repression, interest for alternative sources of return and yield will persist, particularly for growing insurers like AIA seeking to diversify risk.” Mark reiterated that there is no strategic asset class re-allocation as a result of persistent low rates—it is almost entirely based on what AIA believes it can achieve at any point in time, including from alternative opportunities. The insurer believes that while markets have retraced significantly, there will be an abundance of opportunity; in fact, “if you ask about a key investment opportunity to all the different parts of the business, you will get a different response from each investment team.”

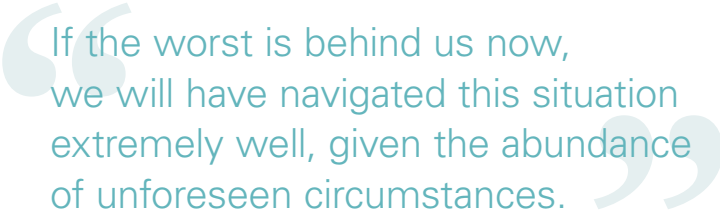
In order to prioritize, AIA is developing market themes from available indicators, metrics and market data in order to further understand the past and developing structural impacts of COVID-19. Despite their efforts here, Mark understands that “it is going to take time for the pot to clear,” as there is still a risk that recovery falters and volatility resumes.

Ellen Cooper

Lincoln Financial Group

According to Ellen Cooper, Chief Investment Officer of Lincoln Financial Group, the unprecedented and unforeseen nature of the global pandemic came with great surprises from many perspectives—public health, economic, monetary and fiscal policy, and overall market. Ellen shared, “In my wildest dreams, I could not have envisioned a scenario, in any analysis, where the economy would completely shut down, and everyone would stay home for an extended period of time.” In particular, Ellen commented on the significant and swift actions as it relates to monetary and fiscal policy, noting that these active responses may fundamentally mitigate negative impacts. In retrospect, it was obvious in February that this pandemic would spread to the United States, however, she never envisioned a correlated event of a global pandemic lining up with a credit cycle.

COVID-19 did not cause any change in Lincoln’s investment strategy, and this was very intentional. “We believed for some period of time that we were in the later stages of the credit cycle and had been positioning defensively. Therefore, when the cycle began to turn, we had been preparing all along and were able to play defense and offense where there were opportunities to do so.” In order to effectively participate and capitalize on these market opportunities, the investment team met more frequently, and worked more rapidly to accelerate decisions following the processes and frameworks in place.



If the worst is behind us now,
we will have navigated this situation
extremely well, given the abundance
of unforeseen circumstances.

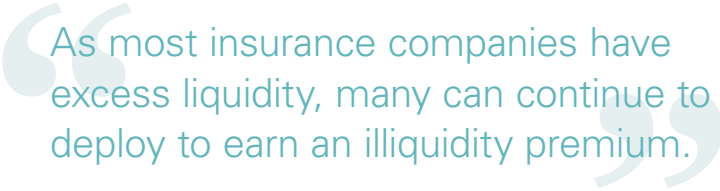
As we look forward to a return to status quo, Ellen Cooper is most concerned that “overall recovery is going to take longer,” and this alone would have meaningful impacts on many sectors, particularly those Lincoln considers to be most exposed to coronavirus. On the other hand, Lincoln has found that the current market environment has yielded new money investing opportunities. As we continue to navigate these unprecedented times, Ellen predicts some combination of a “swoosh” and W-shape recovery as reports of a continued virus spread headline in the news. Regardless, she considers that “if the worst is behind us now, we will have navigated this situation extremely well, given the abundance of unforeseen circumstances.”

Neeti Bhalla Johnson

Liberty Mutual

As the world continues to piece together the social and economic impacts of this year's many unprecedented events, Neeti Bhalla Johnson has been most surprised by the speed and magnitude of both the global shutdown itself and of the resulting fiscal and monetary policy response. While we still await a return to normalcy, Neeti did not anticipate that work-from-home would be as productive and efficient as it has proven to be for many institutions. More broadly, she believes that these events have materially accelerated a number of established trends; "From the collapse of the traditional retail model to the expansion of online commerce and communication, this crisis has accelerated many previously established trends that shape how we work, live and invest."

Overall, these events have not prompted any changes to Liberty Mutual's long-term investment strategy. The insurer's investment strategy is built upon a core set of beliefs about the future that persist through this crisis. These include: a heightened focus on relative value opportunities, a "blur" between public and private assets and investing in diverse, cross-trained talent that leverages analytics and technology to enable better decision-making. "While there have been no strategy shifts, the recent volatility has sharpened our focus on our core beliefs and in some cases, even heightened their importance." In particular, recent market events allowed Liberty Mutual to "put governance around capitalizing on market dislocations and how the organization coordinates from a top-down and bottom-up



As most insurance companies have excess liquidity, many can continue to deploy to earn an illiquidity premium.

perspective to do so." Neeti highlighted that in order to be successful, a culture of heightened transparency, communication and collaboration were essential across the entire Liberty Mutual enterprise.

As "lower-for-longer" remains an investment theme, Neeti believes that the "public-to-private" trend will persist. Investors will increasingly look across the traditional public and private silos to consider the relative value between the two. "As most insurance companies have excess liquidity, many can continue to deploy to earn an illiquidity premium." She considers that illiquidity and complexity premiums underlying many private investments present exciting opportunities on a relative value basis for patient capital. Conversely, Neeti remains most concerned about reinvestment risk in the portfolio given geopolitical, economic and healthcare concerns. The combination of low levels of interest rates and higher bouts of volatility will render fixed income less effective in managing insurance company balance sheet risks.

While Liberty Mutual's base case is more similar in shape to a "check mark" than a "V" or a "U", Neeti also believes there is a reasonable probability of a W-shape recovery. Although there have been no changes in the investment strategy, given the unprecedented nature of these world events, as well as many outstanding unknowns, the team cautiously analyzes all decisions assuming a volatile return to recovery with a wide range of possible outcomes.

SURVEY FINDINGS

Introduction

The GSAM Insurance Asset Management Survey has highlighted Environmental, Social and Governance (ESG) as an investment consideration for the past four editions. Over this time period, ESG has consistently climbed in importance for global insurers. In 2017, 68% of global respondents considered ESG to not be an investment consideration or applicable to their investment processes. This stands in comparison to only 21% of global respondents in 2020.

Asia Pacific and Europe led in actual ESG implementation in the portfolio, although the Americas reported increased adoption over the past year. Across the world, insurers broadly consider portfolio risk mitigation to be among the strongest motivators for this. This points to the idea that investors believe that the credit worthiness and/or the future value of an asset is directly impacted by ESG principles. Despite a broader trend in adoption, insurers unanimously find continued hurdles impeding implementation.

We also included insights on insurer's ETF adoption, insurtech investment and M&A activity. These questions yielded interesting trends, as globally, respondents cited increased utilization of ETFs and interest in insurtech over the course of the past year.

Summary of Survey Respondents

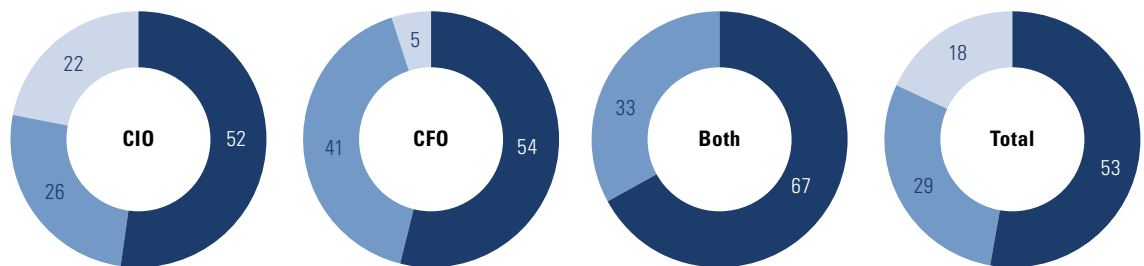
GSAM Insurance Asset Management continued its partnership with KRC Research, an independent research provider, to conduct its ninth annual global insurance investment survey. The survey provides valuable insights from Chief Investment Officers (CIOs) and Chief Financial Officers (CFOs) regarding key industry themes. We received responses from 220 CIOs and senior investment professionals, 41 CFOs and senior finance managers and 12 individuals who serve as both the CIO and CFO. This year, our survey included insurance companies that invest over \$13 trillion in balance sheet assets, which represents around half of the balance sheet assets for the global insurance sector. The participating companies represent a broad cross section of the industry in terms of size, line of business and geography. The following table summarizes the profile of this year's respondents.

Participants of the 2020 Insurance Survey

Type	CIO	CFO	Both	Total
P&C / Non-Life	69	20	5	94
Life	87	10	4	101
Multi-Line	32	5	2	39
Health	19	5	0	24
Reinsurance	13	0	0	13
Captive	0	1	1	2
Total	220	41	12	273

Participants (Regional, %)

■ Americas
■ EMEA
■ Asia



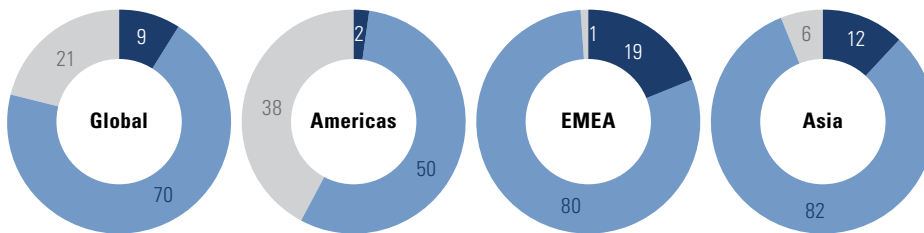
ENVIRONMENTAL SOCIAL & GOVERNANCE

ESG continues to grow as a global trend year-over-year despite reported hurdles in implementation.

To what extent is Environmental, Social and Governance (ESG) and/or Impact Investing an investment consideration?

Adoption of ESG and/or Impact Investing Considerations (Regional, %)

■ A Primary Consideration ■ One of Several Considerations ■ Not a Consideration

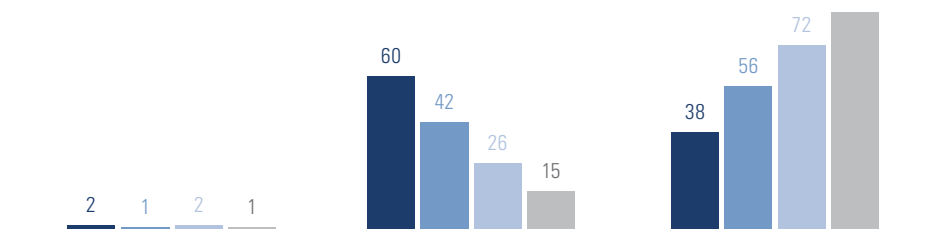


Consistent with previous years, ESG continues to be a stronger investment consideration in Europe and Asia Pacific than in the Americas.

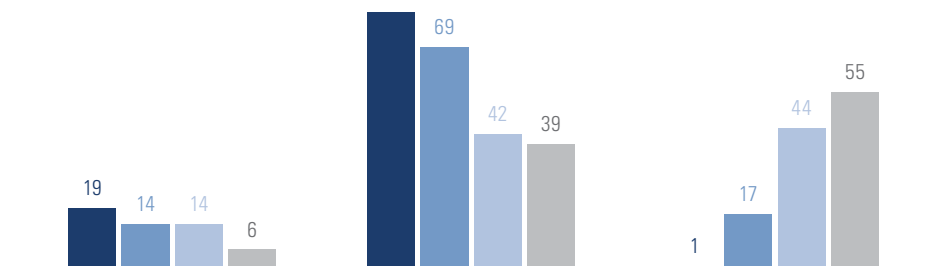
Adoption of ESG and/or Impact Investing Considerations (Regional, %)

■ 2020 ■ 2019 ■ 2018 ■ 2017

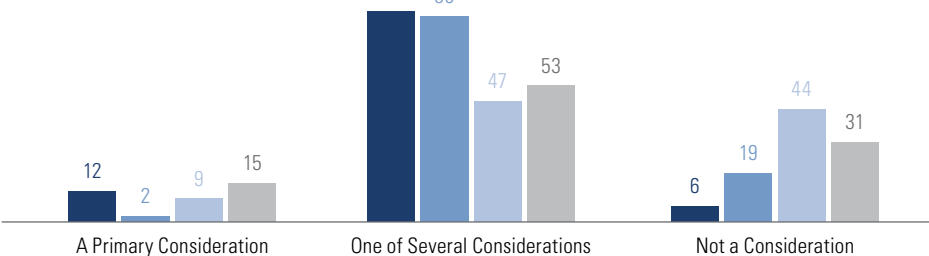
Americas



EMEA



Asia



While Europe and Asia Pacific consider ESG more strongly in their investment considerations, this trend has also been steadily increasing in the Americas.

Do you apply the following ESG considerations in your investment portfolio?

Reliable Reporting of ESG Values when Evaluating Investments (Global, %)

■ Yes ■ No, but Intend to ■ No



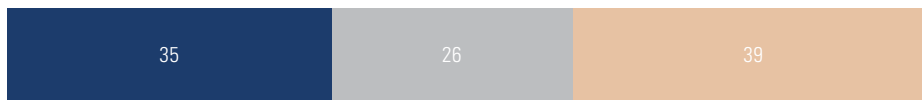
Negative Screening and Avoidance Tools (Global, %)

■ Yes ■ No, but Intend to ■ No



Dedicated ESG Investments (Global, %)

■ Yes ■ No, but Intend to ■ No

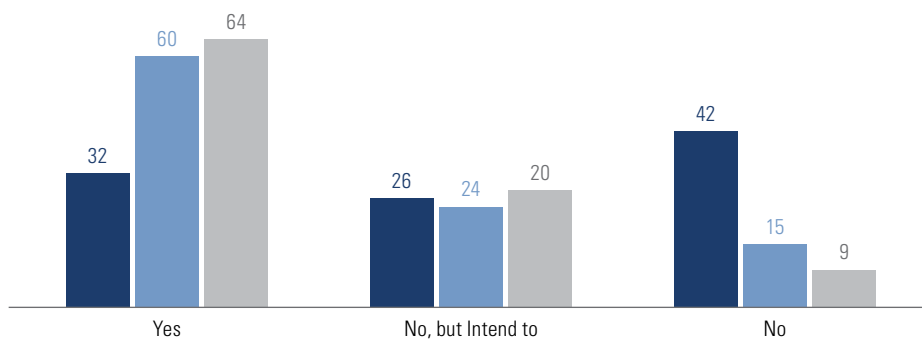


Negative screening and avoidance tools are most utilized in the investment process across regions. Insurers most commonly cited the intention to implement reliable reporting of ESG values in the portfolio over other ESG considerations.

Do you apply the following ESG considerations in your investment portfolio?

Negative Screening and Avoidance Tools (Regional, %)

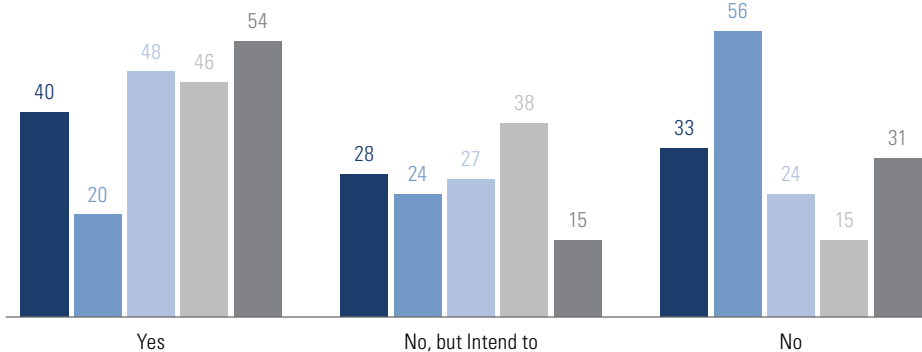
■ Americas ■ EMEA ■ Asia



The use of negative screening and avoidance tools is driven by insurers in Europe and Asia Pacific. In the Americas, 42% of insurers choose not to implement negative screening and avoidance tools in their investment process, in comparison to only 15% in Europe and 9% in Asia Pacific.

Dedicated ESG Investments (Type, %)

■ Life ■ P&C/Non-Life ■ Multi-Line ■ Reinsurance ■ Health

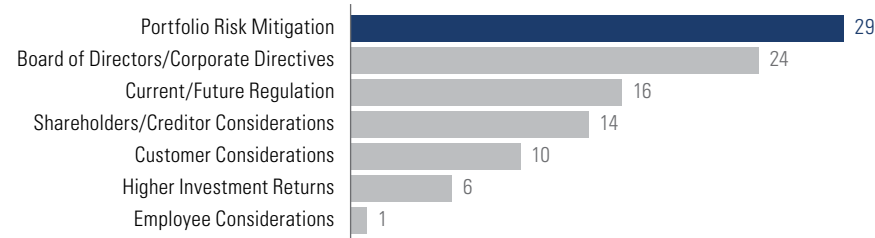


Life, Multi-Line, Reinsurance and Health insurers reported stronger use of dedicated ESG investments while the majority of P&C insurers do not consider this in portfolio construction.

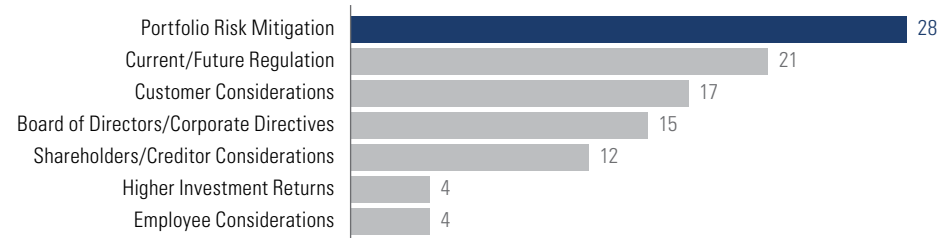
Please rank your primary motivations for implementing (or considering implementing) ESG and/or Impact Investing strategies?

Motivations for ESG Implementation (Regional, %)

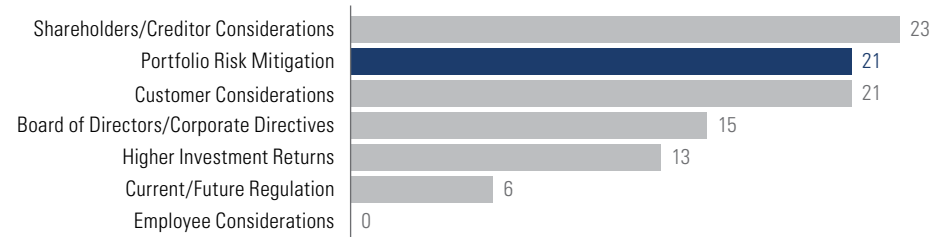
Americas



EMEA



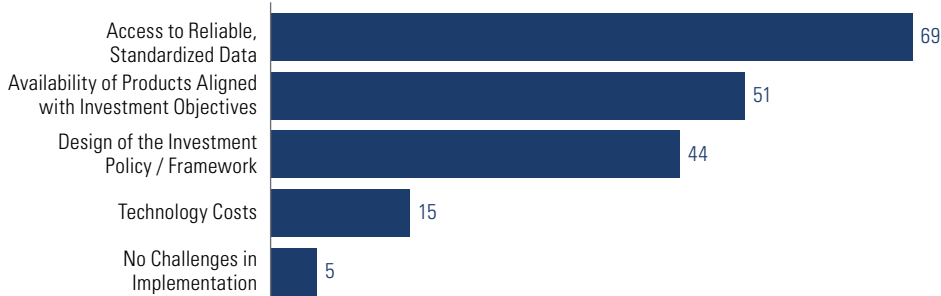
Asia



Regionally, motivations for ESG strategy implementation differed. Portfolio risk mitigation served as a common driver globally, as this was the primary motivator in the Americas and Europe and a secondary motivator in Asia Pacific. Asia Pacific insurers reported shareholder and creditor considerations as the dominant driver of implementation.

What would you consider to be the main hurdles in implementing an ESG strategy?

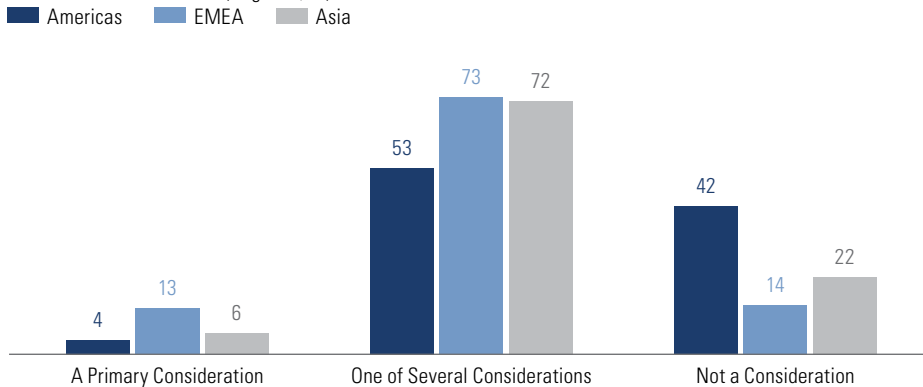
Hurdles to ESG Implementation (Global, %)



In a majority consensus, insurers globally find that access to reliable, standardized data is the primary hindrance to ESG implementation. Only 5% of insurers report no challenges to adoption.

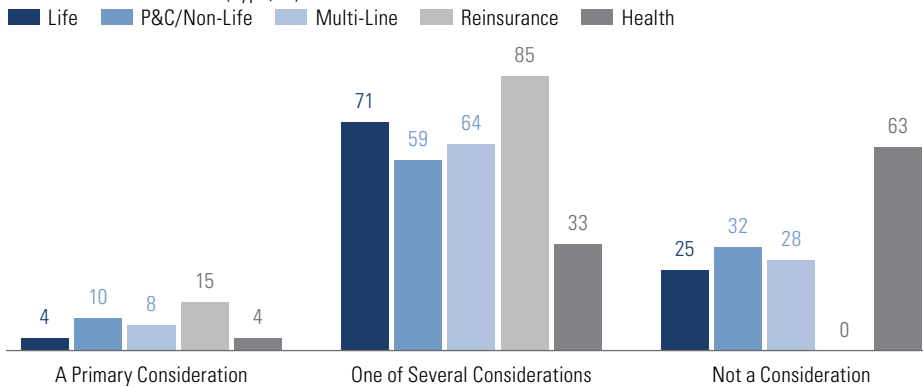
To what extent is climate risk a consideration in your investment process?

Climate Risk Consideration (Regional, %)



A minority of respondents deem climate risk a primary consideration. However, the vast majority of respondents in Europe and Asia Pacific do consider climate risk in the investment process.

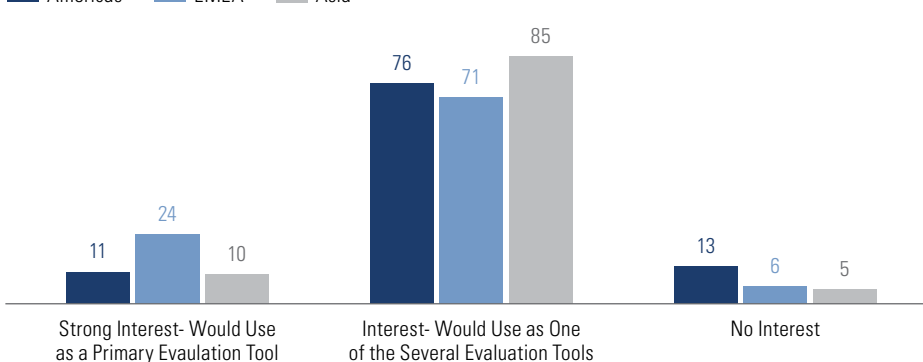
Climate Risk Consideration (Type, %)



Similar to previous years, Health companies least consider climate risk in the investment process.

To what extent are you interested in climate stress tests/scenario analyses to measure your portfolio's exposure to potential, future climate-related risks?

Interest in Climate Analysis (Regional, %)



The vast majority of global respondents expressed interest in climate stress tests or scenario analyses to measure their portfolio's exposure to future climate-related risks. In Europe, about one quarter of all respondents would use this analysis as a primary evaluation tool.

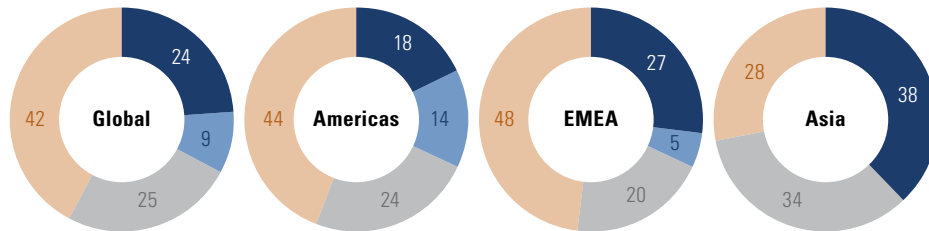
EXCHANGE-TRADED FUNDS

Globally, more insurers reported utilization of ETFs driven primarily by increased interest in Europe.

Do you use ETFs?

Type of ETFs (Regional, %)

■ Equity ■ Fixed Income ■ Both ■ Do Not Use ETFs

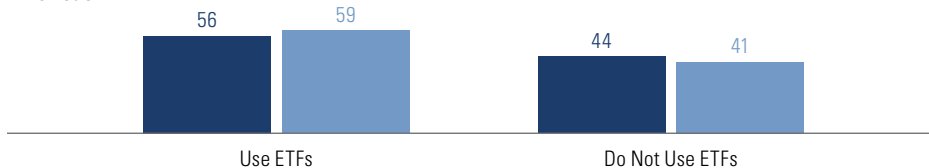


A majority of insurers use ETFs for a portion of their equity and/or fixed income allocations. This remains particularly true in Asia Pacific, where 72% of respondents reported ETF use, marginally higher than last year.

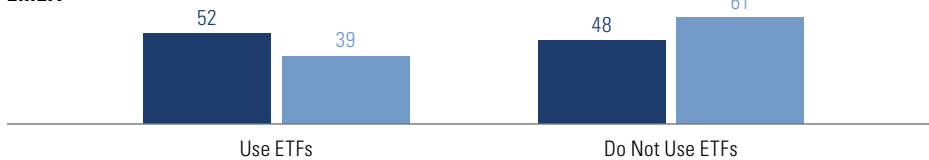
ETF Use (Regional, %)

■ 2020 ■ 2019

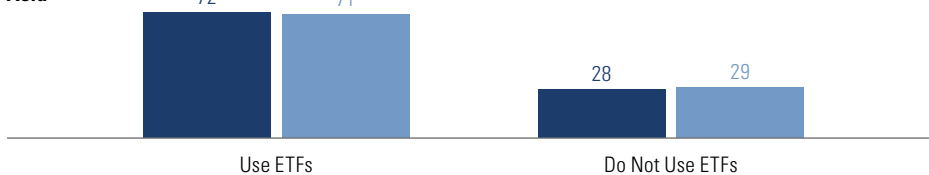
Americas



EMEA



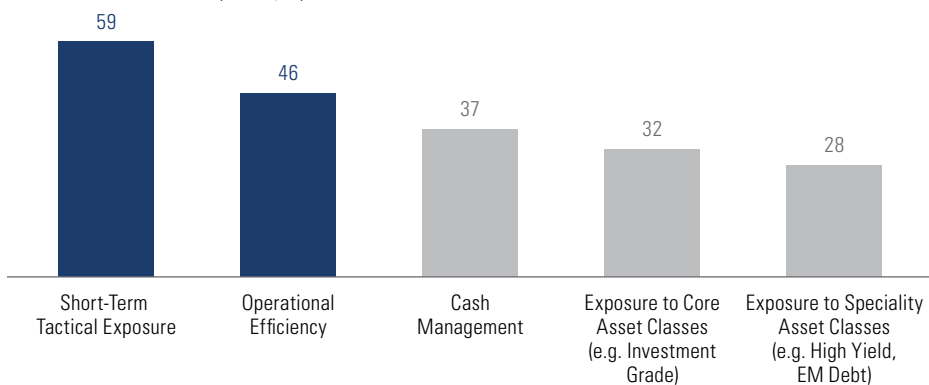
Asia



Year-over-year, ETF usage in the Americas and Asia Pacific has remained fairly stable. In Europe, however, 52% of respondents cited using ETFs, a 13% increase since 2019.

What role do fixed income ETFs play in your investment process?

Role of Fixed Income ETFs (Global, %)



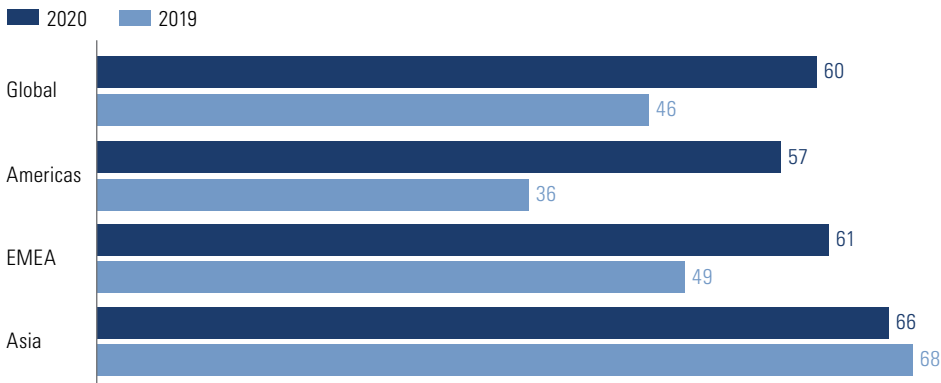
Consistent with 2019, insurers who invest in fixed income ETFs most commonly use the allocations for short-term tactical exposure and/or operational efficiency.

INDUSTRY THEMES

Insurers continue to explore investments in insurtech and M&A activity globally.

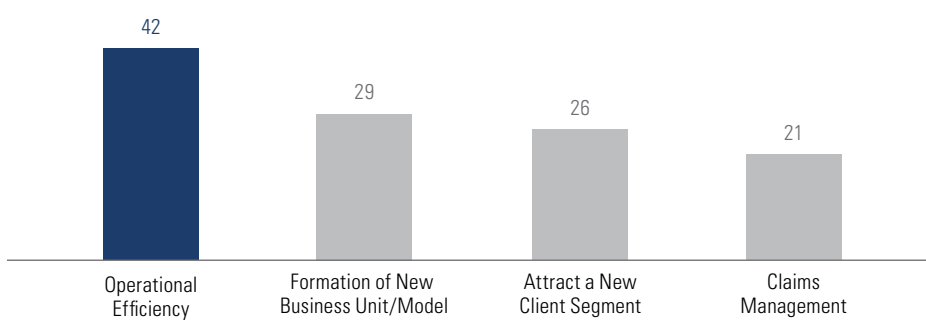
Which of the following factors do you most strongly consider when evaluating potential investments in insurtech?

Investment in Insurtech (Regional, %)



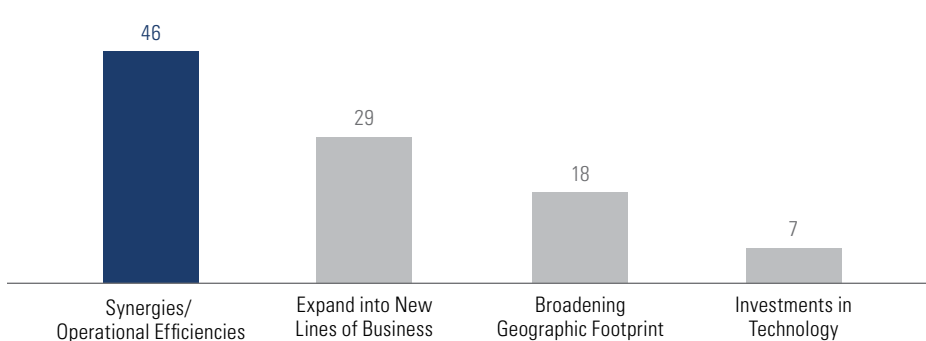
More respondents cited interest in insurtech investments, led by a marked year-over-year increase in the Americas and Europe. In 2019, Asia Pacific was an outlier exploring this type of investment, but over the past year, other regions have aligned with this investment interest. Despite the global growth, operational efficiency remains the most common motivation.

Insurtech Investment Considerations (Global, %)



What would you consider the primary driver behind an insurance company's decision to pursue M&A?

Drivers of M&A (Global, %)



Insurance M&A has been a consistent headline and industry trend through 2019. In the Americas and Europe, insurers report synergies and operational efficiency to be the primary motivators for such activity. Asia Pacific insurers cited broadening of geographic footprints and expansion into new lines of business as factors primarily driving their M&A interests.

DISCLOSURES

Views expressed discussed are those of survey respondents, compiled by GSAM as of February 28, 2020.

2020 survey results as of February 28, 2020. 2019 survey results as of February 26, 2019. 2018 survey results as of February 28, 2018. 2017 survey results as of February 22, 2017. 2016 survey information as of February 24, 2016. 2015 survey results as of February 25, 2015. 2014 survey results as of March 6, 2014. 2013 survey results as of March 5, 2013. 2012 survey results as of May 24, 2012.

This material is provided for educational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. This material is provided at your request for informational purposes only. It is not an offer or solicitation to buy or sell any securities.

The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of the date of this presentation and may be subject to change, they should not be construed as investment advice.

GSAM does not provide legal, tax or accounting advice and therefore expresses no view as to the legal, tax or accounting treatment of the information described herein or any related transaction, nor are we providing any assurance as to the adequacy or appropriateness of this information or our procedures for your purposes. This material is not a substitute for the professional advice or services of your own financial, tax, accounting and legal advisors.

As part of the provision of insurance advisory services, Adviser expects to consult with Client with respect to certain Client assets. Adviser does not provide legal, tax or accounting advice and therefore expresses no view as to the legal, tax or accounting treatment of any related transaction, nor are we providing any assurance as to the adequacy or appropriateness of such advice for your purposes. Client acknowledges that Client is solely responsible for interpretation and compliance with all insurance and accounting laws, regulations and related requirements applicable to Client.

Economic and market forecasts presented herein reflect a series of assumptions and judgments as of the date of this presentation and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Goldman Sachs has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. This material has been prepared by GSAM and is not financial research nor a product of Goldman Sachs Global Investment Research (GIR). It was not prepared in compliance with applicable provisions of law designed to promote the independence of financial analysis and is not subject to a prohibition on trading following the distribution of financial research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

THIS MATERIAL DOES NOT CONSTITUTE AN OFFER OR SOLICITATION IN ANY JURISDICTION WHERE OR TO ANY PERSON TO WHOM IT WOULD BE UNAUTHORIZED OR UNLAWFUL TO DO SO. Prospective investors should inform themselves as to any applicable legal requirements and taxation and exchange control regulations in the countries of their citizenship, residence or domicile which might be relevant.

GSAM does not provide legal, tax or accounting advice and therefore expresses no view as to the legal, tax or accounting treatment of the information described herein or any related transaction, nor are we providing any assurance as to the adequacy or appropriateness of this information or our procedures for your purposes. This material is not a substitute for the professional advice or services of your own financial, tax, accounting and legal advisors.

Environmental, Social, and Governance ("ESG") strategies may take risks or eliminate exposures found in other strategies or broad market benchmarks that may cause performance to diverge from the performance of these other strategies or market benchmarks. ESG strategies will be subject to the risks associated with their underlying investments' asset classes. Further, the demand within certain markets or sectors that an ESG strategy targets may not develop as forecasted or may develop more slowly than anticipated.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

United Kingdom and European Economic Area (EEA): In the United Kingdom, this material is a financial promotion and has been approved by Goldman Sachs Asset Management International, which is authorized and regulated in the United Kingdom by the Financial Conduct Authority.

Switzerland: For Qualified Investor use only – Not for distribution to general public. This document is provided to you by Goldman Sachs Bank AG, Zürich. Any future contractual relationships will be entered into with affiliates of Goldman Sachs Bank AG, which are domiciled outside of Switzerland. We would like to remind you that foreign (Non-Swiss) legal and regulatory systems may not provide the same level of protection in relation to client confidentiality and data protection as offered to you by Swiss law.

Colombia: Esta presentación no tiene el propósito o el efecto de iniciar, directa o indirectamente, la adquisición de un producto a prestación de un servicio por parte de Goldman Sachs Asset Management a residentes colombianos. Los productos y/o servicios de Goldman Sachs Asset Management no podrán ser ofrecidos ni promocionados en Colombia o a residentes Colombianos a menos que dicha oferta y promoción se lleve a cabo en cumplimiento del Decreto 2555 de 2010 y las otras reglas y regulaciones aplicables en materia de promoción de productos y/o servicios financieros y/o del mercado de valores en Colombia o a residentes colombianos.

Al recibir esta presentación, y en caso que se decida contactar a Goldman Sachs Asset Management, cada destinatario residente en Colombia reconoce y acepta que ha contactado a Goldman Sachs Asset Management por su propia iniciativa y no como resultado de cualquier promoción o publicidad por parte de Goldman Sachs Asset Management o cualquiera de sus agentes o representantes. Los residentes colombianos reconocen que (1) la recepción de esta presentación no constituye una solicitud de los productos y/o servicios de Goldman Sachs Asset Management, y (2) que no están recibiendo ninguna oferta o promoción directa o indirecta de productos y/o servicios financieros y/o del mercado de valores por parte de Goldman Sachs Asset Management.

Esta presentación es estrictamente privada y confidencial, y no podrá ser reproducida o utilizada para cualquier propósito diferente a la evaluación de una inversión potencial en los productos de Goldman Sachs Asset Management o la contratación de sus servicios por parte del destinatario de esta presentación, no podrá ser proporcionada a una persona diferente del destinatario de esta presentación."

Canada: This presentation has been communicated in Canada by GSAM LP, which is registered as a portfolio manager under securities legislation in all provinces of Canada and as a commodity trading manager under the commodity futures legislation of Ontario and as a derivatives adviser under the derivatives legislation of Quebec. GSAM LP is not registered to provide investment advisory or portfolio management services in respect of exchange-traded futures or options contracts in Manitoba and is not offering to provide such investment advisory or portfolio management services in Manitoba by delivery of this material.

Japan: This material has been issued or approved in Japan for the use of professional investors defined in Article 2 paragraph (31) of the Financial Instruments and Exchange Law by Goldman Sachs Asset Management Co., Ltd.

Asia Pacific: Please note that neither Goldman Sachs Asset Management International nor any other entities involved in the Goldman Sachs Asset Management (GSAM) business maintain any licenses, authorizations or registrations in Asia (other than Japan), except that it conducts businesses (subject to applicable local regulations) in and from the following jurisdictions: Hong Kong, Singapore and Malaysia. This material has been issued for use in or from Hong Kong by Goldman Sachs Asset Management (Hong Kong) Limited, in or from Singapore by Goldman Sachs Asset Management (Singapore) Pte. Ltd. (Company Number: 201329851H) and in or from Malaysia by Goldman Sachs (Malaysia) Sdn Berhad (880767W).

Australia: This material is distributed in Australia and New Zealand by Goldman Sachs Asset Management Australia Pty Ltd ABN 41 006 099 681, AFSL 228948 ('GSAMA') and is intended for viewing only by wholesale clients in Australia for the purposes of section 761G of the Corporations Act 2001 (Cth) and to clients who either fall within any or all of the categories of investors set out in section 3(2) or sub-section 5(2CC) of the Securities Act 1978, fall within the definition of a wholesale client for the purposes of the Financial Service Providers (Registration and Dispute Resolution) Act 2008 (FSPA) and the Financial Advisers Act 2008 (FAA), and fall within the definition of a wholesale investor under one of clause 37, clause 39 or clause 40 of Schedule 1 of the Financial Markets Conduct Act 2013 (FMCA) of New Zealand (collectively, a "NZ Wholesale Investor"). GSAMA is not a registered financial service provider under the FSPA. GSAMA does not have a place of business in New Zealand. In New Zealand, this document, and any access to it, is intended only for a person who has first satisfied GSAMA that the person is a NZ Wholesale Investor. This document is intended for viewing only by the intended recipient. This document may not be reproduced or distributed to any person in whole or in part without the prior written consent of GSAMA. This information discusses general market activity, industry or sector trends, or other broad based economic, market or political conditions and should not be construed as research or investment advice. The material provided herein is for informational purposes only. This presentation does not constitute an offer or solicitation to any person in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it would be unlawful to make such offer or solicitation.

South Africa: Goldman Sachs Asset Management International is authorized by the Financial Services Board of South Africa as a financial services provider.

Israel: This document has not been, and will not be, registered with or reviewed or approved by the Israel Securities Authority (ISA"). It is not for general circulation in Israel and may not be reproduced or used for any other purpose. Goldman Sachs Asset Management International is not licensed to provide investment advisory or management services in Israel. In the United Kingdom, this material is a financial promotion and has been approved by Goldman Sachs Asset Management International, which is authorized and regulated in the United Kingdom by the Financial Conduct Authority.

Qatar: This document has not been, and will not be, registered with or reviewed or approved by the Qatar Financial Markets Authority, the Qatar Financial Centre Regulatory Authority or Qatar Central Bank and may not be publicly distributed. It is not for general circulation in the State of Qatar and may not be reproduced or used for any other purpose. In the United Kingdom, this material is a financial promotion and has been approved by Goldman Sachs Asset Management International, which is authorized and regulated in the United Kingdom by the Financial Conduct Authority.

Confidentiality

No part of this material may, without GSAM's prior written consent, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient.

© 2020 Goldman Sachs. All rights reserved.

Compliance code (2, 10-19): 206126-OTU-1218112

Compliance code (3-9): 208798-OTU-1224831

