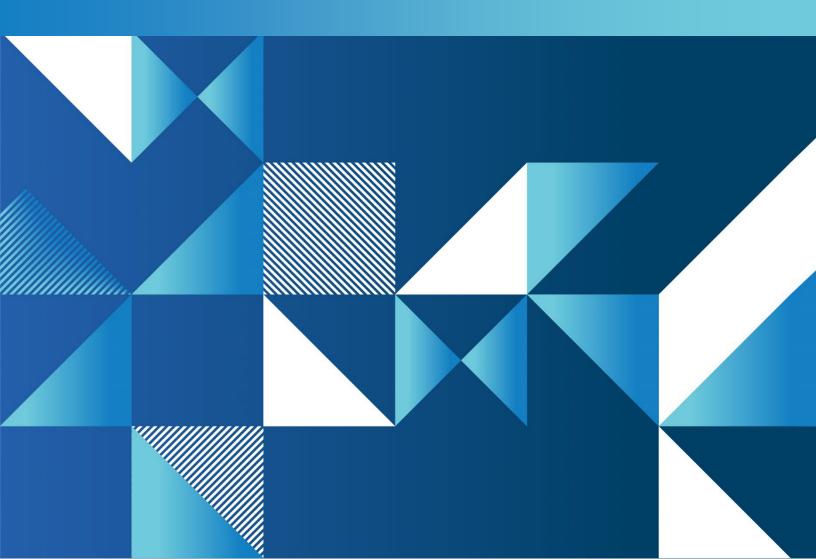


Survey of Emerging Risks in China and Greater Asia
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Survey of Emerging Risks in China and Greater Asia

Introduction

The *Survey of Emerging Risks*¹ has been successfully conducted in North America for 15 years, which provides a consistent report by tracking the opinions of risk managers on the emerging topics beyond the current business cycle with strategic plans over decades. For the first time the survey is also being specifically introduced in China and Greater Asia, with the aim of surveying the actuarial and risk management professionals' opinions on emerging risks in the local market. In relation to the Society of Actuaries, Greater Asia is defined as markets that participate in our Greater Asia Committee. These are additional areas outside of mainland China that include markets such as Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam.

The survey is sponsored by the Society of Actuaries (SOA) Research Institute and comprises both quantitative and qualitative questions in English and Chinese (Simplified). With a wide range of response options and allowing for anonymous comments, the survey results serve as a platform to share the risk views of local actuaries and risk managers in China and Greater Asia.

As a starting point, the respondents were asked to select top current risks, emerging risks, and combinations from 21 risks categorized in five groups (economic, environmental, geopolitical, societal, and technological). Further questions were asked about the local risk management practices and economic environment. It was also encouraged to type in additional risk management considerations not addressed in the survey within the text box embedded within the open-ended questions.

The survey was open from March 1 until March 31, 2022 and included 41 effective responses out of 94 submissions. The respondents reported are based in China and Greater Asia, with over 90% from mainland China. Interestingly, the risk views reflected in the results have been significantly influenced by the recent war outbreak involving the Russian invasion of Ukraine. This event has caused geopolitical risks and economic risks including financial volatility and asset price shocks to become unpredictable. The COVID-19 pandemic has remained a great concern globally, further exacerbating the economic recovery challenges in 2022.

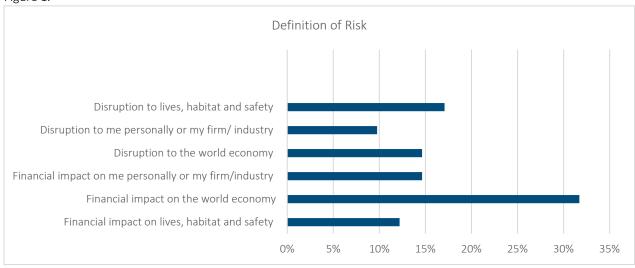


¹ https://www.soa.org/resources/research-reports/2022/15th-survey-emerging-risks/

Key Finding 1: Top Current Risks Center Around World Economy and Geopolitical Risk

The survey opened with the top current risk questions, which is intended to avoid anchoring effect in the present and minimize the impact of the current events on shaping emerging view, Figure 1 shows that 32% of respondents consider the risk with the largest strategic impact to be risks that have the most significant financial impact on the world economy, which reflects the international perspectives in local risk managers' opinions.

Figure 1.



To choose the top current risk, 21 selections of different risks were grouped into five categories: economic, environmental, geopolitical, societal, and technological. The risk categories details and definitions are provided in the Appendix. The top current risks reported are:

- Terrorism (24%)
- Asset price collapse (15%)
- Energy price shock (10%)
- Disruptive technology (10%)
- Pandemics/Infectious diseases (7%)

Figure 2

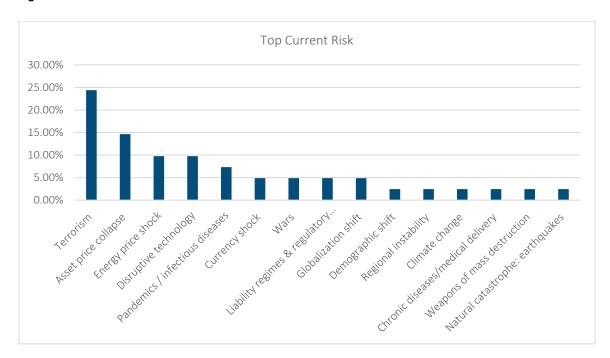


Figure 2 shows the detailed breakdown of each response. Terrorism emerged as the top current risk, which is strongly believed to be linked with the ongoing war situation, with the next two major concerns trending as asset price collapse and energy price shock. Disruptive technology remains a great consideration as markets enter the Industry Revolution 4.0 stage, where a series of emerging technologies, including Artificial Intelligence (AI), Internet of Things (IoT), etc. may cause transformations to existing business models and corporate governance. The COVID-19 pandemic has become less dangerous, but given the new Omicron variant still draws significant responses as one of the top current risks.

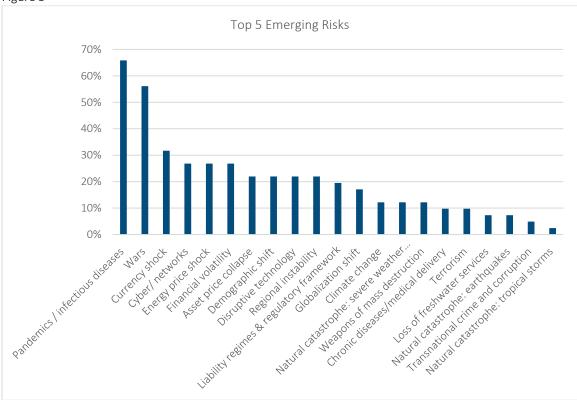
Key Finding 2: Top Emerging Risks in Pandemics, War and Financial Volatility

Participants were asked to choose five top emerging risks and two-risk combinations, where the emerging risks are defined as are risks that have either not previously occurred or have not occurred for so long that the probability of their occurrence is very low. The lack of credible historical data on emerging risk creates a formidable challenge for risk managers. As shown in Figure 3, when considering a time horizon that extends beyond a typical business planning time frame of 3 to 5 years, the top five emerging risks reported are:

- Pandemics (66%)
- Wars (56%)
- Currency shock (32%)
- Cyber/networks (27%)
- Energy price shock (27%)
- Financial volatility (27%)

It is interesting to note that respondents consider that the pandemic will remain an emerging risk beyond the current business cycle. One possible explanation might be the greater uncertainty associated with the long-term effects of COVID-19. Given the majority responses collected in China and Greater Asia, different governments have adopted varying approaches to dealing with the pandemic. Only with the benefit of hindsight will we be able to evaluate which approaches were most effective. In the near-term, the varying approaches present challenges with long-term sustainability and increasing mortality risk as restrictions are eased, which poses uncertainty in the next few years. The recent war also greatly shaped the view of risk concerns, driving more financial volatility.

Figure 3



The top five emerging risk selections can be analyzed by risk categories as shown in Table 1, and the main categories chosen collectively are economic risks, geopolitical risks, and society risks. The main economic risks category includes the currency, commodity, and volatility risk. The top selection in the societal risk category is the pandemic, and the war is a main contributor to the geopolitical risks.

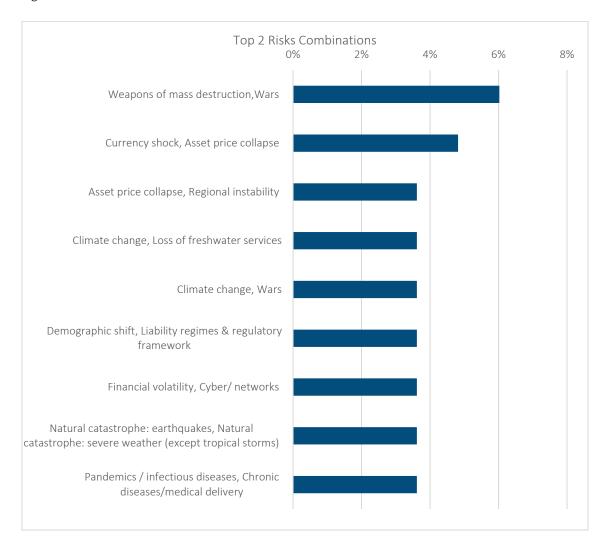
Table 1

Economic Risks	25%
Environmental Risks	9%
Geopolitical Risks	28%
Societal Risks	27%
Technological Risks	11%

The top risk considerations with the greatest impact are aligned with the top 5 emerging risks response selections, including geopolitical, societal and economic risks, wars (22%), pandemics (14%), asset price collapse (8%), currency shock (8%) and cyber (8%).

Regarding the risk pair combinations, it is difficult for respondents to concentrate on a particular combination, as there are 21 selections, and 210 possible combinations. Figure 4 shows that the most significant risks combination of risks include wars/destruction (6%) and currency shock/asset price collapse (5%), with the rest responses combinations around 4%. The wars, financial volatility and associated economic risks remain among the top risk combinations, with natural catastrophes and climate also being regarded as significant.

Figure 4



Key Finding 3: Enterprise Risk Management Industry Practices

As part of a first survey approach to address the local ERM (Enterprise Risk Management) practices, actuaries and risk managers were asked about details and procedures of ERM practices. 52% of participants

reported ERM has a positive effect on the company and industry, however 61% respond it is not clear if implementing ERM has significantly improved risk-adjusted returns.

A significant group of risk managers have a systematic process to identify emerging risks with leading indicators, assess risks with quantitative information, and plan mitigation strategies.

- 44% report once an emerging risk is identified, they have a process to measure, monitor, and/or mitigate the risk for some risks.
- 56% report they select leading indicators to measure changing likelihoods for some risks.
- 38% report they have criteria for when to take action to mitigate (or accept) the risk.

Key Finding 4: Economic Outlook – Pessimistic View and Bubbles

Although the world economy has shown some recovery signs through 2021, the Ukraine-Russia War and the current inflationary environment have led to a more pessimistic view of the outlook. Compared with the North American survey result conducted in 2021, the global economy expectation has worsened.

Figure 5

ECONOMIC EXPECTATIONS IN WORLD MARKETS

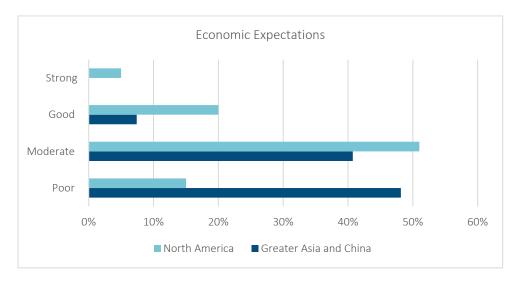


Figure 5 shows the comparison of global economic expectations between the risk managers in Greater Asia and China with those in North America. Only 7% of respondents provide a positive expectation of the global economy, while pessimistic views dominate the responses, including moderate (41%) and poor (48%).

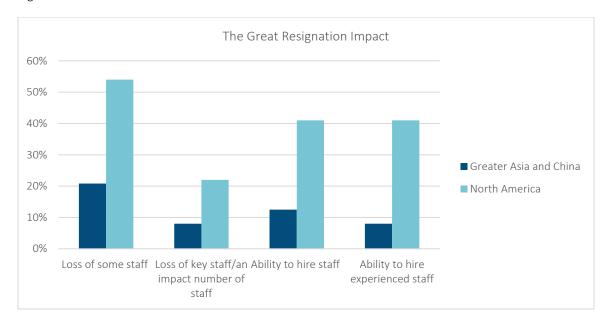
Regarding the ERM staffing and funding activities, some risk managers report an increased level of both staff recruitment and activities funding, with the further growing trend in 2022.

- 33% report an increased level of ERM-focused activities in their organization in 2021.
- 31% anticipate an increased level of ERM-focused activities in 2022 relative to 2021.
- 40% anticipate an increased level of funding dedicated to ERM-focused activities in 2022 relative to 2021

In the open-ended questions, actuaries expressed the risk considerations concerning current economic bubbles in housing and asset prices and noting that it is often difficult to estimate the incidence rate related to the critical illness. When it comes to risk exploiting opportunities, a wide range of responses in foreign currency exchange, medical treatment and financial structured instruments are nominated.

As shown in Figure 6, the Great Resignation does not provide a significant impact on the staffing change in China and Greater Asia compared to the North American market. The top response in the Greater Asia and China markets is 'not applicable', while the majority of respondents in North America report the loss of staff.

Figure 6



Conclusion: ERM Outlook in Greater Asia and China Further Considerations

All the survey respondents are new to the ERM survey, which indicates this reach out to local actuaries and risk managers. The majority are from mainland China, working in Life insurance.

Compared to the ERM survey conducted in the North American region in 2021, the Ukraine war clearly has shaped the risk managers' considerations. Reflected in this survey, actuaries have considered the COVID-19 pandemic to become less dangerous nowadays. However, it may still remain a long-term health risk concern. Although the war is geopolitical risk, emerging risks nominated in the economic categories such as asset price collapse and currency risks all bring in extra volatility in the financial system.

Following the recent war clouding the world economy, the Greater Asia and China actuaries provide a more conservative view of economic expectations in 2022. Although the Great Resignation does not affect the China and Greater Asia market much, global risk managers share consistent fundamental views on climate change, financial volatility and disruptive technologies.







Appendix A: Survey Framework

Economic Risks

Energy price shock 能源价格冲击

Currency shock 货币冲击

Regulatory risk 监管风险

Asset price collapse 资产价格崩溃

Financial volatility 金融波动率

Environmental Risks

Climate change 气候变化

Loss of freshwater services 淡水服务损失

Natural catastrophe: tropical storms

自然灾难: 热带风暴

Natural catastrophe: earthquakes

自然灾难: 地震

Natural catastrophe: severe weather

(except tropical storms) 自然灾难:恶劣天气

(热带风暴除外)

Geopolitical Risks

Terrorism 恐怖主义

Weapons of mass destruction 大规模杀伤性武器

Wars (including civil wars) 战争 (包括内战)

Transnational crime and corruption 跨国犯罪与腐败

Globalization shift 全球化转移

Societal Risks

Pandemics / infectious diseases 大流行病/传染病

Chronic diseases/medical delivery 慢性病/医疗交付

Demographic shift 人口转移

Liability regimes & regulatory framework

责任制度与监管框架

Technological Risks

Cyber/ networks 网络

Disruptive technology 破坏式技术

About The Society of Actuaries Research Institute

Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, datadriven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience and new technologies to help effectively identify, predict and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute connects actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors and non-governmental organizations, building an effective network which provides support, knowledge and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its strategic research programs: aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of topical research available, including an expanding collection of international and market-specific research, experience studies, models and timely research.

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