The Risks of Change in the Insurance Industry: Adapting to the "New" New Normal

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Adapting to the ‘New’ New Normal

AUTHORS Brian Kaul
Janine Bender, ASA, MAAA
Ben Leiser, FSA, MAAA
Lisa Parker, ASA, MAAA
Risk & Regulatory Consulting, LLC

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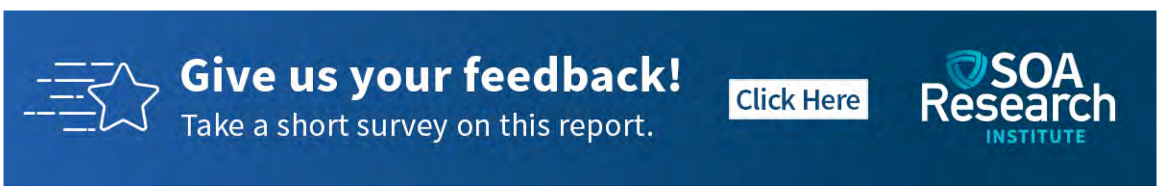

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Executive Summary

In March of 2020, the global economic order was shaken by the advent of the novel coronavirus pandemic, which prompted widespread government lockdowns, business closures, and stimulus spending. Months into the pandemic, commentators began speaking of a so-called 'new' new normal' as citizens adjusted to the cultural and business changes attendant to mandatory masking, working from home, social distancing, and extensive school closures, along with the widespread rise of DEI departments within corporate and government organizations. In a constantly changing world, the concept of a 'new' new normal refers to that which is different from what was experienced in the past, and is now becoming the norm. Going forward, for clarity, this paper will refer to a 'new normal' rather than a 'new' new normal.

Substantial disruptions continued in 2021 as the fallout from the pandemic led to global supply chain disruptions and government spending at continued high levels, coupled with mask and vaccine mandates and continued limitations and business closures, led to inflation and subsequent interest rate increases by the Fed to combat inflation at levels not seen in decades. There were several high-profile bank failures and the collapse of a major fraudulent crypto exchange. All that raised concern about the looming threat of a recession and whether a soft landing could be achieved. Russia's invasion of Ukraine in 2022 and the imposition of trade and currency sanctions by the U.S. and its European allies further fractured the world's supply chain and posed a direct challenge to the rules-based international world order established by the United States and its allies during the unipolar moment after the fall of the Soviet Union. In November of 2022, OpenAI released a large language model artificial intelligence chatbot called ChatGPT, which became the fastest adopted technological advance in world history, and prompted speculation about the labor market disruptions that advances in AI will bring.

To consider all the manifold disruptions that have occurred since 2020, and the ongoing risks and opportunities they portend for the insurance business, we propose the concept of the new normal environment, characterized by the following risks:

- Change in Interest Rates,
- Artificial Intelligence (AI) / Cyber Security,
- Higher Inflation,
- Climate Change,
- Regulatory Risk,
- Social Inflation,
- Talent Management,
- Pandemic Mortality/Morbidity,
- Geo-political Risk,
- Tightening Reinsurance Market,
- Sustaining of Healthy and Vibrant Corporate Culture,
- Supply Chain,

- Diversity, Equity & Inclusion (DE&I),
- Slowdown in the Court System,
- Healthcare Provider Consolidation / Staffing Shortages, and
- Economic Volatility.

We issued a survey in July 2023, which included the above list of risks, to ask Chief Risk Officers and other senior-level insurance personnel what they see as the current new normal risks and how they plan to respond to the changing environment. We sent the survey to a cross-section of different life, health and property and casualty (P&C) insurance companies across industry and consulting, conducting business both in North America and abroad. We received 16 responses, with the majority from large, publicly-traded life companies that write business in the U.S.

For the above list of risks, as well as additional risks the participants included, we asked the survey participants to provide the following from their company's point of view:

- The likelihood that risks will occur within three years, and the severity of each risk for their company,
- The top five new normal risks they see,
- An assessment of which areas of their company each risk will affect (IT, valuation, product, etc.) and each risk's impact on capital, revenue, and earnings,
- How the company is responding or will respond to changes and managing these new risks, and
- What the company has learned from the past and how that will be leveraged in the new normal.

While companies varied somewhat in their responses based on the size of the company and the business they wrote (life vs health, for example), we found that inflation and interest rate risks were consistently ranked as both highly likely and highly impactful. Diversity, equity, and inclusion and climate change risks were ranked lower than we expected. This could be due to financial impacts being a more immediate concern (over the next three years) to risk managers, whereas DE&I and climate change risks do not have short-term financial impacts to companies. Regulatory changes were considered likely, but of lesser impact compared to other risks. Insurance companies are used to managing regulatory changes and changes in regulation typically do not occur quickly.

The top five risks among the participants are the following:

- Change in Interest Rates
- Artificial Intelligence / Cyber Security
- Higher Inflation
- Talent Management
- Pandemic Mortality/Morbidity

We observed that two of the participants' top five risks, change in interest rates and higher inflation, were consistent with their ranking of being highly likely to occur. However, regulatory and reinsurance risks that participants ranked as highly likely to occur did not make it into the top five risks. This may be because the risks in the top five are current issues for risk managers with potential impacts to capital and earnings.

Participants ranked three risks from the top five, change in interest rates, higher inflation, and pandemic mortality/morbidity, along with regulatory risk, as having the most impact on capital, revenue and earnings. The actuarial functions of capital management, product/pricing, and valuation were seen as typically being affected by the risks of changes in interest rates, higher inflation, and pandemic mortality/morbidity, whereas risks such as AI/cyber security and talent management affect human resources and operational functions.

The majority of participants responded that they already include the risks they identified in their companies' risk assessment scenarios (i.e., they are stress testing these risks) with somewhat fewer participants including them in their risk management playbook (i.e., the management and mitigation of these risks are not formally documented). A common theme among participants is that the keys to being prepared and managing these risks are senior leadership involvement, regulatory guidelines, and capital management.

The participants concluded that companies need to analyze what worked and did not work for them over the past few years and adapt and modify risk management strategies to use for the next set of new normal risks that will occur in the future. Companies need to react faster to change, perform more frequent and extreme sensitivity tests, and increase coordination between pricing, underwriting, and mortality reporting, as well as always striving to be innovative.

Section 1: Introduction and Methodology

The 2020 pandemic marked a turning point, not only in the U.S. culturally, but also in terms of markets, and ushered in so many changes that you might call the following period a "new normal." Numerous changes have occurred since the onset of this new time period, including changes in inflation and interest rates, increases in mortality due to the pandemic, social unrest over issues concerning race and gender, the invasion of Ukraine, disruptions in global supply chains, increasing concerns about climate change, advances in artificial intelligence, social inflation in P&C insurance, a changing workforce dynamic, and new regulations, among others. The confluence of these shocks and their possible persistence into the future prompt a discussion on the implications of this new normal for the insurance industry.

The purpose of this paper is to demonstrate and discuss how insurers across all practice areas (life, health, and P&C), from the Chief Risk Officers' (CRO) perspectives, will:

- Identify changes the new normal will bring in a constantly changing world,
- Identify the nature of the accompanying new risks,
- Discuss how the industry should respond to these changes and manage these new risks,
- Understand what we have learned from the past and how we can leverage it, and
- Understand how we can be equipped to live in this new normal.

1.1 RISK DETERMINATION

Based upon our research, we considered the following risks:

- Interest Rate / Inflation Risk – Whereas prior to the pandemic these had remained low for upwards of a decade, both have recently increased to multi-year highs, with the Fed aiming to get inflation back near 2% by 2025, mainly through increasingly high interest rates (Wessel, 2022.) This environment will prompt companies to write higher interest rate policies and also affect the value of investment portfolios used to back claims. Rising rates decrease bond values, while inflation decreases their real value and, since inflation will affect nominal earnings which, in turn, drive equity valuations, inflation may also affect stock prices. While interest rate volatility and inflation are not new to the insurance industry, the steep increase in both at once could pose a unique challenge to insurance companies by simultaneously lowering the market value of fixed income bond portfolios, while increasing market volatility and counterparty default risk on balance sheet assets, as well as increasing the prevalence of premium non-payment or policy lapse.

- Pandemic Mortality / Morbidity – Until the COVID-19 pandemic, insurers had seen mortality improvement. With COVID, life insurance companies put their longevity assumption updates or product designs on hold until they had a better assessment of the impacts. Hence, modeling mortality rates has been the focus of life insurance companies. Even though many companies have reported that their mortality assumptions are still reasonable or only need a little adjustment after their mortality assessment, the variability that exists remain problematic. Compounding this challenge is that the self-isolation and fears relating to the virus (e.g., access to medical care, fear of getting medical attention) may accelerate the mortality of policyholders that do not have the disease. For health insurance, the increasing clusters of infection and mortality in nursing homes have been a worrying trend, and the potential exposure to insurers is unclear (Deloitte, 2020). On the Life and Pension business, reinsurers' expectations of loss will depend on the evolution of mortality rates and how this will impact their respective overall books of business, given that annuities are potentially a natural hedge against term life coverage (Deloitte, 2020).

- Geopolitical Risk – During the pandemic, the perceived threat of the virus to sovereignty and national security led most states to isolate themselves and refrain from multilateral cooperation (Guiseppe, 2020). The years following the pandemic saw increased tensions between the U.S. and China, as well as an invasion of Ukraine by Russia. In this environment, the possibility of future trade wars, increased tariffs or military conflict all pose a risk to the stability of markets.

- Supply Chain Risk – The pandemic and the war in Ukraine have disrupted supply chains around the world, leading to higher prices and the less reliable supply of goods. The trend of increasing prices may be exacerbated by countries onshoring their production to ensure more stable supply lines.

- Climate Change Risk – In 2021, there were 50 severe flooding events worldwide, resulting in $80 billion in losses (Bevere et al., 2021). The higher frequency and severity of natural catastrophes, such as tropical cyclones, floods, winter storms, and wildfires, poses risks for the P&C industry directly, but regulations intended to offset the effects of climate change may affect company profitability and, by extension, stock prices and portfolio values. Thus, climate change seems poised to reshape the investment landscape.

- Artificial Intelligence – Recent advances in language-processing models based on GPT-3 (ChatGPT, for example) demonstrate that AI may begin to obviate the need for certain tasks that are more routine and can be automated, such as some underwriting and data analysis. The advance of technology enables the capability for the insurance industry to increase reliance on sophisticated analytics, such as Blackrock's Aladdin System, Strategic Asset Allocations (something new or just a revitalization of the efficient frontier), Value-at-Risk, and other complex models. The key issues for the insurance industry driven by emerging technologies are (a) the ability/opportunity to understand and manage both the rewards and risks of investing in big data analysis, (b) the higher risk of companies' failure and overload key processes being exposed to the public (reputational risk) and, (c) the increasing needs for companies to look for opportunities to adopt and integrate new advanced methods or to partner with Insurtechs.

- Social Inflation Risk – This term refers broadly to excessive growth in insurance settlements and is of particular importance to the P&C industry. One study sponsored by CAS estimated that social inflation increased commercial auto claims by more than $20 billion between 2010 and 2019 (Lynch & Moore, 2022). Similar trends seem to be present in liability and medical malpractice claims.

- Regulatory Risk – Compliance with regulations costs money, especially when regulations that some might consider burdensome differ across state lines. Following are examples of risk considerations:

    - Government and Regulatory Compliance Risk – Regulatory risk is the risk that a change in the laws and regulations will materially impact a security, business, sector, or market. Compliance risk, on the other hand, is the risk that a company will be determined to be in violation of already established laws or regulations (Hayes, 2022). Because the government can change regulations at any point in time, insurance companies must not only bear the cost of current regulations, but also anticipate the impact of emerging regulations on their strategic direction, business model and compliance/risk management processes and systems (PWC, 2023).

    - Government and Regulatory Divergence Risk – Increasing political polarization in the United States may lead to conflicting regulations across state lines. Regulatory scrutiny and enforcement activities will increase. Examinations and investigations under existing regulations will increase in scope coverage as regulatory "perimeters" expand via established jurisdictional authorities. Divergences and debate on jurisdictional authorities will continue across federal, state, and global regulations and frameworks—exacerbated by social and political divides, as well as a heightened value to "regulatory democratization" (Matsuo, 2023). These discrepancies may complicate policies meant to span state lines and impose costs on companies that operate in multiple jurisdictions with differing regulations.

  - Rating agency structural changes and the expanded number of nationally recognized statistical rating organization (NRSRO) designations.

- Workforce Dynamic – The new normal that companies faced immediately after the onset of COVID-19 was enabling staff to work remotely. Remote work has been a relative culture shock for many organizations, and insurers have had to invest in strategies to ensure effective staff engagement and support (Deloitte, 2020). Unfortunately, while implementing these strategies, new or hidden existing issues have surfaced and quickly become pain points at workplaces. Following are a few examples of the risk considerations related to the changes in the workforce dynamic:

  - DE&I – For years, DE&I has been an idea or topic of discussion within companies and, over the past few years, many organizations have taken strides to build DE&I into their policies and hiring practices. Companies that are diverse, equitable, and inclusive are better able to respond to challenges, win top talent, and meet the needs of different customer bases (McKinsey & Company, 2022). Some studies show a link between increased diversity among employees and workplace productivity, as well as employee engagement because employee engagement at work is strongly linked with a sense of inclusion. Beyond the new normal of whether and how DE&I could increase companies' expenses, cause division among employees, and lead to increases in executive level suits, there is the other realm concerning how DE&I may impact a firm's ratings.

  - Talent management – "According to a July 2021 survey from the Society for Human Resource Management, 41% of U.S. workers were either actively searching for a new job or planning to do so in the next few months. Two-thirds of those searching considered a career change, rather than moving within their industry. Bankrate's job seeker survey in August 2021 found even more turbulence; 55% of the workforce said they would likely look for a new job in the next year." (Dayen, 2021). This trend has been characterized as the Great Resignation. Insurers are not immune to employee churn or the resignation of top talent and should review their succession plans, especially those for key individuals in the organization, as well as long-term talent-retention strategies to reflect the pros and cons of remote work. (Deloitte, 2020).

  - Sustaining of a healthy and vibrant corporate culture - The tone set by the risk/CRO function and senior management is a key determinant of corporate culture. On the one hand, a company's culture can foster innovation and collaboration and, on the other hand, the culture can foster turf wars and encourage silo-focused activities.

1.2 SURVEY

Based upon our literature research, we developed a survey in Excel that was e-mailed to the majority of participants. The survey was expected to take approximately an hour to complete. For a few of the participants, in lieu of completing the survey, a 30-minute discussion occurred.

We asked the participants, from their point of view, to identify new normal risks, identify their top five risks, assign the likelihood of a risk occurring in a three-year horizon and the severity of impact of that risk to their company; how the risks will impact areas of the company (IT, valuation, product, etc.) and the impact on capital, revenue, and earnings; how the company is responding to changes and managing these new risks; and, what the company has learned from the past and how that will be leveraged in the new normal. The complete survey is in Appendix A.

The survey was sent to a cross-section of different life, health and P&C insurance companies across industry and consulting, conducting business both in North America and abroad. We received 16 responses. As shown in the following charts, the majority of responses were from large, public life companies that write business in the U.S..

Figure 1
TYPE OF INSURANCE COMPANY

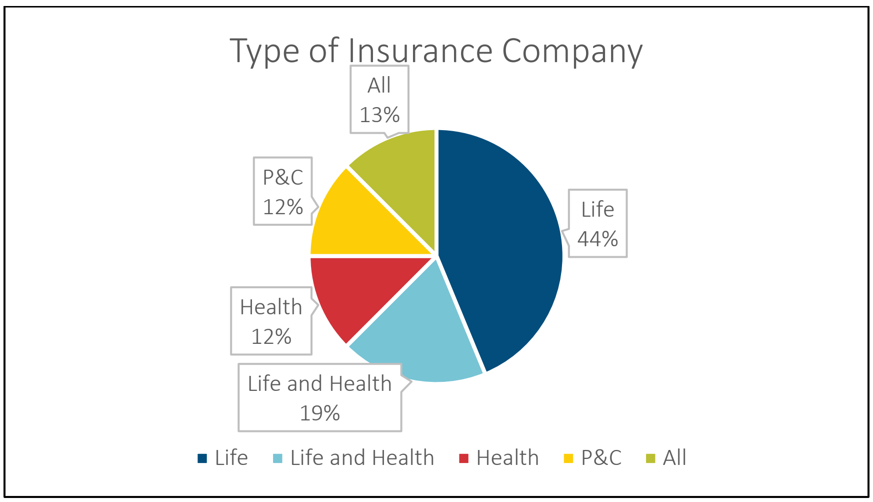


Figure 2
COUNTRY

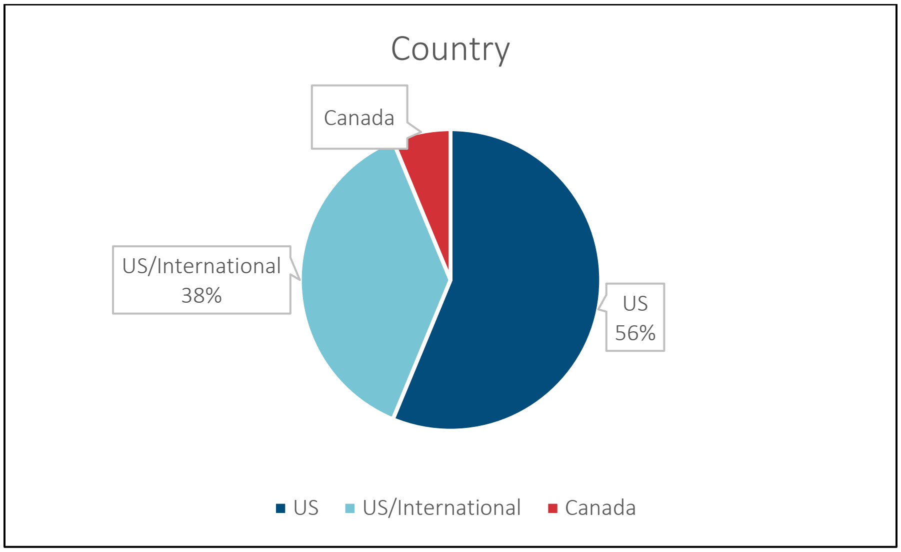
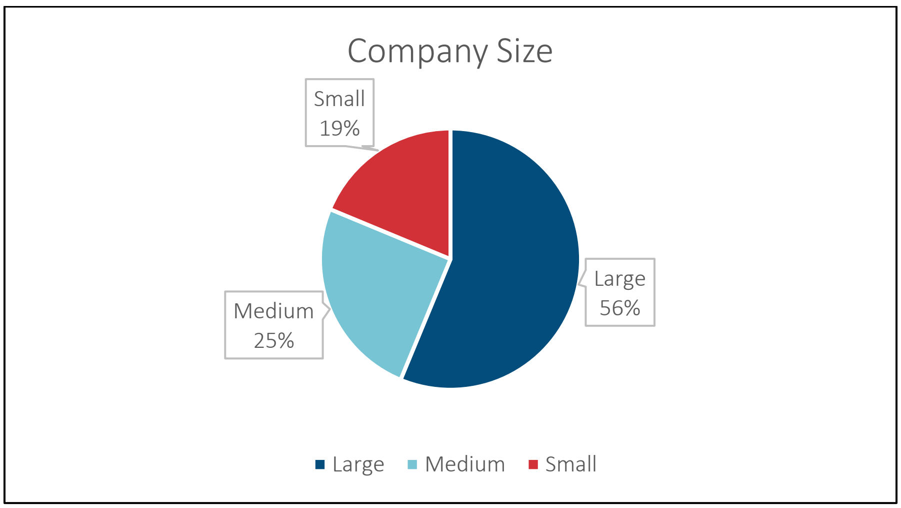
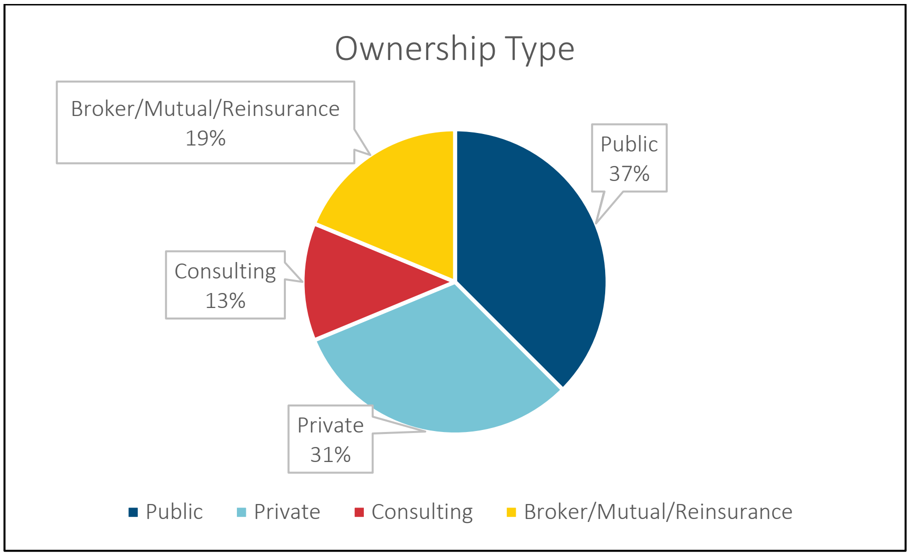


Figure 3
COMPANY SIZE



Large: Assets > $65 billion, Medium: Assets $500 million - $65 billion, Small: Assets < $500 million

Figure 4
COMPANY SIZE



Section 2: Survey Results and Analysis

2.1 RISKS

The participants were asked to share what they would define as the new normal environment, both in terms of a baseline and the risks to that baseline. The survey then provided a set of new normal risks with an associated baseline and risk definition, and the companies were asked to include their baselines, if different than provided, for the new normal risks, and then include any new normal risks that were not included in the survey. Most participants used the new normal statements provided or had similar baselines, in which case the responses were combined with one of the provided new normal risks.

Based on participant responses, the following new normal risks are used throughout this paper and are worded as they appeared in the survey.

Table 1
NEW NORMAL RISKS

New Normal Risks	Baseline	Associated Risks
Change in Interest Rates	Steadily increasing rate	Rapidly increasing rate or interest rate spikes causing policyholder disintermediation
Artificial Intelligence / Cyber Security	Large language models (GPT-4) assist worker productivity	Stronger AI disrupts the labor market by making some workers irrelevant
Higher Inflation	Inflation rate elevated compared with the pre-pandemic level	Inflation could move significantly within a few years
Climate Change	Global warming and its impacts become a much higher priority to regulators, rating agencies, government	More frequent disclosures required (for investment, as well as risk mitigation status)
Regulatory Risk	Current regulatory regime	Regulatory differences across state lines increase
Social Inflation	Higher frequency of frivolous lawsuits	Higher payouts in lawsuits
Talent Management	Great resignation makes it difficult to retain talent	Employees demand unprecedented higher salaries
Pandemic Mortality/Morbidity	Higher mortality rate	Insurance company faces liquidity issues from the higher mortality rate
Geo-political Risk	Geo-political Risk	Increased government intervention
Tightening Reinsurance Market	Sharp increases in reinsurance pricing	Insurers increasing exposure to catastrophic or other large events by increasing retentions, lowering reinsurance limits, and/or co-participating in higher layers of losses

New Normal Risks	Baseline	Associated Risks
Sustaining of Healthy and Vibrant Corporate Culture	Sustaining a healthy and vibrant corporate culture	Company reputation could be hurt; higher employee turnover rate
Supply Chain	Supply chain slows down or gets blocked	Longer wait time, higher expense
Diversity, Equity & Inclusion	Heightened DE&I awareness	Mandatory DE&I for all companies
Slowdown in the Court System	Delays in settling third-party liability claims due to COVID	Greater uncertainty in the ultimate cost of claims
Healthcare Provider Consolidation and Staffing Shortages	Healthcare provider consolidation and staffing shortages	Additional costs to obtain temporary workers to fill the need
Economic Volatility	Since the start of the pandemic economic volatility has increased, including global supply disruption, inflation, rapidly rising interest rates, increased policyholder lapses, bank failures, possibility of recession, etc.	Inflation impacts the ability of consumers to buy insurance. Bank failures impact insurers or the broader economy. A severe recession impacts the United States and insurance company balance sheets.

The responses contained some additional risks that were not included in the results because each one was only reported by one company and only appeared on the initial risk page and no other data was provided (likelihood, severity, ranking, etc.). Also, they were not risks that we felt could be combined with other new normal risks due to dissimilarities. New normal risks that are not included in any of the following summaries are as follows:

Table 2
NEW NORMAL RISKS NOT INCLUDED IN RESULTS

New Normal Risks	Baseline	Associated Risks
Business Continuity and Third-Party Risk	An increase in climate-related events, cyber events, and a remote work environment have increased the importance of business continuity planning for our company and third parties.	Disruptions, such as climate-related events or cyber-attacks stop operations, and the company sees a financial impact. Reputational impacts from outages.
Real Estate	Rational footprint, predictable costs and occupancy.	Increased costs and decreased utility and usage.
Medical Technology Improvement	Has been improving	Accelerating, which will have financial impacts
Increased Stress on Social Programs	Lack of affordable housing as population growth exceeds housing supply; increased pressure on health care system from deferred surgeries and other medical treatment; lack of	Drop in sales of insurance products and group benefit products; increased policy terminations or policy loan activity; investment losses due to drop in government debt

New Normal Risks	Baseline	Associated Risks
	collaboration among municipal, provincial and federal governments as each seeks to avoid spending increases.	ratings, corporate defaults, or equity market losses.
Educational Disruption	COVID impacted the education system in the U.S. in a way that affected 3-4 years' worth of graduating students, drove away teachers, and reduced educational standards for years to come.	Unknown. So far, only positive is we have been able to hire ex-teachers. Long term? Will affect new hires over the next 5-10 years.
Erosion of Trust	COVID either highlighted or exacerbated a trend (in the U.S., at least) of distrust between groups. Groups with opposing views are not able to agree on a reliable source of information and so have different views of the facts and the solution to a problem, although both groups may actually agree there is a problem.	Distracts government resources and leads politicians to focus on issues that do not matter for the long-term benefit of the country. Creates social inflation in insurance claims and uncertainty around which lines will be impacted by it.

2.2 TOP FIVE RISKS

From the list of new normal risks, participants were asked to rank the top five risks to their company from 1 to 5, with 1 being the top risk and 5 being the least. Then, we assigned five points to the company's top priority, four to their second priority and so on, and totaled the scores for each risk to identify the following risks as most salient overall. A change in interest rates was ranked as the highest risk among most of the participants. Both interest rate and inflation risks are in the top three, consistent with the heat map below, yet regulatory and reinsurance risks are not at the top of this list, unlike in the heat map below.

The following table displays the ranking of the participants' top five risks. In total, the risk of changing interest rates was overwhelmingly of the most concern, followed by artificial intelligence and higher inflation.

Change in interest rates remains the number one risk for life-only companies, is the number one risk across all size companies, and for the majority of companies by ownership, particularly for public companies. Because of the lack of responses in certain groups, such as from small companies and privately-owned companies, it is difficult to draw any conclusions. Also, because there are a different number of responses in each column, a comparison of the magnitude across characteristics is not applicable. However, we can look at the relative position of the risks.

For the most part, in total and across all characteristics, the risks that were ranked in the top five are the following:

- Change in Interest Rates

- Artificial Intelligence/Cyber Security
- Higher Inflation
- Talent Management
- Pandemic Mortality/Morbidity

Risks, such as changes in interest rates, were ranked noticeably higher for life-only companies compared to companies that write other lines of business and for publicly-owned companies. This aligns with the interest sensitive nature of many life products and publicly-owned companies needing to answer to stockholders. Artificial intelligence/cyber security was ranked highest for non-life only companies, which makes sense as use of artificial intelligence and big data is more developed in the P&C industry. For example, the use of credit scores (big data) in personal auto insurance goes back to the 1990's and states have had regulations in place for the use of credit data for many years (Insurance Handbook). Larger companies also ranked artificial intelligence/cyber security high compared to small- and medium-sized companies, most likely because of the cyber vulnerability that comes with their larger operational size.

Table 3
RANKING OF TOP FIVE RISKS

		Type		Size			Ownership		
Risk	Total	Life Only	Other	Small	Medium	Large	Private	Public	Other
Change in Interest Rates	37	22	15	5	14	18	0	28	9
Artificial Intelligence/Cyber Security	23	6	17	8	1	14	4	4	15
Higher Inflation	21	8	13	4	1	16	0	14	7
Talent Management	16	9	7	1	4	11	1	5	10
Pandemic Mortality/Morbidity	11	6	5	3	2	6	0	7	4
Social Inflation	8	3	5	0	0	8	5	0	3
Economic Volatility	8	3	5	4	3	1	0	4	4
Tightening Reinsurance Market	7	5	2	2	2	3	0	4	3
Diversity, Equity & Inclusion	6	2	4	0	0	6	0	0	6
Slowdown in the Court System	5	4	1	0	3	2	0	3	2

Most of these top five risks align with the heat maps below. Two notable exceptions are:

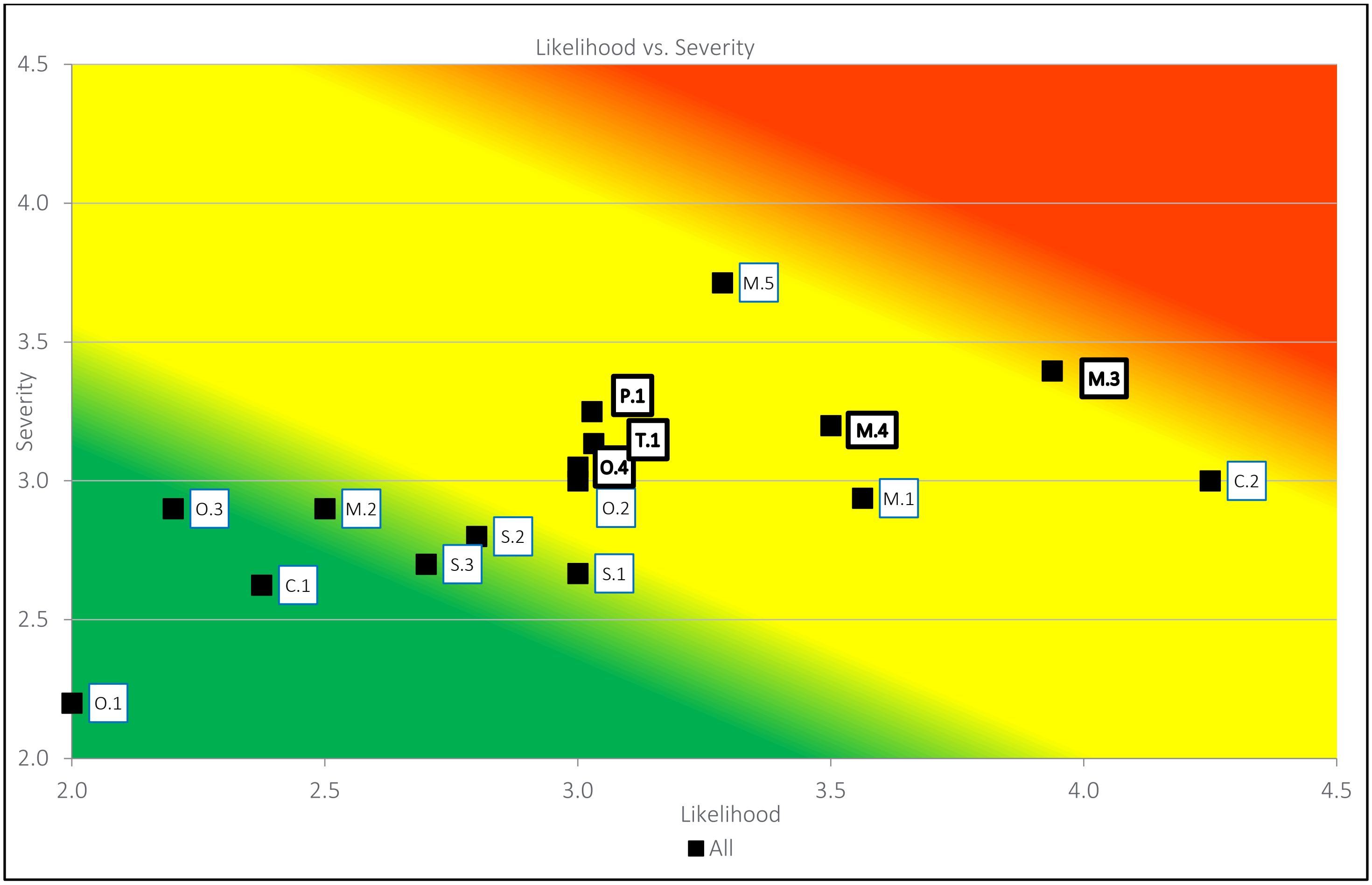
- Regulatory risk is not ranked as one of the top risks, but it was ranked with a high likelihood of occurrence with a moderate impact on the heat map.
- Pandemic mortality/morbidity is ranked as one of the top risks, but it was ranked with a moderate likelihood of occurrence with a somewhat high-moderate impact.

2.3 LIKELIHOOD/SEVERITY (HEAT MAP)

Participants were asked to rate the likelihood of a risk occurring over a three-year horizon and the level of impact on their company of each risk from 1 to 5, with 1 being least likely/least severe and 5 being most likely/most severe. The survey provided the definitions of the 1 to 5 rankings. After averaging their responses (ignoring non-responses), we assembled the following heat maps based on each of the average likelihood and average severity of the responses. The following sections show results in total, by company type, by company size, and by type of company ownership.

2.3.1 HEAT MAP - TOTAL

Figure 5
HEAT MAP - TOTAL



Note. Top five risks are in **bold** in the above heat map.

Human Resources O.1 – Diversity, Equity & Inclusion O.2 - Healthcare Provider Consolidation and Staffing Shortages O.3 - Sustaining of Healthy and Vibrant Corporate Culture O.4 - Talent Management	**Strategic** S.1 - Supply Chain S.2 - Climate Change S.3 - Geo-political Risk
Legal & Compliance C.1 - Slowdown in the Court System C.2 - Regulatory Risk **Pricing & Underwriting** P.1 - Pandemic Mortality/Morbidity **IT** T.1 - Artificial Intelligence / Cyber Security	**Market & Credit** M.1 - Tightening Reinsurance Market M.2 - Social Inflation M.3 - Change in Interest Rates M.4 - Higher Inflation M.5 - Economic Volatility

The above heat map is the likelihood/severity results from all participants. The risk that was rated the most likely to occur was regulatory risk and the risk that was rated to have the greatest impact was economic disruption. The risk of changing interest rates was also rated with a high likelihood to occur with a high impact. The risk that was rated with the lowest likelihood to occur with a low impact was DE&I. The majority of the risks fell in the mid-range of the heat map.

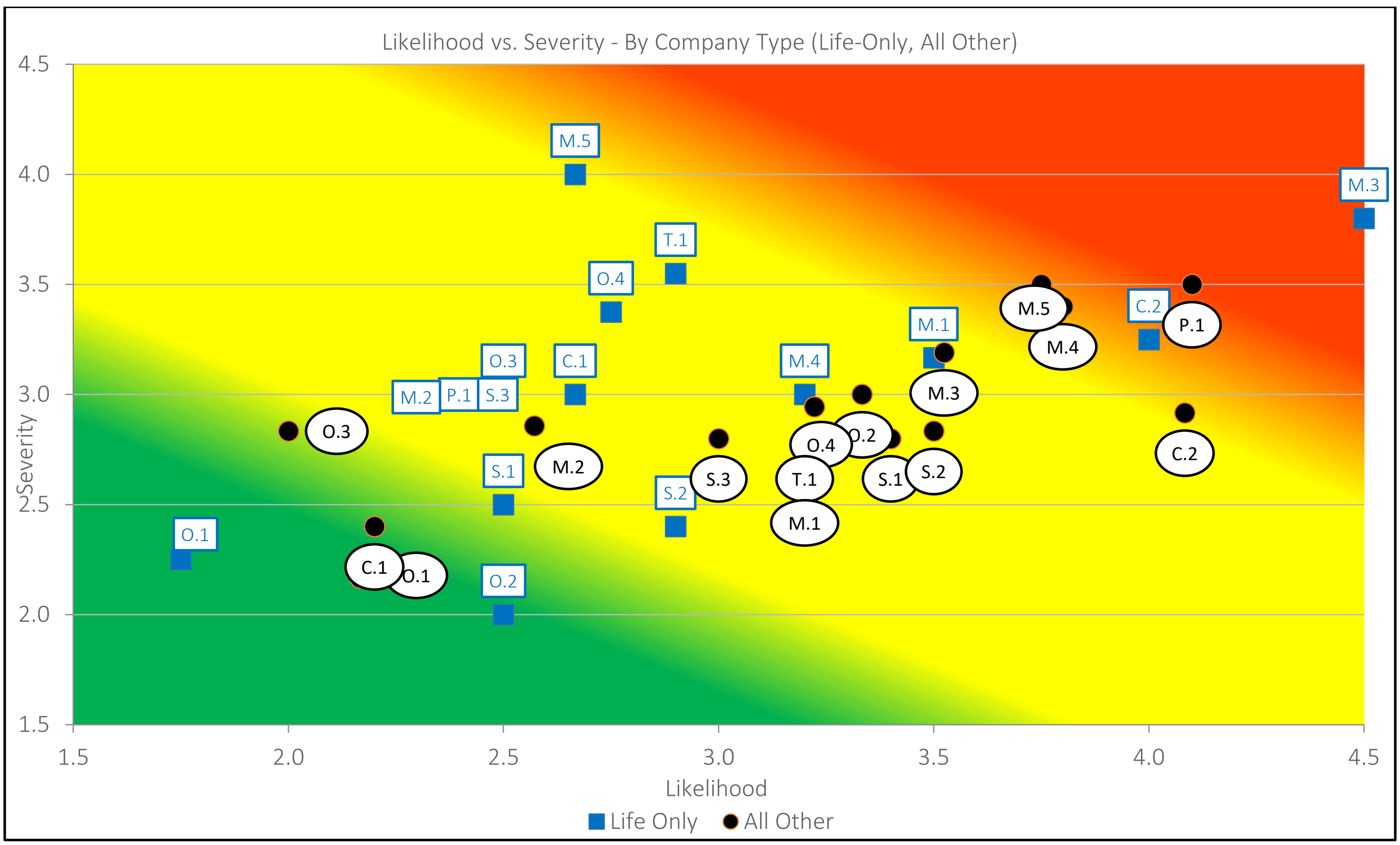
The risk with the highest combination of likelihood/severity is regulatory risk and the lowest is DE&I. There are also several risks that have a higher impact than regulatory risk, most notably the risks of a change in interest rates, higher inflation, and economic volatility.

Given the current economic environment, it is not surprising to see participants rank economic/market risks as likely to occur. The impact of these risks is moderate to high. The participants' high ranking that regulatory risk is highly likely to occur is also not surprising. While regulatory change itself is not new, current rates of change have increased and include some new areas, such as in the use of big data and artificial intelligence, new actuarial guidelines and updates to the NAIC Valuation Manual. The severity impact is moderate for regulatory change, which is most likely due to the fact that regulatory changes occur over longer time periods and companies have time to adapt.

What is surprising, given that climate change and DE&I are current hot topics, is that these risks were ranked low in terms of likelihood and severity. The reason for this may be due to the fact that they are seen as longer-term risks (past a three-year horizon).

2.3.2 HEAT MAP – COMPANY TYPE

Figure 6
HEAT MAP – COMPANY TYPE



Human Resources O.1 – Diversity, Equity & Inclusion O.2 - Healthcare Provider Consolidation and Staffing Shortages O.3 - Sustaining of Healthy and Vibrant Corporate Culture O.4 - Talent Management	**Strategic** S.1 - Supply Chain S.2 - Climate Change S.3 - Geo-political Risk
Legal & Compliance C.1 - Slowdown in the Court System C.2 - Regulatory Risk **Pricing & Underwriting** P.1 - Pandemic Mortality/Morbidity **IT** T.1 - Artificial Intelligence / Cyber Security	**Market & Credit** M.1 - Tightening Reinsurance Market M.2 - Social Inflation M.3 - Change in Interest Rates M.4 - Higher Inflation M.5 - Economic Volatility

The above heat map is the likelihood/severity results by company type, i.e., life-only companies vs. all other (life & health, health only, P&C, all). In general, the life company likelihood/severity pairings are clustered around less likelihood and more severity, whereas the other company type likelihood/severity pairings are clustered around higher likelihood and less severity.

For life-only companies, a change in interest rates has the highest likelihood and the second highest severity, and economic volatility is ranked with the highest severity. Given the longer-term and interest sensitive nature of products offered by life insurance companies, interest rates and economic volatility are expected to have a greater impact on life insurance companies compared to other company types.

Regulatory risk has a similar impact and likelihood for all company types as there is not an inherent reason for there to be a difference.

For other types of companies, pandemic and regulatory risks are expected to have the highest likelihood of occurring, followed by the risk of higher inflation and economic volatility following close behind in likelihood of occurrence, with the risks of a pandemic, economic volatility and higher inflation having the highest severity.

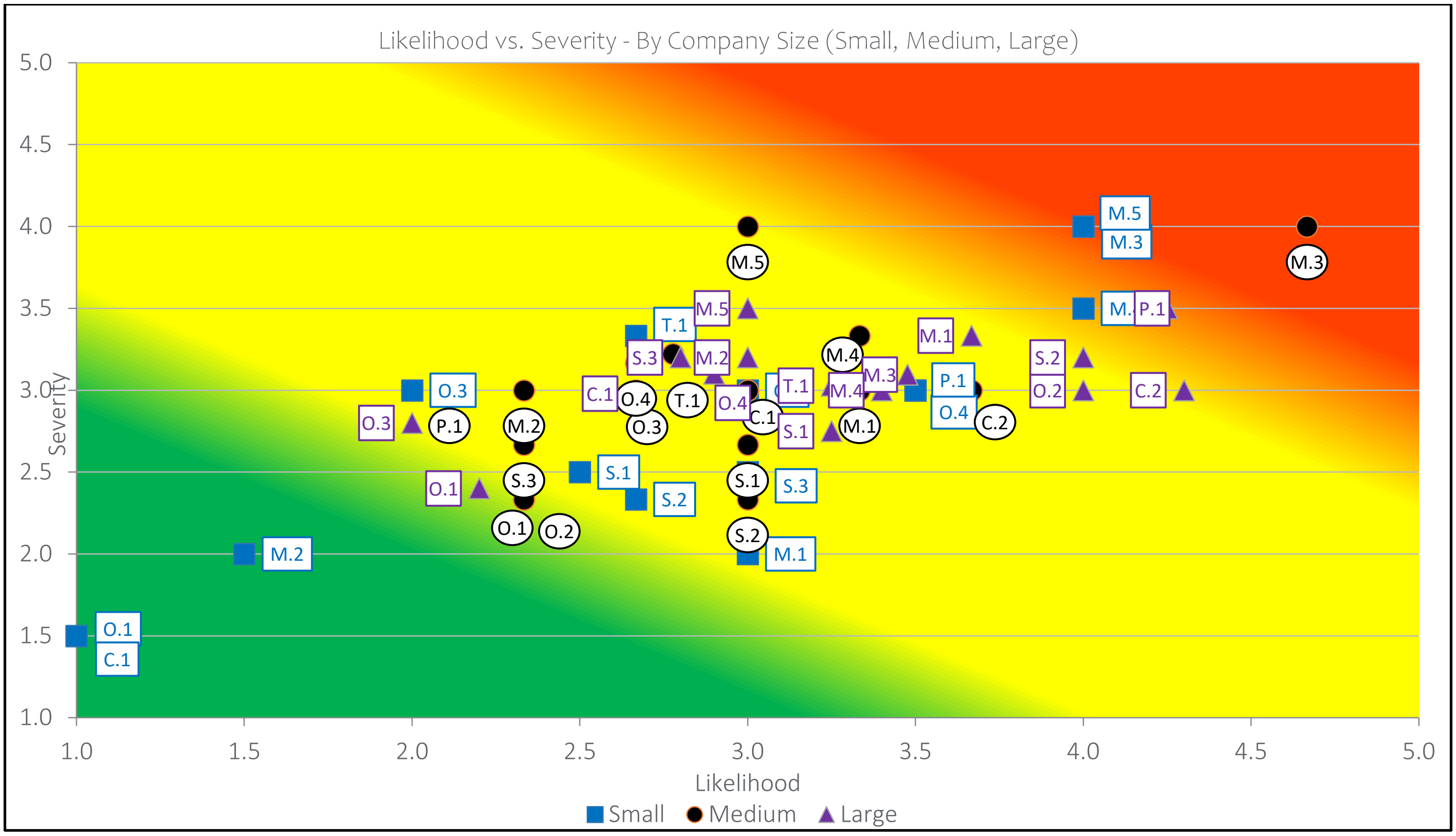
We find it interesting that, while the impact of pandemic risk is assessed to be only slightly higher for non-life only companies compared to life-only companies, the likelihood of occurrence is ranked much higher for non-life only companies than life-only companies. This may be due, in part, to at least a perceived immediate impact to health companies and the pandemic having unknown long-term effects on health (i.e., more unknowns around morbidity impact than mortality impact).

There is not much difference in the severity ranking of climate change, but life-only companies rank the likelihood of climate change to be lower than other company types. This is not surprising because one would expect property & casualty insurers to have more of a concern about how climate change affects their block of business than life companies. The risk of DE&I was ranked low for both company types.

2.3.3 HEAT MAP - COMPANY SIZE

Figure 7

HEAT MAP – COMPANY SIZE



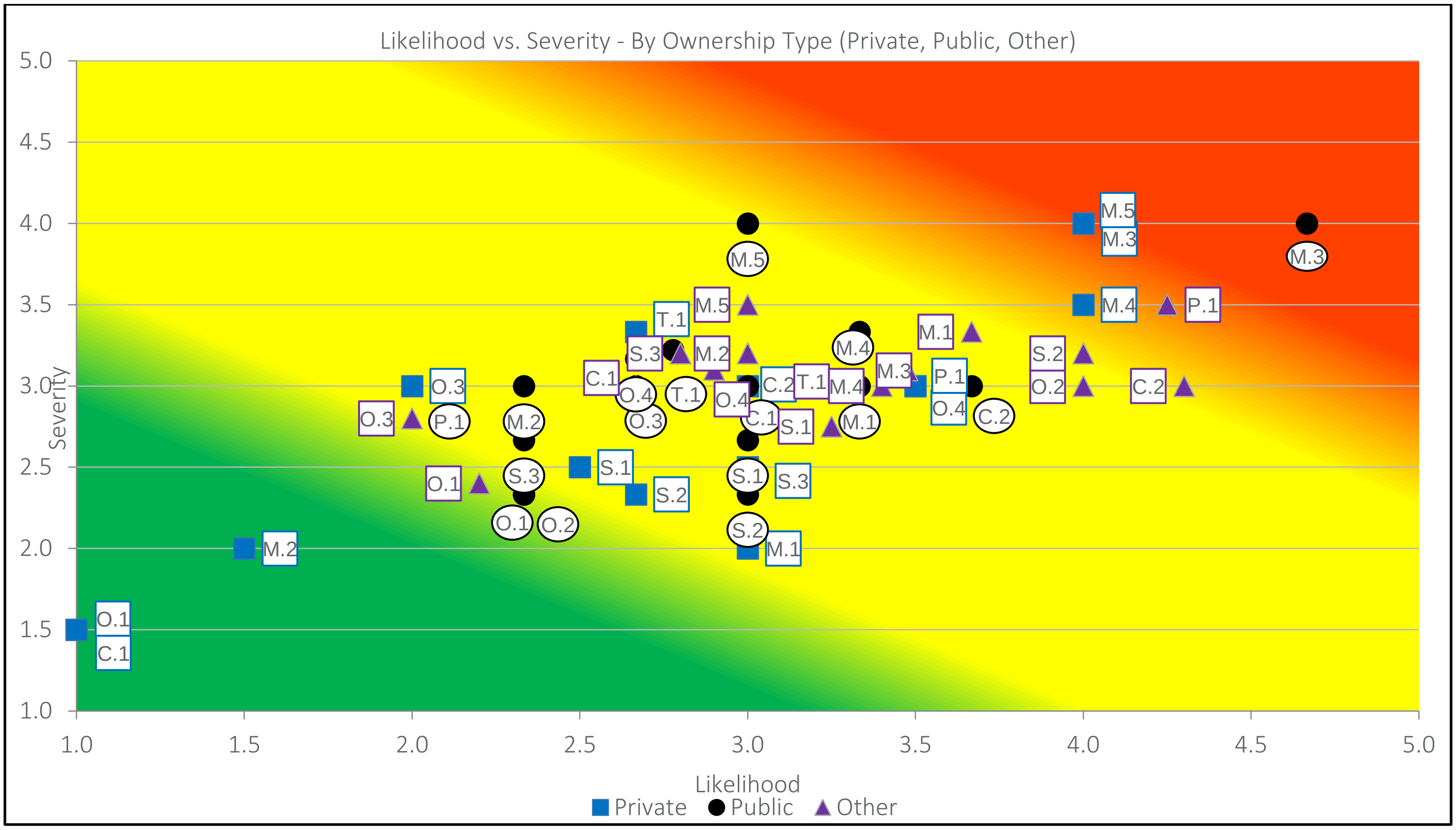
Human Resources O.1 – Diversity, Equity & Inclusion O.2 - Healthcare Provider Consolidation and Staffing Shortages O.3 - Sustaining of Healthy and Vibrant Corporate Culture O.4 - Talent Management	**Strategic** S.1 - Supply Chain S.2 - Climate Change S.3 - Geo-political Risk
Legal & Compliance C.1 - Slowdown in the Court System C.2 - Regulatory Risk	**Market & Credit** M.1 - Tightening Reinsurance Market M.2 - Social Inflation M.3 - Change in Interest Rates M.4 - Higher Inflation M.5 - Economic Volatility
Pricing & Underwriting P.1 - Pandemic Mortality/Morbidity	
IT T.1 - Artificial Intelligence / Cyber Security	

The above heat map is the likelihood/severity results by size of company (small, medium, large). The smaller- and medium-sized companies' likelihood/severity pairings of the various risks are fairly clustered together. The large companies have a greater likelihood of non-market risks, such as pandemic, regulatory, climate change, and healthcare consolidation. Medium companies consider a change in interest rates to have both a high likelihood of occurring and severity impact and economic volatility has the highest severity, whereas for small companies, economic volatility has the highest likelihood/severity followed by high inflation. Because smaller- and medium-sized companies probably do not have the capital resources of a larger company, these risks will have more of an impact on them compared to larger companies. Small companies ranked DE&I as having a lower likelihood and lower impact compared to medium and large companies. Larger companies have more resources, such as employing a DE&I officer, than a smaller company, which could account for some of the difference.

2.3.4 HEAT MAP - OWNERSHIP TYPE

Figure 8

HEAT MAP – OWNERSHIP TYPE



Human Resources O.1 – Diversity, Equity & Inclusion O.2 – Healthcare Provider Consolidation and Staffing Shortages O.3 – Sustaining of Healthy and Vibrant Corporate Culture O.4 – Talent Management	**Strategic** S.1 – Supply Chain S.2 – Climate Change S.3 – Geo-political Risk
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Pricing & Underwriting P.1 – Pandemic Mortality/Morbidity	
IT T.1 – Artificial Intelligence / Cyber Security	

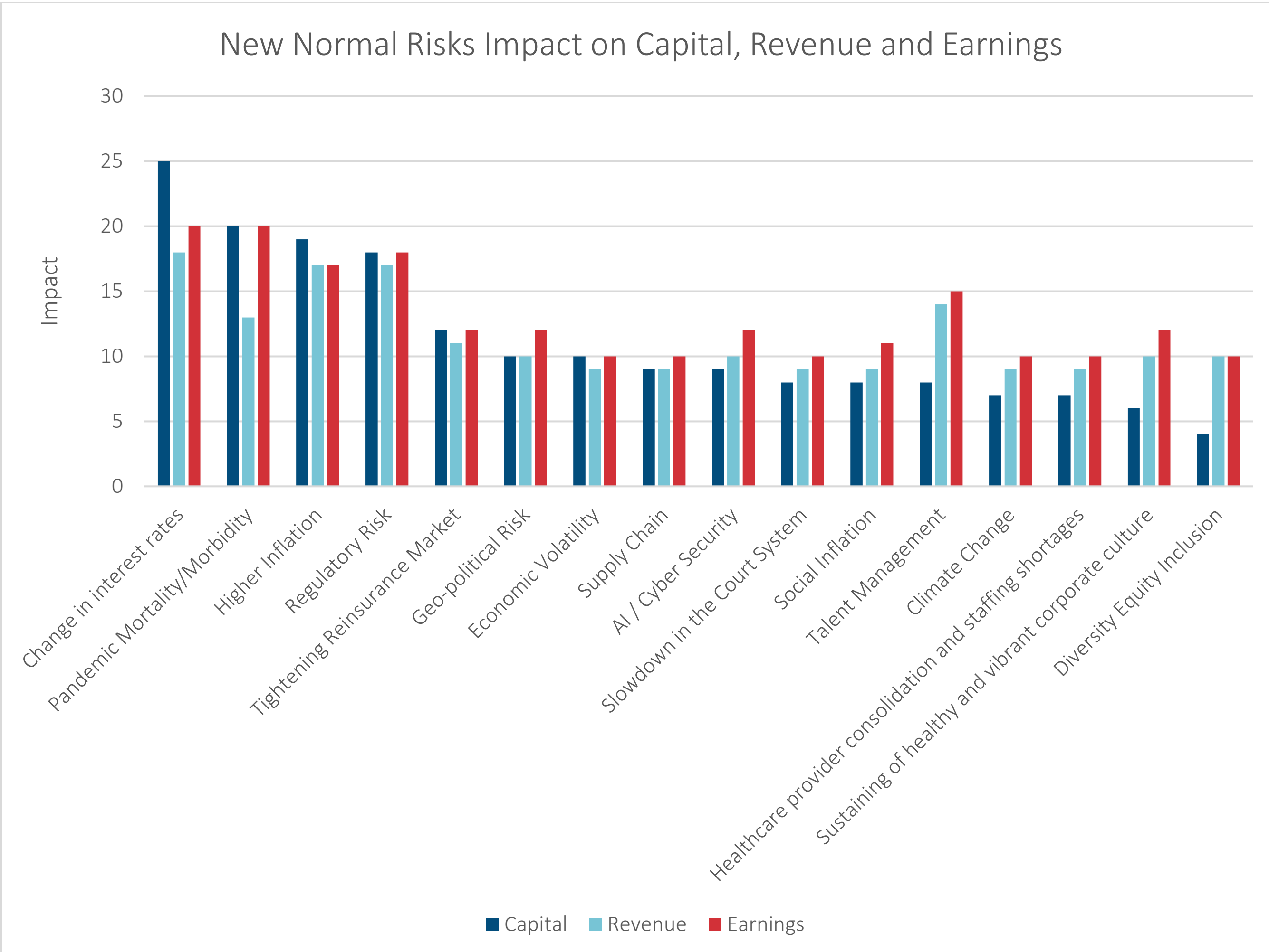
The above heat map is the likelihood/severity results by type of company ownership (private, public, other). The change in interest rates has a higher severity impact for private and public companies compared to other ownership types. Economic volatility has the highest likelihood of occurring for privately-owned companies, with public and other having a similar likelihood of occurrence, but the severity of impact is the same for publicly- and privately-owned companies and a little lower for other ownership companies. The ranking of social inflation for private companies is an outlier (low likelihood/severity) compared to publicly-owned and other ownership-type companies. Climate change is ranked at a low to moderate likelihood/severity for publicly- and privately-held companies, but is ranked higher for likelihood/severity for other ownership-type companies. We find this result a little surprising as one might think that publicly-owned companies may have more concern over climate change risk than other ownership types because of the potential reputational risk and board oversight that publicly-owned companies face.

2.4 IMPACT

For each risk, participants were asked to provide the level of impact (high, medium, or low) that the new normal risks would have on capital, revenue, and earnings. We assigned three points to a response of “high,” two for “medium” and one for “low,” and then assembled the following chart to show the anticipated impact of each risk.

The respondents believe that a change in interest rates will have the highest impact on capital; a change in interest rates, higher inflation, and regulatory risk are expected to have the highest and similar impact on revenue; and a change in interest rates and pandemic mortality/morbidity are expected to have the highest and similar impact on earnings. While talent management and sustaining a healthy and vibrant corporate culture are not expected to have a large impact on capital, they are expected to affect revenue and earnings. Other risks, including climate change and DE&I, are ranked on the low end of impacting capital. The remaining risks were ranked as having a similar impact on capital, revenue, and earnings.

Figure 9
NEW NORMAL RISKS IMPACT ON CAPITAL, REVENUE AND EARNINGS



The following three charts show the number of participants that ranked each risk statement as low, medium or high for their impact on capital, revenue, and earnings, respectively.

Figure 10
NEW NORMAL RISK IMPACT ON CAPITAL

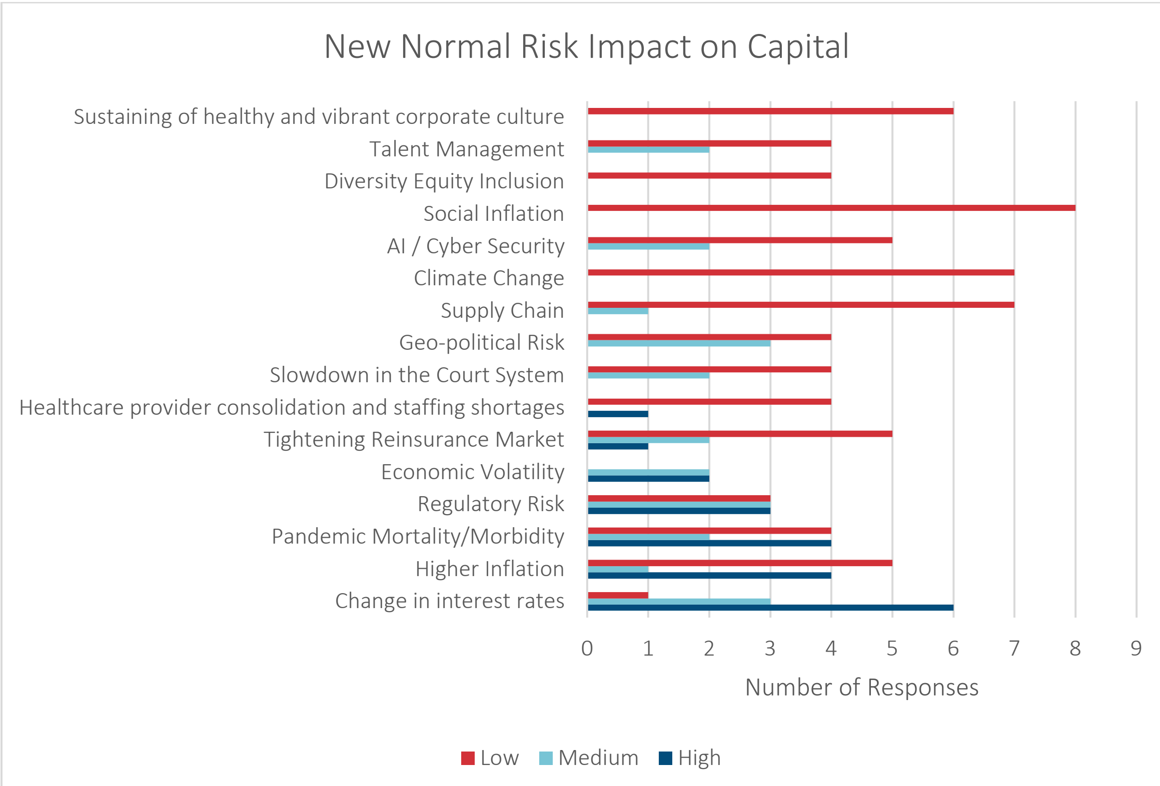


Figure 11

NEW NORMAL RISK IMPACT ON REVENUE

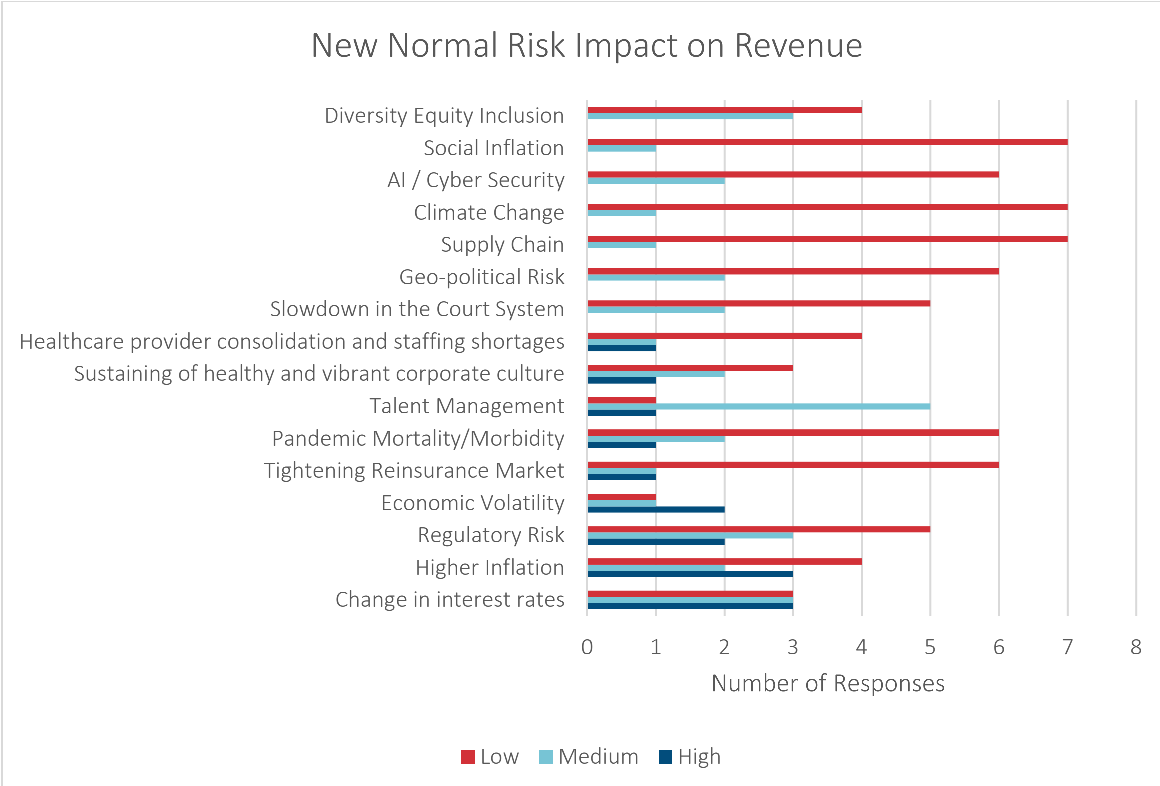
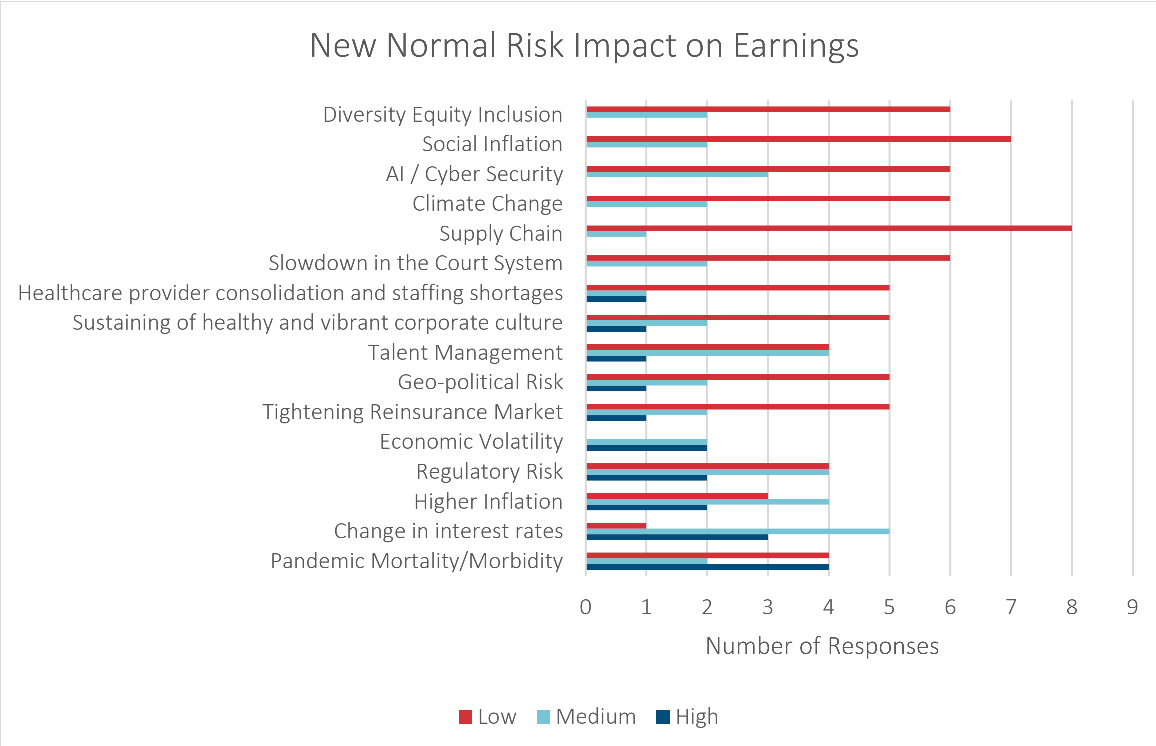


Figure 12
NEW NORMAL RISK IMPACT ON EARNINGS



2.5 IMPACT ON FUNCTIONS

Participants were asked which business function they thought each risk would affect, such as Asset Liability Matching (ALM) /Asset Management, IT, Pricing, or Valuation, etc. We split the categories of business into actuarial and non-actuarial functions. By aggregating the responses, we can see which risks were seen as having the most impact on the various business functions.

While changes in interest rates are predicted to have a high impact on capital management (figure 13), companies tend to think artificial intelligence will mainly affect operational risk management (figure 14).

The following graphs indicate that financial risks tend to impact actuarial and financial functions, whereas other types of risks that are more social and operational in nature (such as cyber security, talent management, and corporate culture) tend to impact non-financial functions (such as Human Resources and Operations). Also, the pandemic affected actuarial/financial functions, particularly capital management, pricing, and valuation.

Figure 13
AREAS MOST IMPACTED BY NEW NORMAL RISK – ACTUARIAL FUNCTIONS

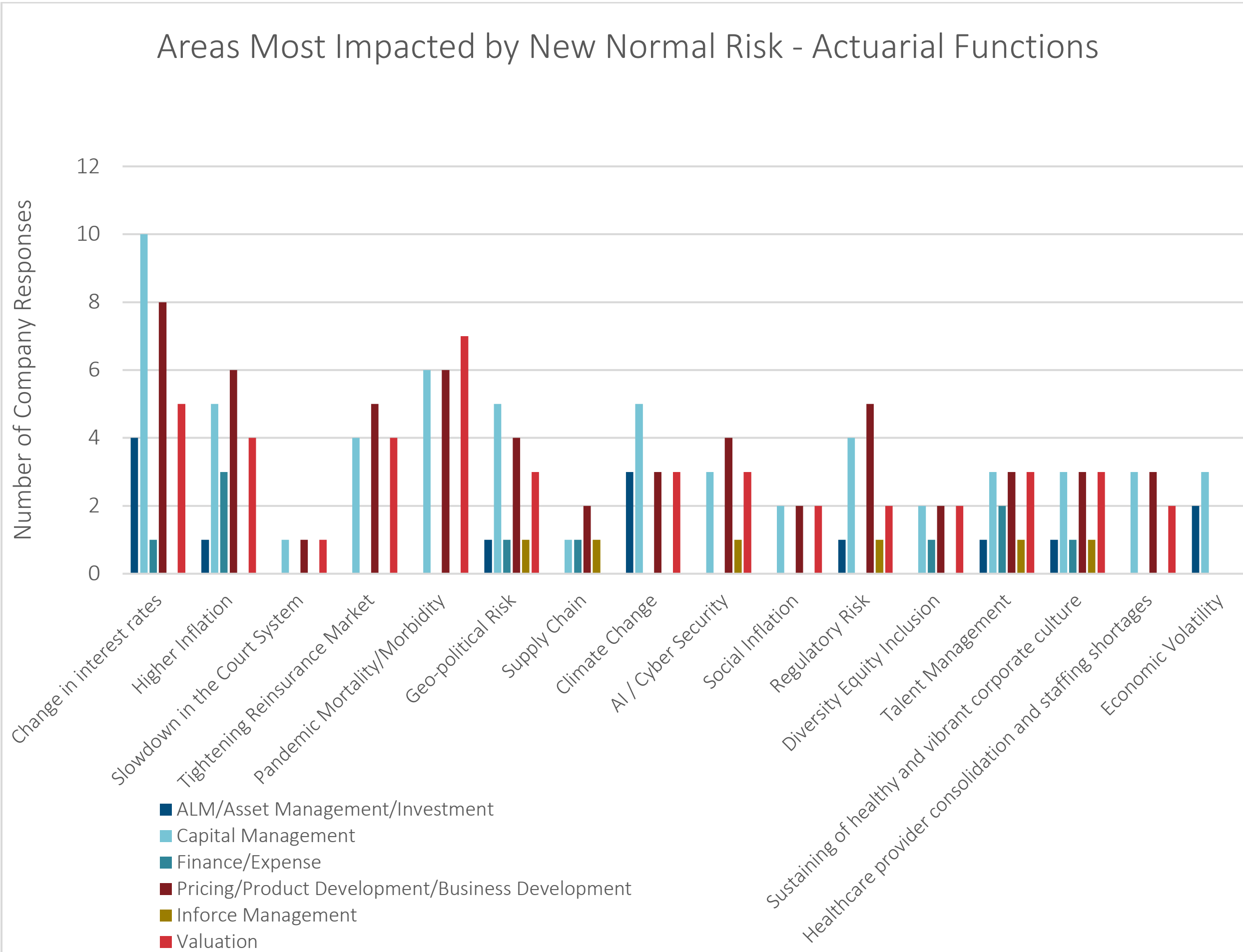
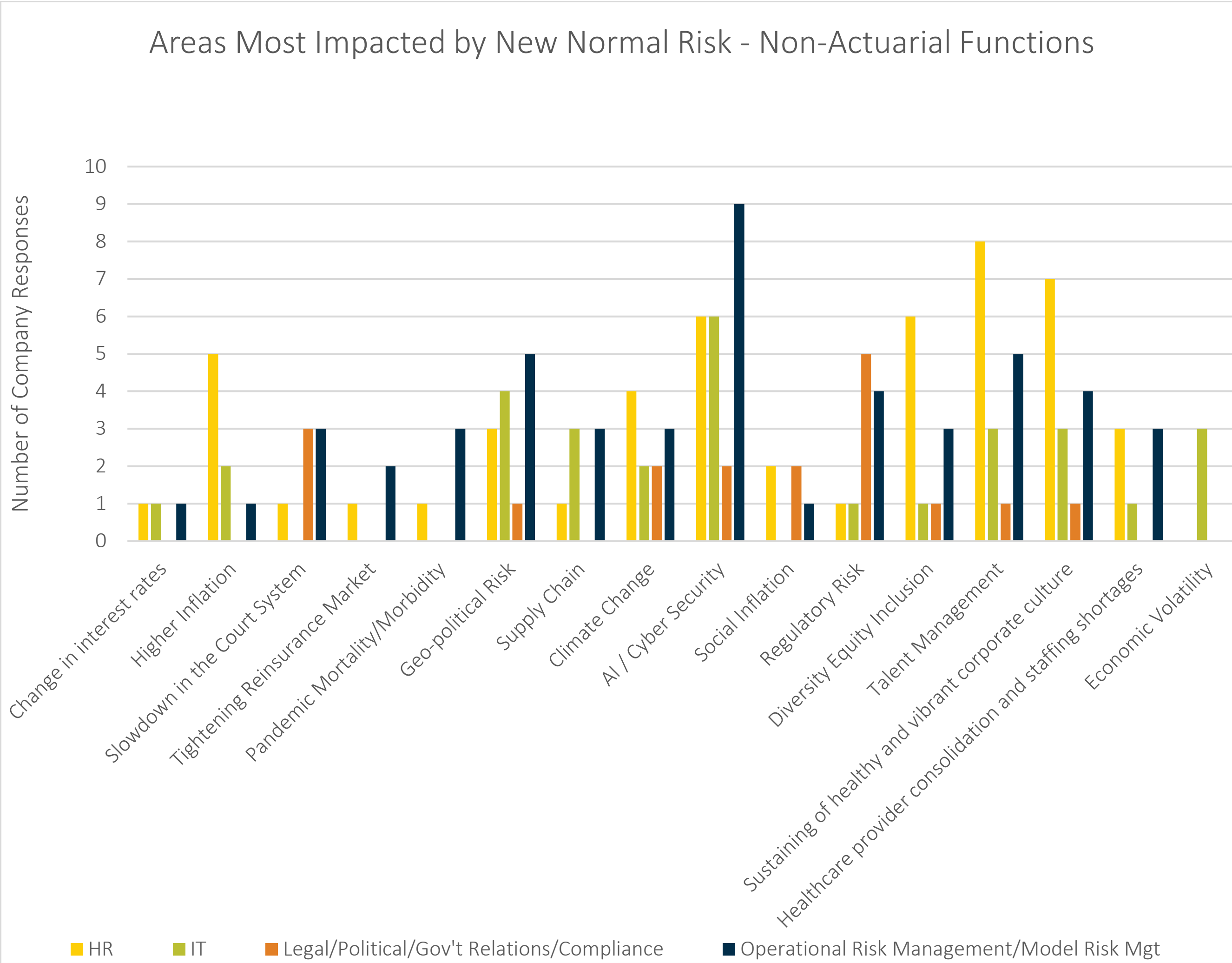


Figure 14
AREAS MOST IMPACTED BY NEW NORMAL RISK – NON-ACTUARIAL FUNCTIONS



2.6 RISK IN COMPANY RISK ASSESSMENT AND RISK MANAGEMENT PLAYBOOK

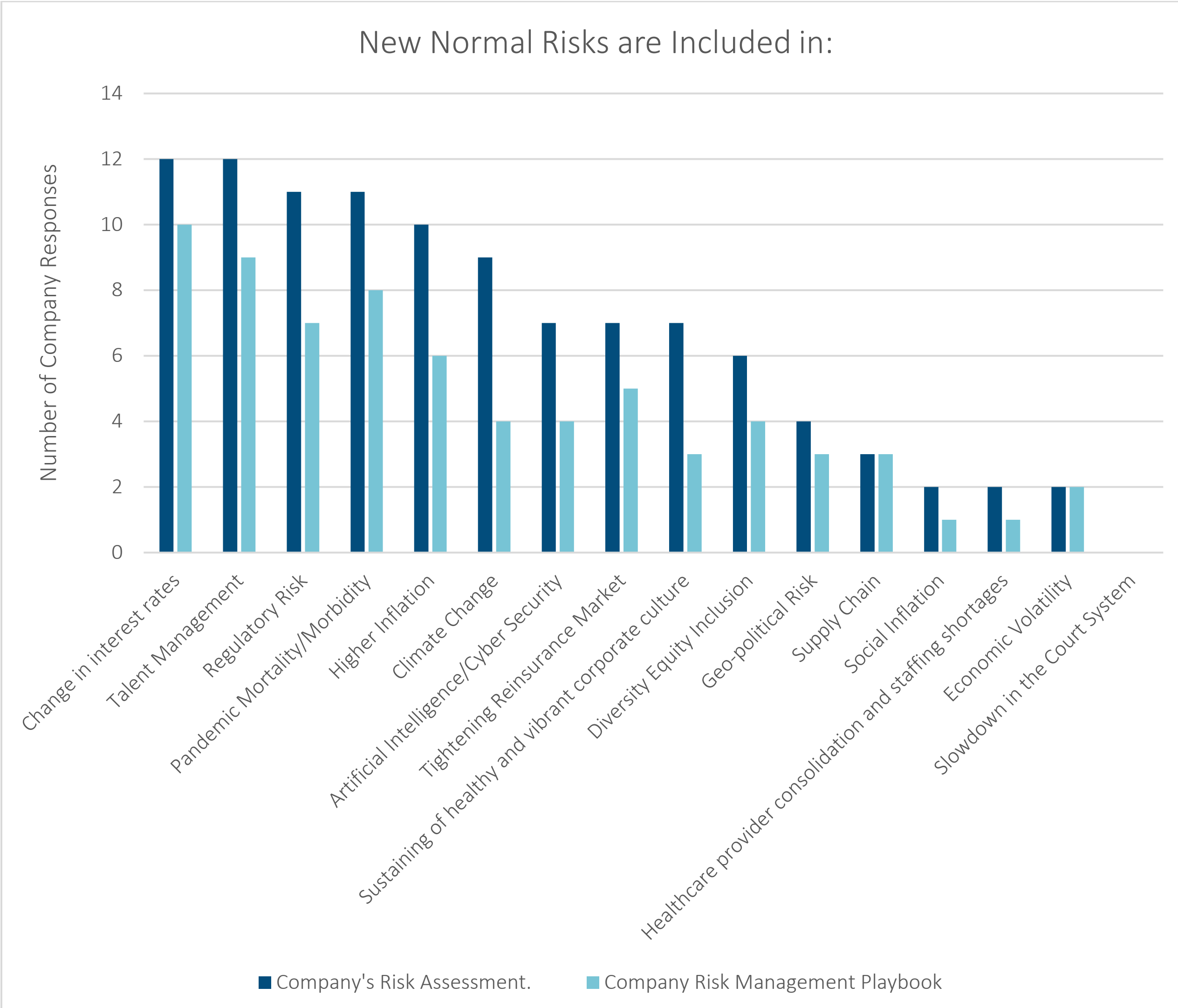
The participants were asked the following two questions:

a) Were the new normal risks already included in their company's risk assessment?
b) Were the new normal risks already included in their company's risk management playbook?

The graph below shows that many companies are including the above-mentioned risks in performing risk assessments, but not as many have incorporated these new normal risks in their risk management playbook. This might be because it takes time for companies to fully develop management actions, integrate new processes and document them as part of their action playbooks once the risk is assessed as high and impactful.

Change in interest rates, talent management, regulatory risk, pandemic mortality/morbidity, and higher inflation are the top five risks that are already included in the company risk assessments and risk management playbooks. This indicates that companies are already thinking about and incorporating these new normal risks into their risk assessments.

Figure 15
NEW NORMAL RISKS ARE INCLUDED



2.7 PREPARE AND MANAGE RISKS & RESOURCES

The participants were asked that if they could go back and change things:

a) What could have been done to better prepare for this risk?
b) What could have been done to better manage/mitigate this risk?
c) What are the most effective resources in managing these risks?

There was a low response rate to these questions. For those who responded, the following were common themes, in addition to a couple of companies that said they would not have done anything differently.

New Normal	a) How to Better Prepare for this Risk	b) How to Better Manage this Risk	c) Effective Resources for Managing this Risk
Change in Interest Rates	• Modify product mix, design, and pricing. • More granular and frequent liquidity planning. • Asset Liability Management with improved scenario analysis that considers a wider range of yield curve movements, including a scenario for rapidly rising interest rates.	• Annual pricing adjustments. • Modify investment durations, use of equity like investments and hedging. • Increase liquidity planning. • Prepare for rising interest rates via investments and product design. • Increase use of scenario testing and communication of potential impacts.	• Product development. • Robust ALM Framework. • Senior leadership involvement. • Investment advisor and internal risk team. • Incentive compensation structures. • Regulatory capital requirements.
Artificial Intelligence / Cyber Security	• Earlier identification of cyber risks. • Improve focus on monitoring broader technology and cyber trends and threats, including benchmarking cyber risk management framework against standards.	• Create a risk management framework and procedures to manage availability. • Increase resources (staff, funding) dedicated to improving client/advisor facing cyber security processes.	• Cross-functional engagement. • Regulations, guidelines, compliance function. • Policy added to Corporate IT policy set; strong communications/employee education. • Employee upskilling, Governance. • Building knowledge now via external partners. • Senior leadership involvement. • Prioritization/budgeting/focus. • Dedicated IT security team.
Higher Inflation	• Modify product design and pricing. • Perform scenario modeling on the impacts of inflation. • Consider cost of living adjustment for disability products.	• Annual pricing adjustments. • Modify investment durations. • Increase use of scenario testing and communication of potential impacts.	• Regulatory guidelines. • Inflation-linked investments. • Excellent product mix and distribution partnerships that could temper the impact of potential reduced sales from high inflation. • Senior leadership involvement. • Product line experts to understand potential impacts. • Underwriting and claims managers.

New Normal	a) How to Better Prepare for this Risk	b) How to Better Manage this Risk	c) Effective Resources for Managing this Risk
			• ALM, investment and risk management personnel to manage risks. • Robust risk management/ALM processes.
Climate Change	• Enhanced education efforts. • Conduct peer benchmarking.	• Enhanced awareness.	• Platform to publish education. • Centralized steering by the group. • CAT modeling teams. • Senior leadership involvement. • Industry groups. • Regulatory Guidance / industry groups.
Regulatory Risk	• More relationship building with state insurance departments, including educational sessions.	• Prioritize state efforts. • Proactive education to offset objections.	• Gov't relations team; project management. • Diversification (product, client, geographic). • Strong interdisciplinary groups that monitor and track developments in regulations. • Government oversight / Regulatory guidance. • Industry groups. • Risk management dept. • Senior leadership involvement. • Dedicated compliance team.
Social Inflation	• Modifications to contractual language.	• Monitor industry responses. • Modify external messaging to manage reputational impacts.	• Legal involvement. • Culture. • Government oversight, Regulatory guidelines. • Claims managers. • Senior leadership involvement.
Talent Management	• Capture exit interview data. • Monitor social media. • Perform ongoing surveys and monitor results. • Earlier and more transparent adoption of remote work guidelines. • Better focus on talent management, including longer-term view on succession planning at all levels.	• Conduct more frequent employee engagement surveys to track sentiment over time. • React sooner to emerging trends, including review of HR programs, compensation, recruiting strategies and recruiting capacity. • Earlier and more transparent adoption of remote work guidelines.	• Senior leadership involvement. • Prioritization/budgeting/focus. • HR and department managers.

New Normal	a) How to Better Prepare for this Risk	b) How to Better Manage this Risk	c) Effective Resources for Managing this Risk
Pandemic Mortality/Morbidity	• Test multiple facets of pandemic crisis plan. • Better coordination of pricing, underwriting and mortality reporting. • Increased use of reinsurance.	• Scenario test for extreme conditions. • Better coordination of pricing, underwriting and mortality reporting. • Increase use of reinsurance.	• Capital management, reinsurance. • Mortality research team. • Strong interdisciplinary groups that monitor and track developments in mortality. • Experience studies, Industry groups. • Senior management. Reinsurance company leaders and SMEs. • Risk committee projects. • Robust experience study processes to manage emerging trends. • Appointed Actuary / Senior leadership ownership.
Geo-political Risk	• More diversification of investments.	• Analyze potential impacts and create contingency plans to diversify.	• Investments policy. • Government oversight, Regulatory guidelines. • Credit risk management team. • Senior leadership involvement.
Tightening Reinsurance Market	• Secure longer-term contracts.	• Build relationships and contingency plans.	• Reinsurance expertise. • Diversification in products and clients. • Senior leadership involvement. • Reinsurance purchasers.
Sustaining of healthy and vibrant corporate culture	• Begin continuous measurement earlier.	• Increase leadership communications and accessibility.	• Senior leadership involvement. • Collaboration between HR and internal “Culture Fellows.” • Prioritization/budgeting/focus • Human Resources.
Supply Chain	• Identify key n^{th} party dependencies.	• Earlier implementation of Third-Party Risk Management (TPRM) tools to enhance monitoring.	• Sourcing, IT & Risk partnership. • Strong third-party governance program manages vendor risk. • Government oversight, Regulatory guidelines. • Senior leadership involvement.
Slowdown in the Court System	• More granular timing of claims projections. • Planned resources differently.	• Include in crisis management testing.	• Legal involvement. • Government oversight, Regulatory guidelines • Claims managers. • Senior leadership involvement.
Diversity, Equity & Inclusion	• Earlier focus on talent management.	• Active efforts to drive the program, including the implementation of best	• Senior leadership involvement. • Human Resources.

New Normal	a) How to Better Prepare for this Risk	b) How to Better Manage this Risk	c) Effective Resources for Managing this Risk
	• Incorporate awareness programs.	practices, and measure the program's success.	
Healthcare provider consolidation and staffing shortages	• Capture data to analyze claims impact.	• Assess applicability in assumption philosophy.	• Data management resources. • Senior leadership involvement.
Economic Volatility	• Require annual liquidity reviews.	• Diversify investment portfolio. • Improve fungibility of capital.	• Capital management. • Senior leadership involvement.

2.8 ACTIONS

We asked if companies had made any major changes because of these new normal risks (e.g., working from home, re-organization, update core values, strategic initiatives, investment in technology, M&A activities, financial transformation, etc.) and whether the changes were permanent or short term.

Most responses focused on the change in the work environment and indicated a change from only working in the office to a hybrid model (combination or working from home and at the office) or to a fully remote option, which appears to be a permanent change.

2.9 HINDRANCES

We asked participants to describe the hindrances that prevented or made things more difficult to manage these new risks. There were a variety of responses to this question that are summarized as follows:

- General Market & Business: In general, insurance companies are slow to change. However, some risks emerge quickly and are complex, making it difficult to prioritize and respond appropriately. Also, there can be multiple disruptions at the same time (tight labor market, rising interest rates, and COVID) making it difficult to understand and analyze, as well as set future expectations.

- Workforce: The labor market has been tight, making it difficult to find and retain talent, as well as keep up with salary inflation. Remote work makes it difficult to maintain a company culture.

- Regulatory: Increased scrutiny from U.S. and non-U.S. regulatory bodies makes it difficult for new reinsurance entities to enter the market and for certain reinsurance transactions to occur. Participants also mentioned the uncertainty of future long-term rate increase decisions by state insurance departments as a hindrance.

- Artificial Intelligence / Technology: It is important to understand the tools with respect to bias in the models, knowing where and how the tools add value. Also, many current monitoring and tracking processes are in Excel and are labor intensive, making them difficult to use as companies grow and the risk universe expands.

2.10 GOVERNMENT INTERVENTION

We asked participants what levels of government interventions they anticipate in managing the new normal risks for the short term and the long term.

While very few participants commented on this question, the few responses we received indicate that they expect more regulatory control over artificial intelligence and cyber security, as well as more stringent risk management oversight, particularly with managing interest rate risk.

2.11 RATING AGENCY REACTION

We asked participants if they expect rating agencies to change their rating approaches because of the identified new normal risks.

While few participants commented on this question, responses varied from anticipating no changes to slow changes over time. One comment suggested that there will be a continual evolution in the approaches rating agencies take, but that does not differentiate the near future from what has happened historically.

Section 3: Conclusions

Overall, the same group of risks was generally ranked the highest among participants irrespective of the dominant type of business, size, and ownership. Risks related to inflation and changing interest rates were generally the risks of most concern. Given that inflation and increases in interest rates are currently occurring after decades of low inflation and low interest rates, it is not surprising that these risks are at the top of the list for Chief Executive Officers (CEO) and CRO's. Current hot topics of climate change and DE&I are not ranked as top concerns or severity of impact, while changing interest rates and inflation ranked as high concerns with high financial impact. 'Social'-type risks, while a concern, are not of immediate concern (three-year time horizon) and may be considered more of a long-term risk. In general, heat map results and the identified top five risks are relatively consistent with what we are hearing in discussions with senior management in the insurance industry.

- Economic Volatility is not high in the list of top five risks, but has the highest impact. However, interest rates and inflation are in the top five risks and high on the heat map, possibly because they are more immediate risks.
- Artificial Intelligence/Cyber Security is not ranked high for impact on capital/revenue/earnings, which may be because artificial intelligence is in the relatively early stages and only being used by large companies.
- Regulatory risk is high in the heat map, but not in the top five risks. Regulatory risk is a common risk mentioned by the industry, but companies may be used to dealing with regulatory risk so that may be why it is not ranked as having a high severity impact even though it has a high likelihood of occurring. Also, regulatory changes typically occur slowly so the industry has time to adapt.
- Talent, Geopolitical, and Artificial Intelligence/Cyber Security are second tier concerns when looking at results, although still significant. It is difficult to directly connect these risks to financial results.

For the overall top five risks of changes in interest rates, artificial intelligence/cyber security, higher inflation, talent management, and pandemic morbidity/mortality, the majority of participants indicated that these risks are already in their companies' risk assessment. However, only the risks of changes in interest rates, talent management, and pandemic mortality/morbidity were already in the risk management playbook for the majority of the participants. The majority of participants indicated that the risks of regulatory changes and climate change were already in their companies' risk assessment. Less than a majority of participants indicated these risks were included in their risk management playbooks.

A change the companies made in response to the new normal risks of talent management is offering various work remote / work in the office options to attract and maintain employees. This was a recurring theme and it appears that this is going to be a permanent change for many companies.

Some of the outliers may be due to the low number of responses in a given question/breakdown, but this does not diminish the information provided and relative comparisons can still be useful.

The industry will, of necessity, always evolve as new technologies change the way we work and the content of our work. New coverages, new assets, and new ways of managing risk will arise to meet new challenges. Those companies and industries that can map out a more far-sighted vision of the new normal will be better prepared to survive and adapt.

When the pandemic hit, the technology for working at home, the communications hardware and software for online meetings, and file sharing were all available, so the financial community was able to make a rapid and relatively smooth transition to remote workplaces. Though companies have returned to work-in-the-office models or hybrids to some extent, the eventual model for many companies may go back to working at home with frequent group online meetings. This will also be driven by the cost savings in real estate.

The path for industry evolution in response to AI is much less clear, but it could lead to a significant reduction in workforce .

There will always be new risks, some anticipated and some unanticipated. Learning from the past can be used to better prepare, manage, and mitigate new risks. We need to pay attention to what worked and what did not work; be aware of the 'big picture' and emerging changes in our industry, economy, and culture; and be open to new ideas in order to successfully deal with the future's new normal.

Section 4: Acknowledgments

The researchers' deepest gratitude goes to those without whose efforts this project could not have come to fruition: the Project Oversight Group and others for their diligent work overseeing questionnaire development, analyzing and discussing respondent answers, and reviewing and editing this report for accuracy and relevance.

Project Oversight Group members:

Alp Can, FCAS, MAAA, CSPA

Syed Danish Ali, CSPA

Syed Muhammad Razi Hasnain, ASA, ACIA

Weiling Lao, FSA, MAAA

Mengran Li, FSA, MAAA, CERA

Tim Morant, FSA, MAAA

Joshua Travis Poythress, FSA, MAAA, CERA

Ira Robbin, ACAS

Max J. Rudolph, FSA, MAAA, CERA

David K. Sandberg, FSA, MAAA, CERA, FCA

Christopher M. Smerald, FCAS, MAAA

Renee C. West, FSA, MAAA

At the Society of Actuaries Research Institute :

Korrel Crawford, Senior Research Administrator

R. Dale Hall, FSA, MAAA, CERA, CFA

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Appendix A: Survey

I. **Define "New Normal" and the Associated Risks:**

I. Please consider the most salient changes your company faces in the post-COVID era or recent events and the risks they pose to your company. Please share what you would define as the New Normal environment your institution is evolving in, both in term of baseline and risk to that baseline. Please do this before looking at the next page, so your judgment is not steered in a specific direction.		
New Normal	Baseline: Example risk has increased dramatically since the onset of COVID-19 and affects the insurance industry in ways A, B and C.	Risk: Specific effects on our company is actually X, Y and Z….
Example 1: Increased polarization of politics	Low level of collaboration between the two main political parties, but the basic functions of the government are fulfilled (e.g., police on the street, no government default on debt, working central bank…)	One or more states attempt to secede, or instigate a prolonged period of lawlessness in part of the US
Example 2: Economic Co-operation and Development (OECD) Disruption	A limited number of financial institutions failing in an orderly fashion without disruption to the economy, like SVB, some crypto-industry companies, and Credit Suisse	One or more major financial institutions fail with ramifications for the entire US economy

II. **Identify changes the New Normal risks will bring in a constantly changing world:**

(a) The research team selected the following indicators that we feel could be viewed as structurally changed and would like to perform some quantitative analysis to verify those assumptions. If you have the same New Normal but a different Baseline and/or Risk(s), please provide (blue text in following table). Please bring in the ones that you entered in tab "I" that is not already on this list (red text in following table).

II. (a) The research team selected the following indicators that we feel could be viewed as structurally changed and would like to perform some quantitative analysis to verify those assumptions. Please bring in the ones that you entered in tab "I" that's not already on this list. Notes: [1] If you have the same New Normal but a different Baseline and/or Risk(s), please provide them in rows 21 - 27 (blue text). [2] The content in cells B28:B42, C28:C42. and D28:D42 should reference to the information provided in tab "I" directly (red text).			
New Normal	**Baseline**	**Risk**	**Do you agree this is a new normal?**
Change in interest rates	Steadily increasing rate	Rapidly increasing rate or interest rate spikes causing policyholder into disintermediation	Yes
Higher Inflation	Inflation rate elevated compared with the pre-pandemic level	Inflation could move significantly within a few years	
Slowdown in the Court System	Delays in settling third party liability claims due to COVID	Greater uncertainty in the ultimate cost of claims	
Tightening Reinsurance Market	Sharp increases in reinsurance pricing	Insurers increasing exposure to catastrophic or other large events by increasing retentions, lowering reinsurance limits, and/or co-participating in higher layers of losses	
Pandemic Mortality/Morbidity	Higher mortality rate	Insurance Company faces liquidity issues to pay the higher mortality rate	
Geo-political Risk	Increase international competition	Government intervention	
Supply Chain	Supply chain slows down or even blocked	Longer wait time, higher expense	
Climate Change	Global warming and its impacts become a much higher priority to regulators, rating agencies, government	more frequent disclosures required (for investment as well as risk mitigation status)	
Artificial Intelligence	Large language models (GPT 4) assist worker productivity	Stronger AI disrupts the labor market by making some workers irrelevant	
Social Inflation	Higher frequency of frivolously lawsuits	Higher payouts in lawsuits	
Regulatory Risk	Current regulatory regime	Regulatory differences across state lines increase	
Diversity Equity Inclusion	Heighten DEI awareness	Mandatory DEI for all companies	
Talent Management	Great resignation makes it difficult to retain talent.	Demand unprecedented high salary	
Sustaining of healthy and vibrant corporate culture	Sustaining of healthy and vibrant corporate culture	Company reputation could be hurt, higher employee turnover rate	
Healthcare provider consolidation and staffing shortages	Healthcare provider consolidation and staffing shortages	Additional costs to obtain temporary workers to fill the need	
Same New Normal, Different Baseline/Risk: example, Change in Interest Rate	example: excess (i.e., more than 100 bps difference) inverted yield curve	a lot more interest rate volatility and large spike on the long-term rates	
Same New Normal, Different Baseline/Risk			
from "I" tab that's not on the list above	from "I" tab that's not on the list above	from "I" tab that's not on the list above	Yes
from "I" tab that's not on the list above	from "I" tab that's not on the list above	from "I" tab that's not on the list above	Yes

(b) Use the drop-down list to indicate the levels of the Likelihood of the risk materialized in the 3 year horizon and the Severity to your company. See "likelihood-severity" tab for definitions. (Based on all risks listed in the table.)

(c) Please indicate the top 5 risks to your company. Enter the number (1 = highest risk consideration). (Based on all risks listed in the table.)

(d) Please provide any comments.

III. Identify the nature of the accompanying New Normal risks and their impacts:

(a) For each of the risks you listed in II.(a), please include the Areas of Impact and the Levels of Impact (high/medium/low) to your company's Capital/Revenue/Earnings/. Examples of area of impacts are IT, Product Development/Pricing, Capital Management, HR, Valuation, Operational Risk Management, others (please specify).

(b) Which ones are your current top five priorities?

(c) If/when these New Normal risk risks show up simultaneously, how do you prioritize the risk management strategies (e.g., ranking by likelihood or by severity, or by impacts to company capital plan, or by something else)?

IV. Discuss how your company is responding to these changes and manages these new risks:

(a) For each of the risks you listed in II.(a) on tab II, are they already included in your company's current risk assessment scenarios? If you could go back to change things, what your company could have done to better prepare for this risk?

(b) Are they already included in your Risk Playbook? If you could go back to change things, would you do anything differently to manage/mitigate the New Normal risks you mentioned in II.(a)?

(c) What is the most effective resource that you need or have in managing these risks? Examples of effective resources are senior leadership involvement or regulatory guidelines.

(d) Has your company made any major changes mainly because of these New Normal risks (e.g., working from home, re-organization, update core values, strategic initiatives, investment in technology, M&A activities, financial transformation, etc.)? Are these changes permanent or short term?

(e) What have been the hindrances that prevented or made things more difficult for you to manage these new risks?

(f) What levels of government interventions do you expect to see in managing the New Normal risks for the short term and the long term?

(g) Please type you answer to the following prompt in the textbox below: Do you expect rating agencies to change their rating approaches because the New Normal risk risks you identified?

V. Understand what your company has learned from the past and how you can leverage that knowledge and be equipped to live in this New Normal:

(a) Are there data or lessons from the past that can help your company manage the risks or conditions associated with the New Normal risks (e.g., how was interest rate volatility/inflation managed in the past)?

(b) Please type you answer to the following prompt in the textbox below: While managing the risks or conditions associated with the New Normal risks, what opportunities have been created for your company?

(c) If you were able to go back to the time before these New Normal risks occurred, what changes or tools do you wish you had to manage/mitigate them better?

VI. Definitions provided in the survey:

<u>Definition of Likelihood (considering 3-year time horizon):</u>

1 = Remote: Highly unlikely, but the event may occur in exceptional circumstances.

2 = Possible: Not expected, but there is a slight possibility the event may occur at some time.

3 = Likely: The event might occur at some time as there is a history of occurrence at company.

4 = Highly Likely: There is a strong possibility the event will occur as there is a history of frequent occurrences at company.

5 = Imminent: The event is expected to occur in most circumstances as there is a history of regular occurrence at company.

<u>Definition of Severity (considering 3-year time horizon):</u>

1 = Negligible: The Risk is so small that the team can ignore it.

2 = Low: The Risk is insignificant and can be managed with routine procedures.

3 = Medium: The Risk is significant but manageable with additional controls or mitigations.

4 = High: The Risk is severe and requires immediate attention and action.

5 = Maximum: The Risk is extreme and intense, and it needs to be addressed immediately.

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Society of Actuaries Research Institute
8770 W Bryn Mawr Ave, Suite 1000
Chicago, IL 60631
www.SOA.org

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The Casualty Actuarial Society
4350 N. Fairfax Drive, Suite 250
Arlington, VA 22203
www.casact.org