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Inflation and the Impact on Insurance Companies

Multiple Choice and True or False Questions — Submit Answers Online

1. Inflation measured by the Consumer Price was largely attributable to:
   a. Supply Chain Issues
   b. Russian Invasion of the Ukraine
   c. Economic sanction imposed on Russia
   d. Disruption in oil and gas shipments from Russia to Europe
   e. All of the above
   f. Both a. and b.

2. The current inflationary environment is usual in that it is not driven by general growth in demand exceeding the supply of goods and services driving up the price of these goods and services.
   a. True
   b. False

3. While higher investment yields will benefit insurers in terms of their new investments as market yields rise, the book value of existing holdings with lower coupons will decline.
   a. True
   b. False

4. It is not likely that premium increases can occur to a level sufficient enough to offset the increases in expenses caused by inflation
   a. True
   b. False

5. Procedures for testing inflation risk that can be performed during planning of a risk-focused examination are:
   a. Discussion with the financial analyst concerning inflation risk
   b. Inquiries about inflation risk made during C-level interviews
   c. Basic analytical procedure can be performed during Phase 3 and 4 to determine if there has been any impact on loss costs
   d. None of the above.
   e. Both a. and b.

Model Governance Framework • The Basics

Multiple Choice and True or False Questions — Submit Answers Online

6. Regulator concerns regarding the use of models by the insurance industry include:
   a. Model assumptions
   b. Model Limitations
   c. Whether the Model is fit for its intended use
   d. All of the above
   e. a and b

7. The following are examples of model risk, except for:
   a. Monitoring Risk
   b. Data Risk
   c. Implementation Risk
   d. Use Risk

8. Key stakeholders to a Model Risk Management function typically include which of the following:
   a. Model Owner
   b. Insurance Regulator
   c. Model Approver
   d. Board of Director Member
   e. a and c
   f. a, b, c and d

9. Model risk is mitigated using a four-lines of defense principle.
   a. True
   b. False

10. The following are different categories of changes to models except for:
    a. Unidentifiable change
    b. Requested change
    c. Changes made by multiple stakeholders
    d. Changes identified through a trigger mechanism

Widespread Ransomware is Not Inevitable

Multiple Choice and True or False Questions — Submit Answers Online

11. What was the percentage of increase in network breaches related to Ransomware between 2020 and 2021?
    a. 7-10%
    b. 15-18%
    c. 11-14%
    d. 19%-22%

12. Wiper Malware is considered Ransomware.
    a. True
    b. False

13. Defense in depth tactics includes White-Listing applications.
    a. True
    b. False

14. Which question below does not apply to evaluating a company's protection against ransomware:
    a. Has the Company implemented multiple copies of backups?
    b. Has the Company implemented penetration testing?
    c. Has the Company implemented removal of all non-necessary administrative rights?
    d. Has the Company implemented regular phishing testing/training?

15. Some security software will not allow approved programs to run correctly in the Information Technology environment.
    a. True
    b. False

Market Briefing - 3Q 2022 • Differences in U.S. Industry Invested Assets by Asset Size

Multiple Choice and True or False Questions — Submit Answers Online

16. Which statement is correct?
    a. Investment profiles, strategies and practices differ among U.S. insurance companies
    b. Life insurance companies invest differently from Property & Casualty insurance companies
    c. Life insurance companies invest differently from Health insurance companies
    d. All of above

17. Equity exposure, which includes common stock, preferred stock and mutual funds reported as common stock, was more substantial within or among:
    a. The P&C industry
    b. Life companies
    c. Both (a) & (b)
    d. None of above

18. Life insurers have been more comfortable with taking on credit risk.
    a. True
    b. False

19. P&C and health insurers tend to maintain which of the following(s) as compared with Life?
    a. Shorter duration portfolio
    b. Longer duration portfolios
    c. Neither(a) & (b)
    d. Both (a) & (b)

20. The current inflationary environment:
    a. Driven by supply chain issues with the COVID-19 Pandemic
    b. Exacerbated by multiple issues emanating from the Russian invasion of the Ukraine
    c. Fed in 2022 has been aggressively raising interest rates
    d. All of the above

PwC NAIC Meeting Newsletter Fall 2022

Multiple Choice and True or False Questions — Submit Answers Online

21. The Insurance Data Security Model Law (#668) and the Unfair Trade Practices Act (#880) have been adopted in the following number of jurisdictions:
    a. 12, 1
    b. 21, 7
    c. 14, 35
    d. 41,21

22. INT 22-03 Inflation Reduction Act – Corporate Alternative Minimum Tax (CAMT) states that companies should begin to make reasonable estimates for CAMT impact in Third Quarter 2022 or later. If reasonable estimate cannot be made, companies must disclose the company is subject to the Act but a reasonable estimate cannot be made.
    a. True
    b. False

23 P&C RBC Catastrophe Risk – The 2022 RBC Filings will include an "informational only" risk charge for wildfire peril. The subgroup is considering incorporating other perils.
    a. True
    b. False

24. The Blanks Working Group did not adopt a revision that would include adding new electronic only columns to capture investments issue by a related party or through related party transaction.
    a. True
    b. False

25. The Blanks Working Group did not adopt proposal to add questions related to owning or accepting cryptocurrency for payment of premiums starting for year end 2022.
    a. True
    b. False

Inflation and the Impact on Insurance Companies

By Dave Heppen, FCAS, MAAA
Tricia Matson, FSA, MAAA
Edward Toy
Bill Michael, CFE, CIA, CPCU, ARe
Risk & Regulatory Consulting, LLC

Inflation has continued to be a significant issue throughout 2022, as evidenced by its ongoing, direct impact on our daily lives. Families are spending hundreds of dollars more on basic goods every month; and according to a recent study conducted by Lending Tree, approximately two-thirds of Americans recently reported they were worried about not being able to afford groceries at least once in the past month. This is causing stress for families, particularly for households with young children and for lower-income families. The same report found that households making less than $35,000 a year were the most anxious about inflation, with 74% expressing concern about the affordability of groceries. Based on the most recent numbers from August 2022, there does not appear to be any relief in sight.

But while it's impacting our lives directly, it is also impacting insurance companies as well. The risk is significant enough that the NAIC added it to their risk alert back in the Fall of 2021. It is critical that insurance regulators consider the potential impact of inflation on the solvency of insurance companies. The NAIC specifically notes that the impact on insurers could include *"increased claim costs affecting loss reserves and underwriting profitability. In addition, inflation could have the potential to eventually result in rapidly rising interest rates, which could result in increased surrender activity and have other significant investment portfolio and life insurance product impacts."*

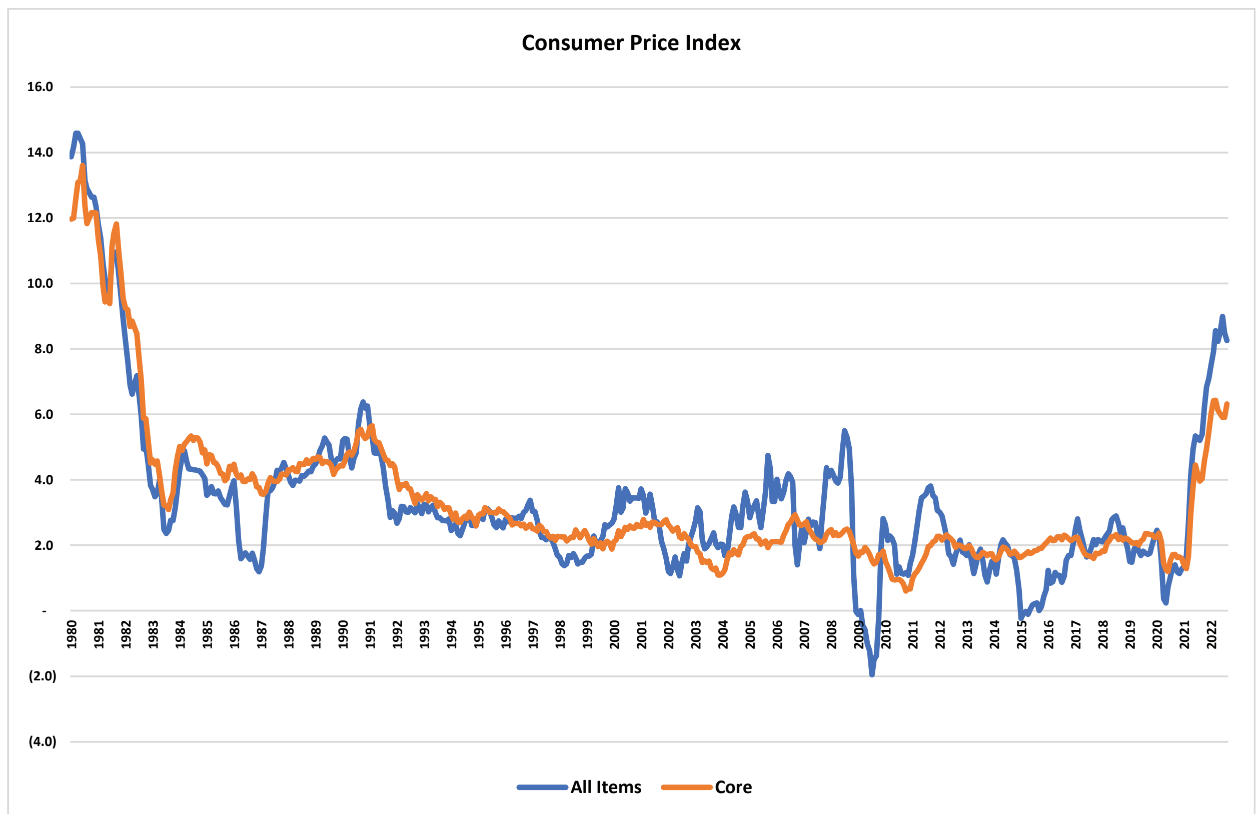
To facilitate regulators' ability to evaluate the solvency impact of inflation on their insurers, this article will provide readers with the following:

- Specific examples of how inflation can negatively impact insurance companies, and some helpful approaches to ensure inflation risk is adequately identified and addressed.
- A macro look at inflation, including some of the primary causes.
- An overview of the impact on insurance companies' investments and the importance of considering how management is responding with any changes to their investment strategies, as well as what that means from a regulatory perspective and additional risks that could arise.
- Broader financial considerations for Life insurers.
- Reserve implications for Property and Casualty insurers, including some possible analyses or tests that could be performed to adequately assess the risk.
- A summary of procedures that regulators should consider performing this year to address the risks associated with increased inflation.

An Overview of Inflation

Inflation, as measured by the Consumer Price Index ("CPI"), showed increases beginning in the fall of 2021. This was largely attributable to supply chain issues that were an outgrowth of the economic turmoil caused by the COVID-19 Pandemic in 2020. In addition, rising inflation numbers were exacerbated in February of 2022 with the Russian invasion of the Ukraine. Economic sanctions imposed on Russia, and the disruption in oil and gas shipments from Russia to Europe, caused oil prices to jump.

As a result, CPI data continued a dramatic increase and that has continued so far through August. The two key numbers are the overall CPI measure and the Core number, which excludes food and energy.



After hitting a peak of 9.1% in June, overall CPI came in at 8.5% for July and 8.3% in August. The latest decline reflects a decline in oil prices. Of greater concern for many is the Core inflation number which held at 5.9% for both June and July, but then rose to 6.3% in August. The latest data for August was just announced on September 13th and has increased market concerns that inflation may be staying stubbornly high.

What usually causes inflation? Inflation occurs where there is a supply and demand imbalance. The current inflationary environment is unusual in that it is not driven by general growth in demand outstripping the ability of the

national economy to meet with supply of goods and services, thus driving the price of those goods and services up. Rather, the drivers in this case appear to be a shrinking supply owing to supply chain disruptions, though it does seem more isolated with the key factors being food and energy, along with housing costs. However, food and energy are excluded from the Core inflation numbers because they are more volatile.

The Federal Reserve Board of Governors (the "Fed") has as a primary goal of keeping inflation within reasonable parameters to provide for growth in the economy while avoiding a recession; and to that end it has historically considered an inflation rate of 1.5% to 2.0% reasonable to achieve this objective. However, the Fed has limited tools within its monetary policy toolkit to keep inflation low. For this reason, it announced at the end of 2021 its intention to begin unwinding its accommodative policies that were enacted in 2020, but did not take immediate action. This approach recognized that since the factors driving the current inflationary environment were different, the typical monetary tools utilized to rein them in may not be as effective.

In 2020, the Fed had lowered the Fed Funds (the rate at which banks borrow from each other) target to effectively zero. In addition, it had pushed longer term interest rates lower by purchasing assets in the marketplace to the tune of nearly $10 trillion. For context, the asset purchase program with the Great Financial Crisis in 2008 was approximately $2 trillion and was more targeted in the types of assets purchased.

With the higher inflation data, the Fed began a program of increasing the target range for the Fed Funds rate, already increasing the rate at every meeting of the Federal Open Market Committee thus far. The unwinding of the Fed's nearly $10 trillion balance sheet is expected to be more gradual, to avoid any excessive impact on markets, primarily by not reinvesting cash flows before it begins selling assets.

The Impact on Insurance Companies

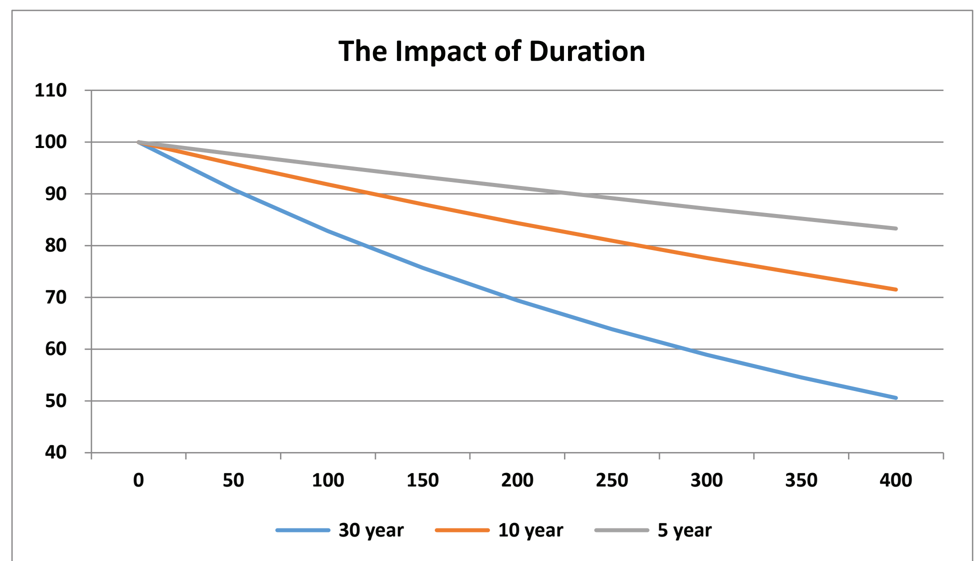
Inflation has very little direct impact on the investments of insurance companies. To the extent that there is direct impact, it is generally mixed across different asset classes. That impact may also vary significantly over time. However, there is significant indirect impact that derives from rising interest rates, which correlate with an inflationary environment.

Fixed income investments account for the majority of insurance industry holdings. Fair market valuations on fixed income investments (bonds and mortgage loans) will be impacted negatively by rising interest rates. Longer duration investments will be more heavily impacted.

Corporate bonds yields, reflecting both rising Treasury yields and changing corporate bond spreads, have risen significantly thus far. The changes vary based on credit quality. Single-A and triple-B rated bonds are generally considered the "sweet spot" for insurance companies, both of which are up about

200 basis points since the end of 2021. Below investment grade bonds are up about 325 basis points.

While higher investment yields will benefit insurers in terms of their new investments, as market yields rise, the fair market value of existing holdings with lower coupons will decline. The impact on thirty-year bonds can be substantial. While maturity (the time until the investment matures) is not the same as duration (the sensitivity of the investment to changes in interest rates), it is nonetheless a useful indicator of interest rate risk. A simply structured thirty-year bond typically has a duration of around 20 years. An increase of 400 basis points over that period would result in a decline in the fair market value of the bond of as much as 50%. This is without any consideration to other factors, such as credit risk. The impact would be less with smaller interest rate increases, as is the impact for bonds with shorter maturities. A ten-year bond would decline about 30% in fair market value with a 400 basis point increase, and a five-year bond about 20%.



Another major consideration is what happens to Residential Mortgage-Backed Securities, or "RMBS." Whether government Agency-Backed or Non-Agency, the RMBS market is subject to significant prepayment variability. When interest rates rise, mortgage rates rise, and individuals do not prepay or refinance their mortgage loans. This drives prepayment cash flows down. Investors generally make investments in RMBS with a certain prepayment assumption, often measured as a Constant Prepayment Rate ("CPR"). For relatively simple and short RMBS structures, assuming a 5% CPR, the investor would expect roughly a 2.5-year bond. This extends to more than 6.5 years if prepayments drop to zero. For an intermediate term bond, it goes from 6.25 years to almost 16 years. For a long bond, it goes from just over 12 years to more than 25 years.

	Average Life		
CPR	**Short**	**Intermediate**	**Long**
0.0%	6.60	15.96	25.46
2.5%	3.38	8.76	16.11
5.0%	2.38	6.17	12.18
7.5%	1.90	4.78	9.92
10.0%	1.61	3.95	8.39
20.0%	1.13	2.40	5.25
25.0%	0.93	2.08	4.45

While those are some of the more significant impacts, there are other less substantial and/or less predictable impacts from high inflation. Looking at the more significant asset classes that insurers hold:

- For Credit Instruments (Corporate and Government Bonds, Structured Securities and Mortgage Loans), the impact from a risk-of-default perspective is likely to be a positive. This obviously depends heavily on the specific industry, but a general expectation is that revenues and income in nominal dollar terms would improve with higher inflation, while the instrument would require repayments of fixed dollar principal and possibly fixed dollar interest requirements.

- For Equity Instruments (Real Estate Equity, Common Stock, and Investments reported on Schedule BA—primarily Private Equity Funds), there are immediate negative valuation impacts as interest rates rise. But longer term, there is also generally expected growth and that should be good for nominal valuations.

An additional complication may also be the increasingly inverted yield curve. The one-year Treasury yield is, as of this writing, 50 basis points higher than the yield for the thirty-year Treasury. This inversion is driven by market concerns that the economy may be heading in the direction of a recession, or at least a significant slowdown. When short-term Treasury yields are higher than long-term yields, the assessment of investment values is more difficult. An inverted yield curve also makes interest rate hedging strategies more difficult.

Broader Financial Considerations for Life Insurers

In addition to the asset impacts described above, insurers will experience increases in their expenses due to inflation. This includes salary costs, and costs associated with purchasing new goods (such as office space and supplies and furniture). Costs of using external parties, such as third-party administrators and other vendors may also increase. While the insurers have the ability to, in turn, increase premiums, the process to get approval of premium increases can take some time; and certain in-force products may have limits on the extent to which premiums can be increased. Therefore, it is not likely that premium increases can occur to a level sufficient enough to offset the increases in expenses.

As described above, new investments will earn higher returns due to the increasing interest rate environment. That too will take time to produce significant benefit, due to a large proportion of the assets invested in long-term bonds with coupons lower than current yields. Rising interest rates may also result in loss of interest-sensitive business (such as deferred annuities and universal life), as those customers look to earn a higher yield on their premium dollars elsewhere (called "disintermediation risk"). If lapses increase and the insurer does not have sufficient liquidity (cash and cash-like investments), they may have to sell assets at a loss due to the depressed asset values described above.

In addition to higher expenses and disintermediation risk, some insurers may also need to strengthen reserves due to these factors. Life insurers regularly test the adequacy of the reserves they hold. This test involves evaluating whether the assets backing reserves are sufficient, under moderately adverse conditions, to cover future policy benefits, expenses, and taxes. If assets were already insufficient, or barely sufficient, the combination of higher expenses, depressed asset market values, and disintermediation risk could result in the need to hold additional reserves under the asset adequacy test ("AAT"). One particular product line for which these AAT reserves are prevalent is long-term care, so insurers with large blocks of long-term care business may be at higher risk of having to increase reserves in a high inflation and rising interest rate environment.

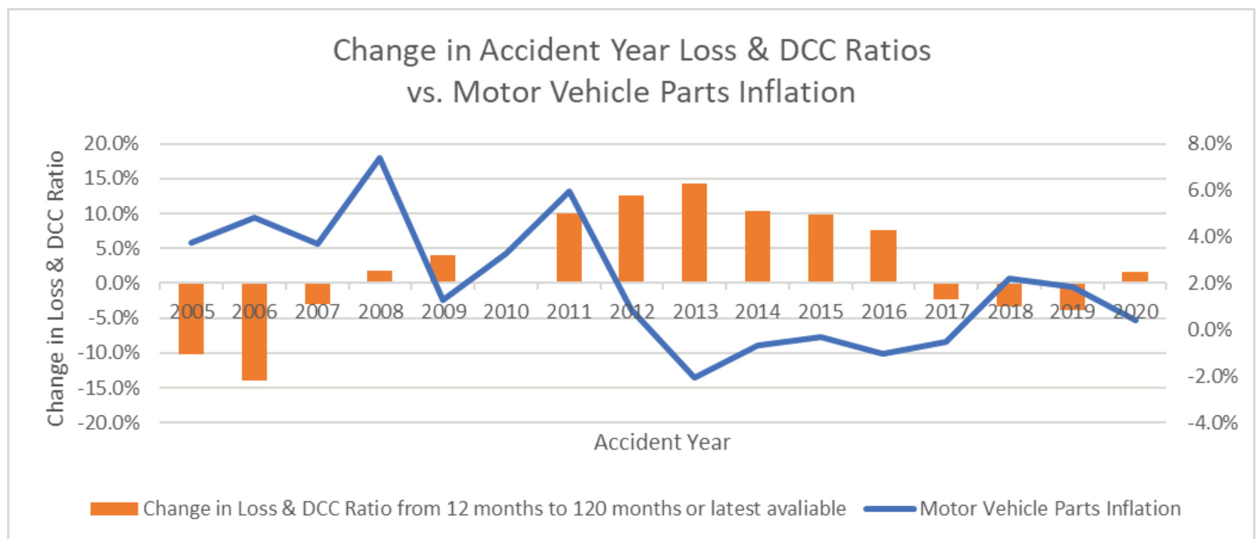
The good news though is that these adverse impacts may only be temporary ones. As Life insurers' investments turn over (i.e., new premium and asset maturities are reinvested at higher yields), the increase in investment income will be beneficial, both in terms of current income and adequacy of the assets backing reserves.

Reserve Implications for Property and Casualty Insurers

A high inflationary environment intuitively suggests that there is a higher degree of reserve risk for Property and Casualty ("P&C") reserves. For many P&C lines of business, it takes years for claims to settle. During that time, economic (and social) inflation can impact claim severities, thereby creating risk that reserves are not set adequately.

Just how much additional reserve risk is created by higher levels of economic inflation is a difficult question to answer. One potential approach is to examine the extent to which historical periods of P&C reserve volatility correspond to historical periods of higher levels of inflation. The overall CPI does not provide a useful lens through which to conduct such an analysis, given the lack of volatility in the CPI from the 1990's through 2020. However, there may be subcomponents of the CPI and the Producers Price Index that could be useful for this type of analysis. For example, historical spikes in the cost of motor vehicle parts may correspond to higher reserve volatility for auto liability.

Publicly available information can be used to measure historical reserve volatility. Each P&C insurer's Schedule P Part 2 includes a 10-year track record of its estimates for each accident year, by line of business. Periods of reserve volatility can be extracted from this data for individual companies, groups of companies, or the P&C industry as a whole. An example of how this analysis could be conducted is shown in the chart below.



The orange bars in the chart represent reserve volatility for a private passenger automobile insurer, based on its 2021 Annual Statement. Bars above 0% represent adverse development, while bars below 0% represent favorable development. The blue line represents inflation for motor vehicle parts. The adverse reserve development for this company experienced in accident years 2012 through 2016 was preceded by spikes in the inflation index in 2008 and 2011. Whether those spikes had any causal impact on this company's reserve volatility is not clear. However, this is a potential framework that can be used to examine the relationship of higher levels of inflation to reserve volatility for many companies.

To the extent strong relationships between reserve volatility and inflation can be identified through this type of analysis, regulators will have a tool to help assess just how much reserve risk P&C insurers are currently facing in today's high inflationary environment.

Potential Exam Procedures

During a risk-focused financial examination, examiners should consider inflation as a potentially significant risk. We recommend adding it to the Exhibit CC for consideration during the examination. Procedures can be performed during planning to determine if there is any potential impact on the insurer. Inflation risk should be discussed with the analyst, and should be inquired about during the C-Level interview process as well. In addition, some basic analytical procedures can be performed during Phases 1-2 (ensuring no duplica-

tion with the analyst's work) to determine if there has been any impact on loss costs. Based on these and any other procedures performed during planning, a decision can be made as to whether inflation risk should be included on a specific risk matrix to be carried through the 7-phase examination process.

The NAIC Solvency Monitoring Risk Alert – Spring 2022 edition provided details of some specific procedures that can be performed:

1. ***"Gain an understanding of and evaluate the impact of inflation on loss costs for the insurer's top lines of business."***

   For example, for P&C insurers with a concentration in property insurance, they will likely be impacted by higher costs for repairing and rebuilding. For this reason, examiners should carefully evaluate the insurer's loss ratios and reserve development for any signs of increased claim severity. Then, if examiners do identify increased claim severity, examiners should follow up with management to gain an understanding of the company's plans to address these rising costs. We have heard from some insurance companies that they are factoring this into their pricing process, with premium rate increases and underwriting adjustments, which is an appropriate response. Examiners should perform testing to validate management's plans and confirm they have achieved the expected impact on underwriting outcomes. If an insurer is experiencing higher claim severities and management does not have a clear plan to address it, this would warrant a major concern which needs to be documented – potentially as a finding with a recommendation, but at a minimum, as an unmitigated risk communicated to the analyst, with an appropriate recommendation for careful monitoring by the department going forward.

   For Health insurers with a concentration in comprehensive lines, examiners should take a close look at medical loss ratios for signs of an inflationary impact due to potential rises in healthcare costs. In reality, most healthcare costs are not expected to rise as quickly due to inflation. However, even prior to the current macroeconomic environment and its impact on inflation, medical inflation's impact on health and workers' comp insurers has been a fundamental exam consideration; and with the impacts of inflation now layered in as well, it is even more critical to evaluate its impact.

2. ***"Evaluate the impact of rising interest rates on the insurer's asset portfolio by reviewing and assessing the average duration of the bond portfolio and the ability and intent of the insurer to hold its fixed assets to maturity."***

   Obviously, the longer the duration of the bond portfolio, the greater the impact of rising interest rates on bond valuation. For this reason,

examiners should perform procedures necessary to understand management's intent and assess the company's ability to hold its bonds to maturity, as a hold-to-maturity approach would result in minimal impact on the insurer. Another important aspect to consider is that some **Life insurers have a significant amount of interest-sensitive business that may be subject to various product risks associated with rising interest rates.**

In summary, examiners should carefully assess inflation risk during planning and determine if inflation is a risk that should be included on a risk matrix, or multiple risk matrices, for testing and evaluation during the examination. If the risk is deemed significant and it is included on a matrix, consider performing the following procedures:

- Gain an understanding of management's approach (i.e., processes and controls) to managing the risk.
- Inquire with management regarding the actual impact to date.
- Inquire with management regarding their analysis and projections on the prospective impact of inflation on the company.
- Review and evaluate the information included in the company's ORSA, if applicable.
- Utilize examiner judgment to assess whether assumptions are appropriate.
- Execute testing to validate management's risk mitigation strategies by assessing the design and operating effectiveness of the controls.
- Perform substantive procedures as deemed necessary, including an analytical evaluation of the company's surplus levels to assess whether the company has the ability to absorb the expected financial impact.
- Document the risk assessment level and the trend.
- Communicate the conclusions and any findings to the analyst via the SRM.

Summary

Inflation could cause significant solvency concerns for insurance companies; therefore, it should be considered on all financial examinations, consistent with the guidance provided by the NAIC. While the potential impacts are various, its direct impact on insurers' investment portfolios is somewhat limited. However, to the extent that there is direct impact on an insurer's portfolio, this is generally mixed across asset classes and its impact may manifest in a

manner which varies significantly over time. Inflation poses a more significant *indirect* impact on investment portfolios, however, deriving from rising interest rates, which correlate with an inflationary environment.

Aside from the impact on investments, inflation will also result in increased expenses for insurers. Property and Casualty insurers in particular may experience increased reserve risk as a result, especially given longer time horizons for lines of business such as workers' compensation, making them more sensitive to interest rate assumptions within the reserves as well as assumptions regarding claim severities.

Given these concerns, there are a number of procedures that can be performed by examination teams to effectively address inflation risk, including evaluating loss costs, reviewing management's assessment of the impact of inflation risk both currently and prospectively, and evaluating the processes and controls implemented in response to inflation. Finally, as with all solvency risks and important exam conclusions, effective communication with the analyst is critical to ensure the impact is understood and any ongoing monitoring deemed necessary can be executed effectively.

About the Authors

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Model Governance Framework - The Basics

By Amy Alves, CFE, CPA, MCM

This article first appeared in the July 2020 issue of Risk Management.

BACKGROUND

There is widespread use of sophisticated mathematical, statistical and deterministic models among financial organizations. Insurance companies use quantitative techniques and models for a variety of reasons: setting business strategy, managing risk, calculating regulatory capital, monitoring and setting internal limits, calculating exposures, pricing different products, performing stress testing, etc. The use of models in the decision making process exposes these institutions to undesirable model risk.

Standards for modeling in the insurance industry gained more attention in the late 1990's to address the role of catastrophe modeling for hurricanes and earthquakes. Since then the number and importance of modeling applications in the insurance industry has increased dramatically. After the last financial crisis, there has been increasing regulatory pressure over the appropriateness of models among financial institutions. Regulators are questioning the assumptions and limitations of models, the quality of the data used for their calibration, and the thoroughness and independence of the model validation process. Regulators have been highlighting the importance of adopting an enterprise model governance framework to address risk throughout a model's lifecycle.

Regulators expect senior management and model users to challenge whether the model is fit for its intended use and to understand any model limitations which may impact the model's ability to meet its intended use. Model limitation considerations include, among other things, data and assumptions. Assumptions used in the models should be challenged to assess whether or not the models would be adequate in real-life situations. In particular, it should be clear to model users under what circumstances the assumptions would no longer hold.

Given the increased use and heightened focus on modeling, the Actuarial Standards Board (ASB) began working on an Actuarial Standard of Practice (ASOP) focused on modeling with four exposure drafts released between 2013 and 2018. In December 2019, the Modeling ASOP was adopted by the ASB with an October 1, 2020 effective date[1]. ASOP No. 56, *Modeling*, provides guidance with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models.

[1] Refer to http://www.actuarialstandardsboard.org/wp-content/uploads/2020/01/asop056_195.pdf, for final approved ASOP No. 56, *Modeling*.

MODEL DEFINITION

Prior to the adoption of the modeling ASOP, one of the key sources of guidance on model risk management came from The Board of Governors of the Federal Reserve in their Supervision and Regulation letters on Model Risk Management:

> *"The term model refers to a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates."*

They also add:

> *"The definition of model also covers quantitative approaches whose inputs are partially or wholly qualitative or based on expert judgment, provided that the output is quantitative in nature."*

The ASB defines 'Model' in ASOP No. 56, *Modeling*, as:

> *"A simplified representation of relationships among real world variables, entities, or events using statistical, financial, economic, mathematical, non-quantitative, or scientific concepts and equations. A model consists of three components: an information input component, which delivers data and assumptions to the model; a processing component, which transforms input into output; and a results component, which translates the output into useful business information."*

And defines 'Model Risk' as:

> *"The risk of adverse consequences resulting from reliance on a model that does not adequately represent that which is being modeled, or the risk of misuse or misinterpretation."*

MODEL GOVERNANCE PURPOSE

Model Risk should be evaluated and, if significant, mitigated with model governance and controls. The type and degree of model risk often varies from model to model and may depend on the model's intended purpose and the nature and complexity of the model including any limitations of the model. A formal model governance framework, including policies and procedures to manage enterprise model risk, allows for consistency in the application of model risk mitigation strategies and provides confirmation that the model is adequately controlled throughout its life cycle.

Examples of model risk include:

- Design Risk: Model flaws due to faulty logic, methodology or theoretical unsoundness
- Data Risk: Risk attributable to insufficient quality and/or quantity of proper data
- Implementation Risk: Risk resulting from translating models into a production environment and embedding the models into an organizational process. This includes numerical inaccuracies, technological issues, source code bugs, etc.

- Calibration Risk: Risk of not properly tuning the model to real-life situations faced by the enterprise

- Use Risk: Risk of incorrect use of the model, inaccurate interpretation of model results or limitations imposed by the context in which the model is used

KEY ELEMENTS and MODEL LIFE CYCLE

Key elements for an effective Model Governance framework include:

1) Development - Management of model risk begins in development when the case for a new model is started. Perhaps the most important elements involved in the process are at work here, including the work from developers who lend their experience to define the model.

2) Documentation - Written documentation that describes every step of the process is essential for the quick and easy identification of model components, ability to perform efficiency review and validation, and also helps to mitigate key person risk associated with the models.

3) Validation - This is considered the core phase to test models and classify their solidity. Validation refers to checking the statistical methodologies used, the input/output information and the performance. From a governance perspective, important elements to be considered include the independence of validators, frequency of validation, level of validation procedures to be performed considering the model's intended purpose and complexity, and required documentation to support and evidence the validation procedures performed.

4) Approval - A formal model approval process is critical for a complete model governance framework. Approval is an essential element for financial institutions, helps evidence good governance to regulators, and drives individual accountability.

5) Implementation - During this stage, the model is deployed to production and managed by the model user(s). The risk here is that some basic components, such as references to origin sources, model execution codes and/or technical documents, can be lost. A central model governance framework governing the entire model life cycle is critical to manage the risk associated with hand-offs and mitigation of any key-person risk.

6) Modification - As models are customized and modified, incomplete or partially complete documentation often becomes a common scenario. The need to have all model elements adequately documented, including specifications, limitations, inputs, outputs, etc. is critical to the ongoing model performance monitoring.

7) Monitoring and Retirement - Model retirement is often undervalued or underestimated compared to the other phases. However, it is crucial to monitor whether a model is still performing efficiently or is no longer applicable given the organization's current situation. The model governance framework ought to include procedures and protocol for ongoing monitoring and, as needed, model retirement.

8) Model Inventory - A model inventory is fundamental to obtain the big picture about models currently in use, which ones are retired or unused but have the potential to be used, what are the model uses, level of model complexity, etc. Models can range from simple to intricate and can also vary in the role they play within an organization. Model Inventories should provide a holistic view, capturing everything related to the models from a single point of view. Additionally, model categorization may help better organize the models. For example, a model's risk can be classified based on its complexity and materiality, in such a way that the inventory allows tracking of every object linked, including uses, purposes, properties, changes, documentation, codes and data; and also identifying every phase in the model life cycle, i.e., all the elements that contribute to model risk evaluation. An effective model governance framework often requires the use of a model inventory to ensure all models are identified, tracked and subject to ongoing validations.

9) Information Sharing - As complexity of processes increase, communication becomes an essential factor for the parties involved, especially when there is a relationship of dependency in the phases.

10) Roles & Responsibilities - A governance framework ought to include a description of roles and responsibilities, allowing for better information sharing to support and govern the entire process of the model life cycle.

STAKEHOLDERS

The model governance framework often includes, as a best practice, a separate Model Risk Management (MRM) function responsible establishing and maintaining the model governance framework, policies and controls. The model governance framework should clearly define the roles and responsibilities of the various stakeholders, including those within and external to the MRM function. Key stakeholders typically include the following:

- **Model Owner** - Party that requests and ultimately 'owns' the model. The model owner sets the model's business requirements, is responsible for end user acceptance testing and ensures a correct roll out of the model to other users, including training, communication, etc.

- **Model Developer** - Responsible for the development, coding, testing, reviewing and documentation of the model, following the regulatory and business requirements.

- **Model Validator** - An individual independent of the model development process, responsible for validating or testing the model.
- **Model Approver** - Prior to implementation, all models and related model documentation should be approved by the Model Approver(s). In some cases, this involves a committee rather than an individual.
- **Model Users** - In general, Model Users use the model or the model results on a day to day basis. Usually, the business requesting the model development, the Model Owner, is the main user of the model.
- **Model Implementer** - Models can be implemented as stand-alone processes, or within the organization's IT infrastructure. The Model Implementer is responsible for deploying the approved model for use.

MODEL RISK LINES OF DEFENSE
Model risk may occur at any stage during the life cycle of a model. Therefore, model stakeholders are part of the three-lines of defense principle:

a) First line: Represented by business operations, deals with model development, activity and availability

b) Second line: The risk management function is in charge of developing model risk management procedures and validation requirements. Model performance monitoring is typically executed within the second line in order to verify consistency, validity and efficacy.

c) Third line: Completes the entire governance picture, deals with auditors, evaluating activities for effective and efficient model risk analysis and notifying deficiencies and process improvements.

MODEL CHANGES and RISK
Models can be subject to minor or major changes at any stage during their life cycle, this is particularly true for stand-alone spreadsheet models, which are highly sensitive to changes.

In general, there are four types of change:

All changes can be classified in terms of impact, for example: Small, Medium, Large and Urgent.

Depending on the type and size of change, the model management process must prescribe appropriate steps to manage and mitigate the risk associated with model changes.

FINAL THOUGHTS
Managing the growing number of models, often with increasing complexity and sophistication, can be challenging and often leads to an increased level of model risk assumed by an organization. A properly designed and implemented model governance framework is essential and of foremost importance to mitigate this risk.

When establishing the appropriate model governance framework for a given organization, one ought to consider:

Customized Framework

- Model governance needs to be customized to the needs of the organization, it is not a "one size fits all" type of framework. Model governance should seek to go beyond a simple procedure; reflecting organization needs, priorities, complexities and environment.

Proportionality:

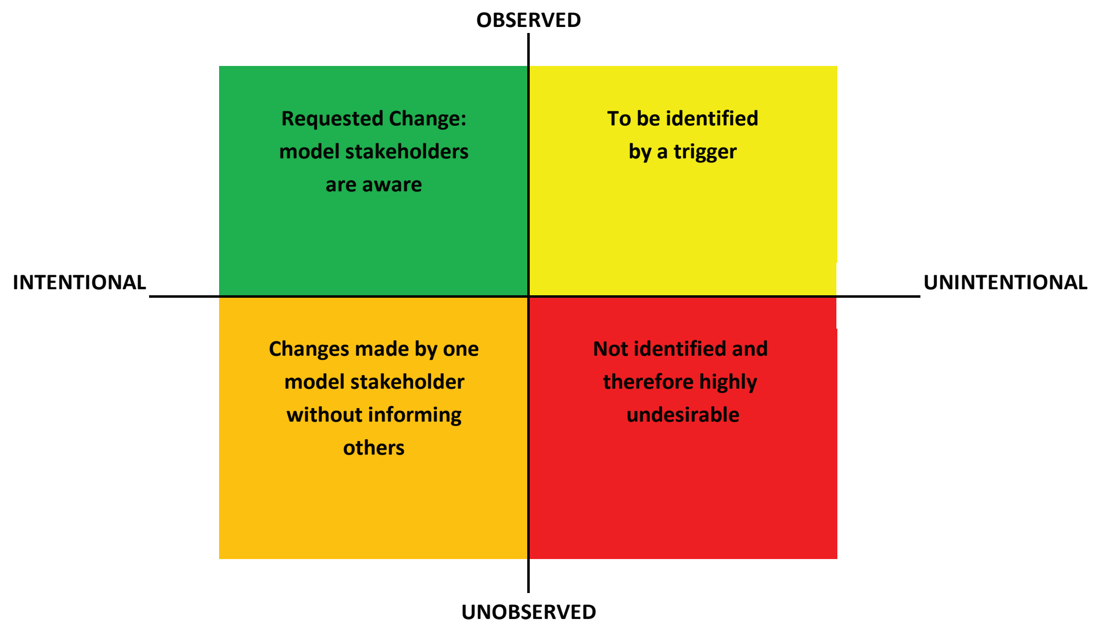
- Costs versus benefits should be taken into consideration when investing in model risk mitigation. Assessing materiality relative to risk and economic value should drive decisions of where efforts and resources should be allocated.

Process Consistency:

- In general, model governance framework should be consistent for all models. However, there may be cases where models with low materiality or risk potential may be subject to more relaxed requirements.

Pragmatic Framework:

- It is important to keep in mind the goal of the model governance framework is to manage model risk, it should be kept as clear and simple as possible, without introducing additional risks.



About the Author

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Widespread Ransomware is not inevitable!

By Jerry Wynne, CISA, CRISC, CISSP BCBSND

Professionals that have been involved in Cyber-Security for a long time have seen many trends in hacking over the years. When hacking (and hackers by proxy) first started becoming part of our vocabulary, Cyber activist (early hackers) would deface websites for fun or for social causes. Later hackers would try and break into networks to disable networks or steal data. As time has gone on criminals have discovered that that there is an opportunity to make money and move crime into the internet. As such, for the last several years we have seen Ransomware grow exponentially to the point that it now represents over 25% of all network breaches in 2021. While 25% does not seem to be a large percentage this represents an 11-14% increase from 2020 and continues to grow. It would appear from all the available data that ransomware is here to stay and will be part of the threats we need to address for the foreseeable future.

A very common question asked of cyber security professionals is *why ransomware is becoming so prevalent*? The short answers are that ransomware is easy to implement, effective for criminals to use to make money, and very profitable. A hacker can easily send out thousands of emails to try and get people to click on a phishing link and all it takes is for one person to click on the link. Because of this ease of use in 2022 it is estimated that up to 75% of all companies will deal with some type of ransomware incident and that ransomware will cost businesses over 20 billion dollars. It has become so profitable that there are numerous websites on the dark web that host ransomware as a service. Periodically some of these websites are shut down by authorities but we do see new sites almost immediately take their place.

Ransomware has also given rise to a new type of malware called Wiper Malware. Wiper Malware originated in one of its original strains, Petya—a ransomware. Today's Wiper Malware is no longer considered ransomware but does share some characteristics with ransomware where is will exfiltrate data but instead of encrypting data it destroys the data and the machine holding the data. The purpose of Wiper Malware is to destroy the network and steal the information. While today's Wiper Malware is no longer considered ransomware, many of the same defenses for ransomware are effective in addressing Wiper Malware

Due to the prevalence of ransomware, there are several experts on the news and online who will assuredly state that it is not a matter of if but more of a matter of when a company will be "majorly impacted" by ransomware. You can also find numerous companies that promise a single silver bullet that will block all ransomware. However, these statements are not supported by all cybersecurity professionals who have been working to defend networks.

Based on available data, the projection that 3 out of 4 companies will deal with ransomware is probably a factual statement in 2022. But the word "majorly impacted" implies much more that simply addressing ransomware. Many companies are attacked and have users that click on items they should not, but they have established ransomware defense in depth. The defense in depth they have implemented prevents ransomware from infecting the net-

work and from spreading. In these cases, those companies must deal with clean up, but to say they were truly "majorly impacted" would be a stretch.

Many cyber security professionals also don't agree with the concept of a single solution for ransomware. This is not to say that there aren't multiple good ransomware solutions available for purchase in the software marketplace but when a company has a single solution, it represents a single point of failure. And even these solutions that are very effective nothing works 100% of the time and hackers are consistently looking to find ways around single defensive points.

Having established that most companies will have to deal with ransomware and that perhaps implementing a single solution is not the best form of defense how should companies address this growing multi-billion-dollar threat? The best solution would be to implement a Defense in depth approach to address ransomware. Defense in Depth is a common term that has been used for many years. The idea behind defense in depth is that a company establishes multiple layers of defense so if hackers get by one layer or even two layers the next layer one should prevent or limit the potential impact to the company.

Some recommended defense in depth tactics that companies can implement to help protect themselves from ransomware include Frequent file backups (including offline backups), Anti-malware software, User training on phishing, Micro-Segmentation of networks, White-Listing applications, Removal of Administrator rights, Enforcement of security software on endpoints, and Patching.

Frequent file backups are not exactly what it states in the title. While not a bad idea from a disaster recovery standpoint it can be used to propagate ransomware from the infected devices directly into the very space that a company would use to recover. Best practices now state that companies should follow a 3-2-1 style of backups. This idea is based on the concept that companies should always keep at least three (3) copies of your data, and store two (2) backup copies on different storage media, with one (1) of them located "offline" and not available from the network. This means that even if ransomware is present and backed up, devices can be recovered. This is a departure from the trend of the last several years where data is backed up in real-time where changes are automatically backed up as they occur and that is the one "backup" for the company.

Anti-malware software is a growing vertical market that is advertised as being able to detect and block ransomware. This is a very important tool for companies to help block ransomware but does not represent a single silver bullet, it represents a single point of failure.

And even these solutions that are very effective nothing works 100% of the time and hackers are consistently looking to find ways around single defensive points.

While user training on phishing may seem self-evident it should include end user testing being done often, when someone fails that testing those failures should result in additional training (at least) and training should be done for all personnel who are on the network (not just employees). All too often companies talk about their annual, semi-annual, or quarterly testing. But that testing can often just be a sampling testing of employees. During sampling there is a chance that an employee could only be tested once per year or not at all and it does not address non-employees who are on the network. A good approach would be to test everyone on the network more often than annual, semi-annual, or quarterly.

While segmentation of networks has been around for years, micro-Segmentation of networks is the concept of driving the area of a part of the network down to a level that prevents hackers from moving around within the network and if an infection occurs then the number of impacted devices is limited to a very small amount. This concept may sound simplistic but is very challenging from a technology perspective. There is always some traffic that must go from one micro-segmentation to another micro-segmentation, the challenge is allowing the traffic that must go from micro-segmentation to micro-segmentation but blocking all other traffic including ransomware.

While many people are familiar with the concept of Blacklisting which is the approach of blocking known bad applications from running on a server or desktop, the idea behind White-Listing applications is to only allow applications to run that are on an approved list and blocking all other programs. This is a very effective block as ransomware will not be allowed to run on the devices, but it is very difficult to maintain the list of approved applications. For example, this is not as simple as just allowing program X to run but every time program X is upgraded or patched the new information about the program must be updated in the White List approved application list. A mid-sized organization can apply hundreds of patches and upgrade numerous pieces of software. Every touched piece of software must be updated in the Whitelist approved application list or they will not function on the end devices.

Removal of Administrator rights might seem to be a standard in today's computer environments many organizations still have administrator rights on local devices and an overabundance of administrator rights within their organizations including on servers and on programs that run as service programs between servers. All user IDs and programs within an organization need to be reviewed (not just end user) and administrator rights should be removed, or access evaluated. One example might be a program is running transferring files between two servers. Due to the nature of the work being done by the software administrator rights are needed. Those rights are assigned to an ID under which the program runs. The evaluation of that ID should include if that ID is allowed to login to a PC from a login screen if the answer is yes then that ID should be considered a full administrator ID.

Security software on endpoints has become very common at most organizations however that software can block/prevent some software from working properly. All too often security software is removed or disabled to allow for troubleshooting or to "get something to work". This creates a hole that can be used by ransomware. Every time security software is removed or disabled this should be tracked, reported on and follow up on to insure it is addressed.

The criticality of patching which again may appear to many to be standard for most companies cannot be overstated. However, patching is not always done to the extent it should be. Often older devices or devices that are slated to be replaced are no patched which again creates holes that can be used by ransomware. Also, some companies put off patching or do not have a patching cadence that can provide an adequate level of protection for the company.

When examiners or auditors are evaluating a company's protections against ransomware some of the questions they should be asking include "Has the company implemented...":

- Defense in depth?
- Regular patching on ALL devices?
- Multiple copies of backups?
- Offline copies of backups?
- A plan to address if ransomware impacts their network?
- Removal of all non-necessary administrative rights?
- Tracking of when security software is removed/altered?
- Regular phishing testing/training?

While a company answering these questions all "yes" does not guarantee that the company will not be impacted by ransomware it does lower the risk substantially.

About the Author

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Market Briefing - 3Q 2022 • Differences in U.S. Industry Invested Assets by Asset Size

By Edward Toy | Risk & Regulatory Consulting, LLC | Reprint

Introduction

It is commonly understood that investment profiles, strategies and practices differ among U.S. insurance companies. Life insurance companies invest differently from Property & Casualty ("P&C) and Health insurance companies. These differences reflect different needs in asset-liability management and meeting liquidity requirements. In addition to differences across insurer types, however, there are significant differences in investment portfolios when comparing different sized insurers within each of those insurer types. Smaller companies rely on different investment practices than larger companies. There are many reasons for this. Substantively, smaller insurers tend to have less flexibility and are less able to absorb the market volatility of more complex, less liquid asset types. As always, the specific needs of individual insurers should be considered on their own. Smaller institutions also may have less access to certain markets. This dynamic has changed somewhat with the increasing reliance on unaffiliated investment managers, but that transition is the subject of a different discussion. This Market Briefing provides some basic analysis into the differences in portfolios by grouping insurance companies for each insurer type into common size categories. *[The data for insurance company investments was all based on Financial Statement Data submitted to the NAIC and acquired via SNL, which is a unit of S&P Global. Market data was acquired via the Federal Reserve Bank of St. Louis.]*

U.S. Insurer Invested Assets

	Combined		Life		P&C		Health	
	2020	2021	2020	2021	2020	2021	2020	2021
Bonds as percent of ULT	76.98	74.97	80.45	79.40	67.84	64.01	82.30	82.17
Corporate (plus Loans)	43.84	43.03	51.42	51.36	26.52	25.07	33.34	33.93
Governments	14.33	13.90	9.75	9.47	24.64	23.07	21.90	21.99
Structured	18.26	17.50	18.78	18.15	16.16	15.24	25.02	24.00
Mortgages and Real Estate as % of ULT	10.85	10.72	15.09	15.21	1.74	1.71	0.17	0.23
Equities as percent of ULT	8.88	10.41	1.30	1.55	26.90	30.35	13.65	13.24
Schedule BA as percent of ULT	3.29	3.89	3.17	3.85	3.51	3.93	3.88	4.36
Equities as percent of Surplus	28.90	32.89	11.84	13.73	37.95	42.99	13.80	13.65
Schedule BA as percent of Surplus	10.69	12.29	28.80	34.20	4.95	5.57	3.92	4.49

RRC's last Market Briefing, dated May 11, 2022, considered total U.S. insurance industry assets of $7.2 trillion as of year-end 2021, the different profiles between Life, P&C and Health, and also focused on changes over the last ten to fifteen years. As a short reminder, the asset allocations as a percent of Unaffiliated Long Term Invested

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Assets ("ULT") differed significantly for each of the insurer types, though common across all three was a substantial weighting to fixed income assets, especially for Life and Health. Equity exposure, which includes common stock, preferred stock and mutual funds reported as common stock, was more substantial within the P&C industry, both as a percent of ULT and as a percent of Surplus. The latter detail was in part driven by larger P&C insurers but was also prevalent across the entire P&C industry. Also notable was a lower percentage allocation to Government Bonds and a higher allocation to Mortgage Loans among Life companies.

	Combined		Life		P&C		Health	
	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y
Bond Portfolio Maturity Score	12.19	12.49	13.95	14.38	7.95	8.02	7.36	7.74
1 or less	10.45%	9.72%	7.75%	6.89%	16.76%	16.67%	19.19%	15.16%
1 to 5	30.48%	30.12%	25.83%	25.29%	41.54%	41.07%	44.43%	45.56%
5 to 10	28.60%	28.18%	28.08%	27.33%	30.18%	30.29%	27.70%	29.69%
10 to 20	14.37%	15.24%	17.29%	18.35%	7.65%	8.17%	4.29%	5.34%
greater than 20	16.10%	16.75%	21.05%	22.15%	3.87%	3.80%	4.40%	4.25%
Greater than 10 year	30.47%	31.99%	38.33%	40.50%	11.52%	11.97%	8.68%	9.59%

Bond maturities are not a direct measure of duration but generally are an indicator of possible interest rate risk. In 2021, all three insurer types reported modest upticks on average bond maturities. Reflecting the longer duration liabilities of Life companies, the average maturity of Bond portfolios at Life insurers was significantly longer than for P&C and Health.

	Combined		Life		P&C		Health	
	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y
Bond Portfolio Credit Sore	1.46	1.46	1.52	1.52	1.31	1.32	1.34	1.38
NAIC 1	63.01%	62.58%	57.33%	56.79%	77.25%	76.88%	74.43%	72.31%
NAIC 2	31.09%	31.64%	36.49%	37.33%	17.60%	17.77%	19.69%	20.66%
NAIC 3	3.65%	3.53%	4.02%	3.78%	2.64%	2.73%	3.46%	4.21%
NAIC 4	1.68%	1.70%	1.57%	1.52%	1.91%	2.08%	2.09%	2.51%
NAIC 5	0.49%	0.41%	0.51%	0.42%	0.47%	0.43%	0.24%	0.20%
NAIC 6	0.09%	0.14%	0.07%	0.15%	0.13%	0.12%	0.09%	0.11%
Below Investment Grade	5.90%	5.79%	6.18%	5.88%	5.14%	5.35%	5.88%	7.03%

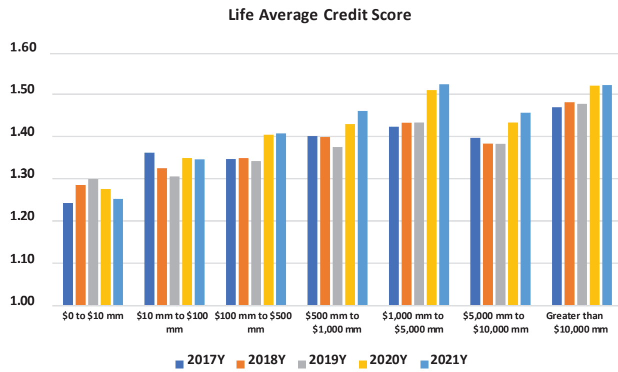
From the standpoint of credit risk in the Bond portfolios, Life insurers also had lower allocations to Bonds with a NAIC 1 Designation, largely reflecting the lower exposure to Government Bonds. Investments in below investment grade Bonds have grown more comparable over time between the three insurer types, but Life insurers had a materially higher percentage in Bonds with a NAIC 2 Designation, leading to a lower overall quality credit score.

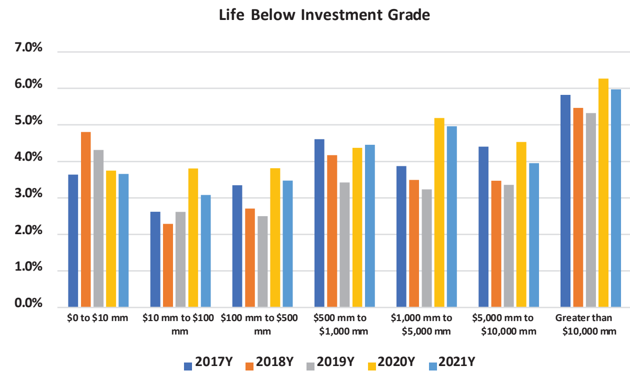
General Comments

It is beyond the scope of this Market Briefing to go through every different asset class or every different metric. Instead, the focus will be on certain specific areas of risk or asset class distinctions that have been the subject of recent discussions, including differences in credit quality and maturity profiles. There also has been a focus on certain asset types that are considered more volatile or of greater regulatory concern for different reasons. These would include Real Estate related investments, primarily Mortgage Loans, Asset-Backed Securities ("ABS"), which includes Collateralized Loan Obligations ("CLOs") and Investments Reported on Schedule BA. With respect to Real Estate related investments and Investments Reported on Schedule BA, those exposures are more significant among Life insurers. The data used only reflects unaffiliated investments, so it does not include insurer-occupied Real Estate, which can be material among some insurers, especially Health companies.

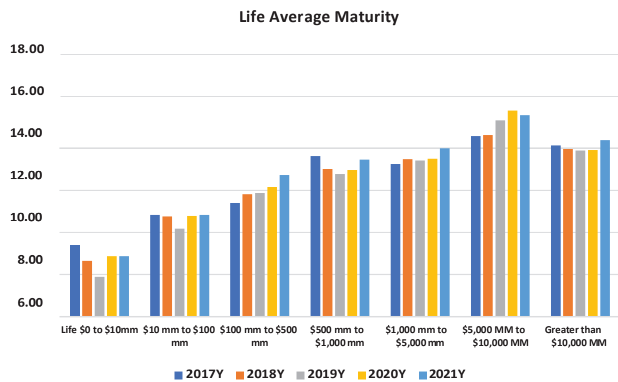
For this analysis, we have divided the data into seven groups based on size of net admitted assets. The intention was to have each group represent a reasonable percentage of each insurer type by number of companies and total net admitted assets. The group of smallest insurers consists of the companies with $10 million or less in net admitted assets. The group of largest insurers consists of companies with $10 billion or more in net admitted assets. This latter group is somewhat less diversified as there are fewer companies that are that large.

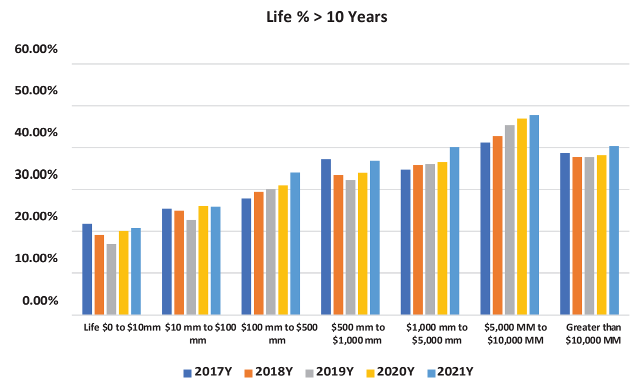
The data represents only General Account assets and includes over 600 Life insurers, over 2,500 P&C insurers and more than 1,000 Health insurers.



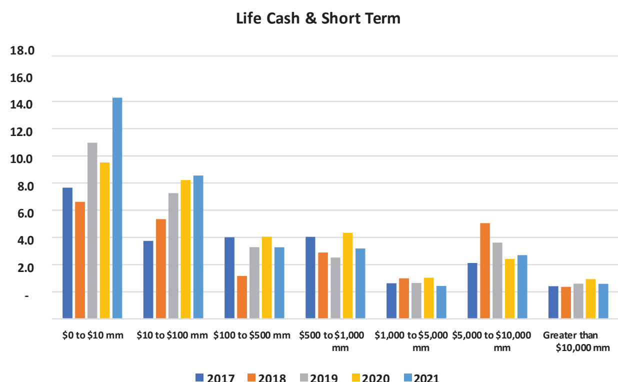


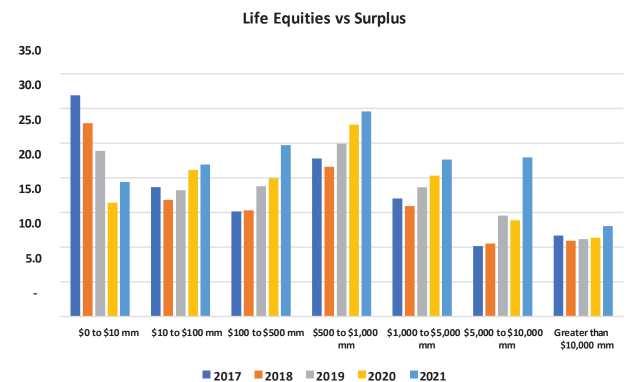
Historically, Life insurers have been more comfortable with taking on credit risk. Using NAIC Designations, the average NAIC Designation for the largest companies recently ticked over 1.50 in recent years, having been on a slow increasing trend since 2019. The average is significantly lower for the smallest Life companies at less than 1.30 and has remained relatively static for the two smaller groups. In part reflecting a similar dynamic is the exposure to below investment grade bonds which is highest at the largest companies at just about 6.0%, but materially lower for all of the other different size groups.

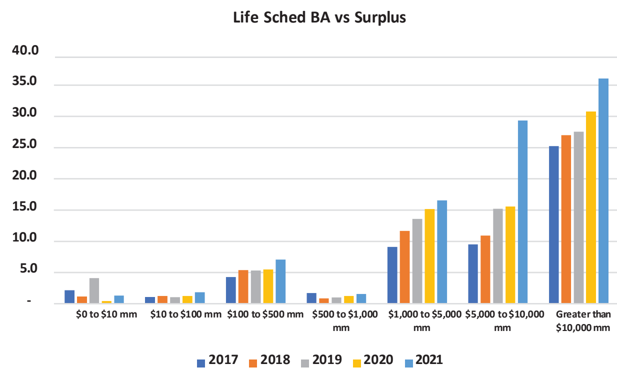


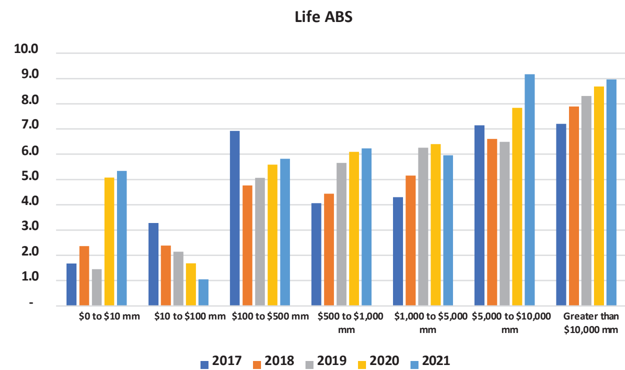


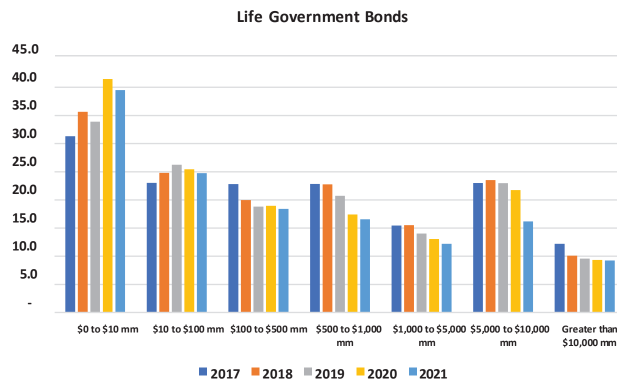
With what had been the prevailing low interest rate environment, another way for generating more portfolio yield was to invest in longer maturity bonds. Longer maturities generally reflect longer duration and, therefore, greater interest rate volatility. Longer duration investments are usually thought to match better with Life insurer liabilities. The duration of a Life insurer's liabilities depends on the type of products that it sells and is not necessarily reflective of the size of the company. With that as a qualifying statement, there are recognizable trends by size of Life insurer. Over time, from 2017 to 2021, both average maturity of the Bond portfolio and percent of the Bond portfolio that has ten-year or longer maturities have been increasing. The one exception is the group of largest Life insurers which has a somewhat shorter profile that has stayed relatively static in the time period.

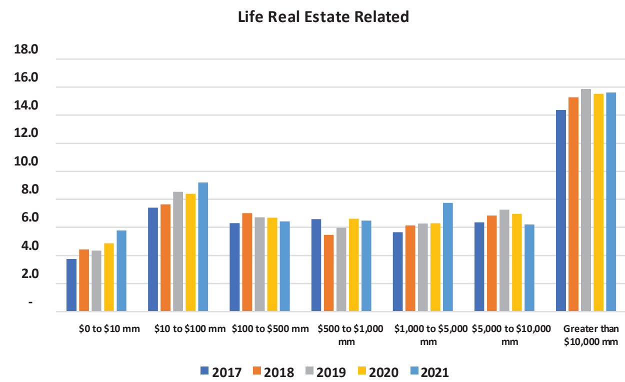






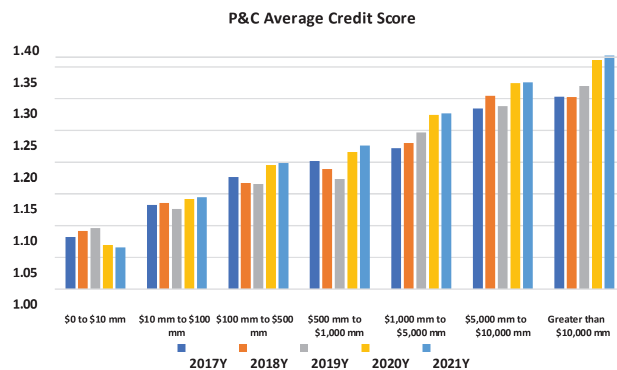


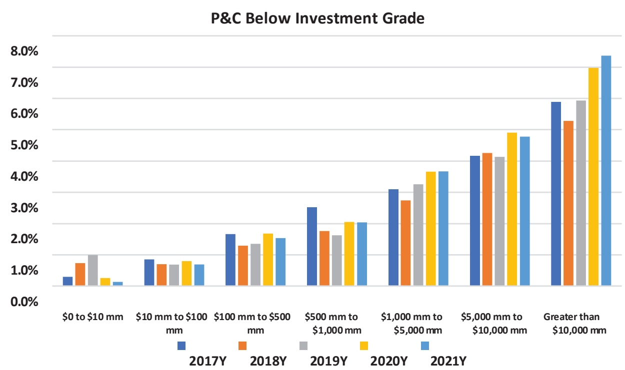




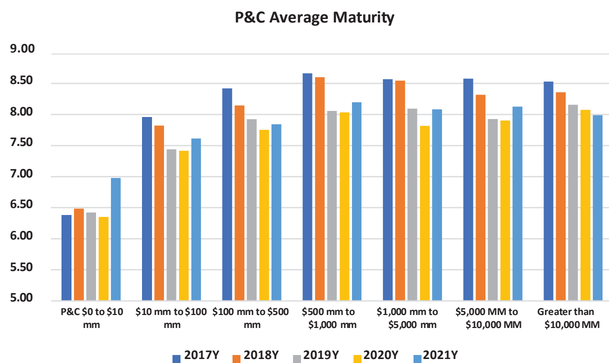
For the different exposures in invested assets, smaller Life insurers generally reflect a more conservative, more liquid profile. The smallest Life insurers maintain a higher percentage in Cash and Short-Term investments and in Government Bonds. Most of the Life industry's investments in ABS and in Investments Reported on Schedule BA are at the largest insurers. That is also the case for Real Estate related assets where the largest Life insurers have more than 15% of ULT in that asset type as compared with the rest of the Life industry which is at 8% or less, and at less than 4% for the group of smallest Life insurers. One exception to this general statement is Equities as percent of Surplus, where the group of smaller Life insurers had a materially higher percentage, though this trend has declined significantly since 2017.

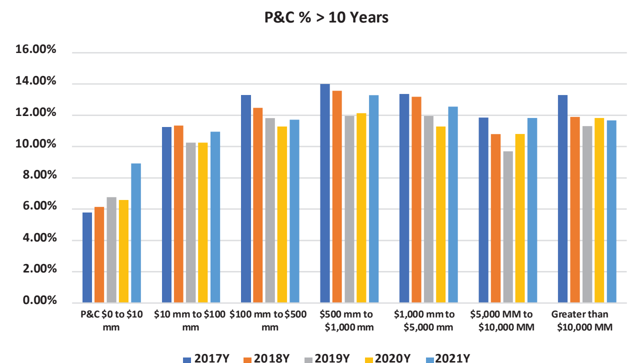
Property & Casualty Insurers



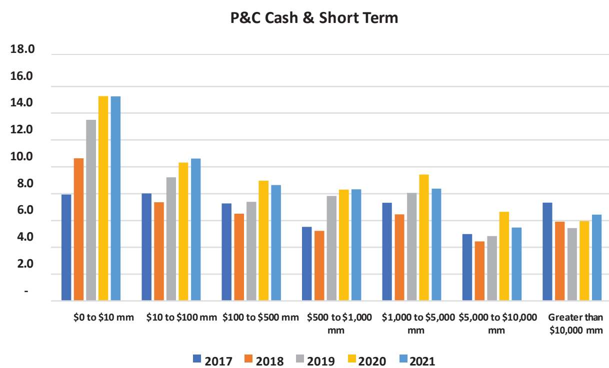


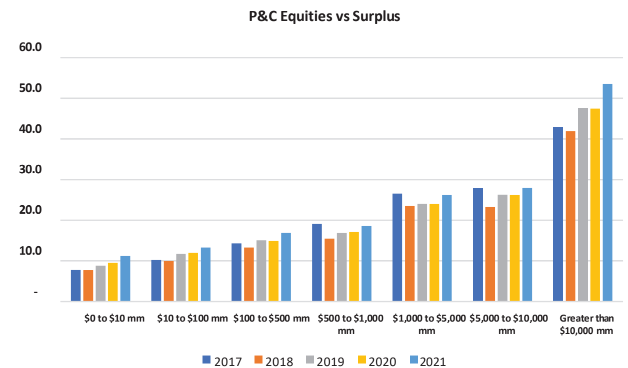
The two graphs above demonstrate a consist trend over time and from the group of smallest P&C insurers to the largest. Average credit quality has been declining over time as the percentage of below investment grade Bonds has been increasing. The two groups of smallest P&C insurers remain relatively conservative across both metrics. On the other hand, the profile of the groups of largest P&C insurers approaches metrics that are similar to those for Life insurers.

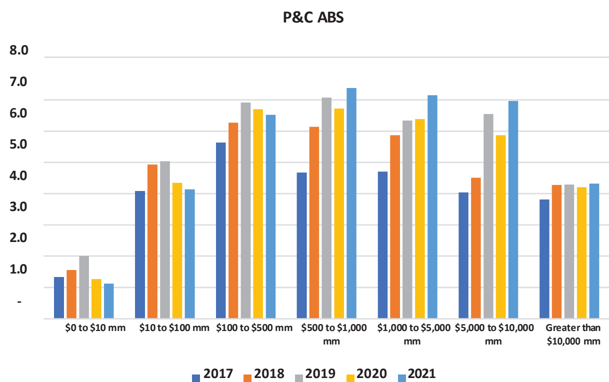


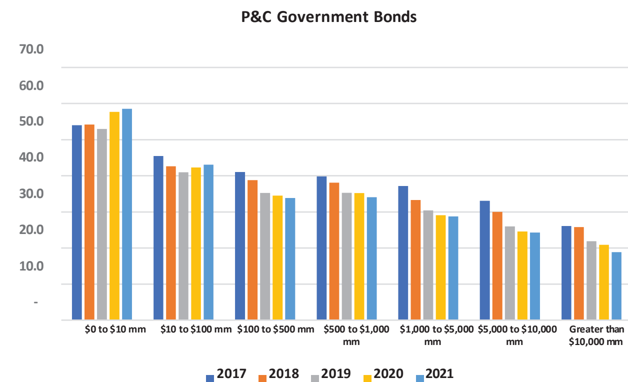


P&C insurers tend to maintain shorter duration portfolios as compared with Life, reflecting shorter and less predictable liability structures. There has been a modest decline in the average maturity of the Bond portfolios over the five-year period. The group of smallest P&C companies has a materially shorter maturity profile than the rest of the P&C industry, though that did lengthen noticeably in 2021.





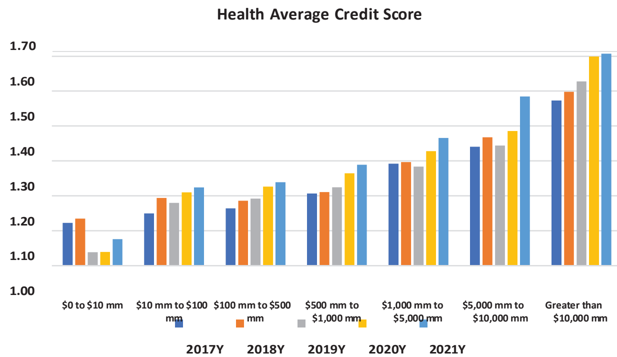


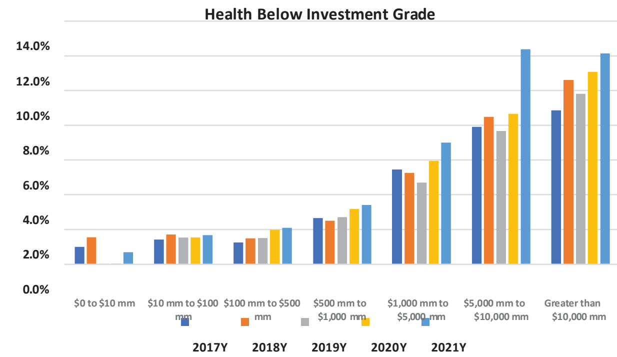


P&C insurers have generally kept stable percentages of Cash and Short-Term Investments, with notably more liquidity at the group of smallest P&C insurers. As Government Bonds can often serve as a secondary source of liquidity in volatile markets, this is also reflected in those holdings as a percent of ULT. For Government Bonds, with increasing size of the insurer, percentage allocation decreases, and within each group, there has been a gradual decrease over time. For the group of largest P&C insurers, Government Bond holdings declined below 20% in 2021. Both this and the general trends noted are offset by a gradual increase in Equity exposures. Equity exposures for the group of largest P&C insurers ticked above 50% of Surplus in 2021. This was significantly driven even more so by the largest P&C insurers within that group. The large exposure to Equities also translates into a smaller percentage allocation to ABS with the group of largest P&C companies. For most P&C insurers, investments in ABS have increased over the five-year time period but remain a relatively small percentage in the group of smallest P&C companies. Investments Reported on Schedule BA and Real Estate related investments in the P&C industry

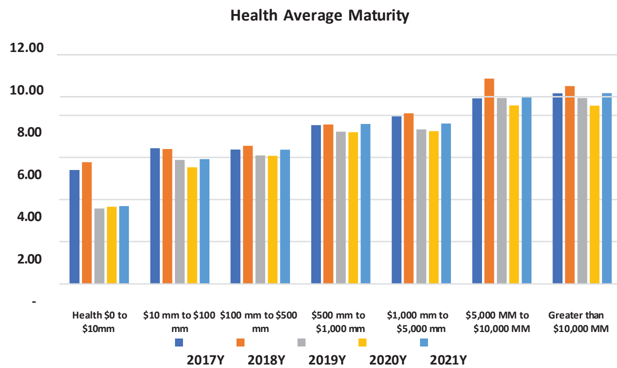
have also increased in recent years but remain not that significant in the P&C industry. (These latter graphs were not included in the above.) For the larger P&C insurers, Investments Reported on Schedule BA account for between 5% and 9% of Surplus. Real Estate related investments account for just over 2% of ULT in the group of largest P&C companies. In both of these latter asset groups, the exposure at the smaller P&C insurers is not material.

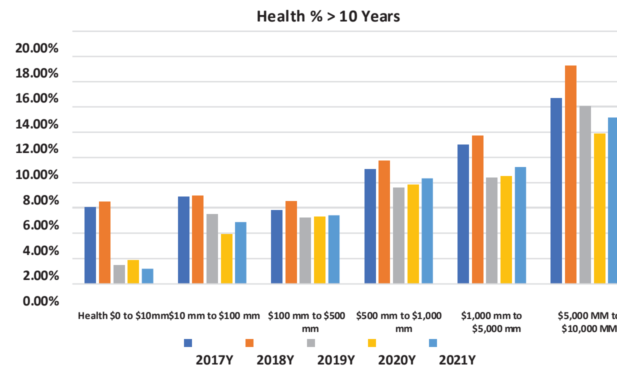
Health Insurers



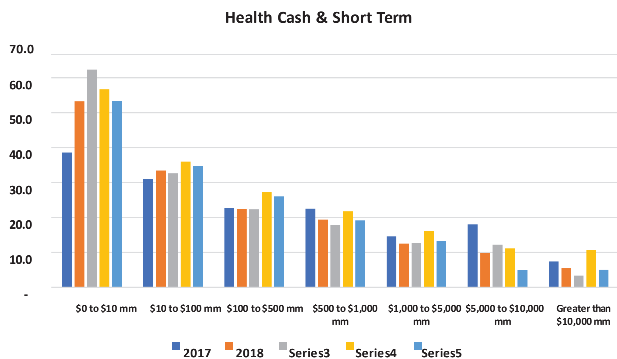


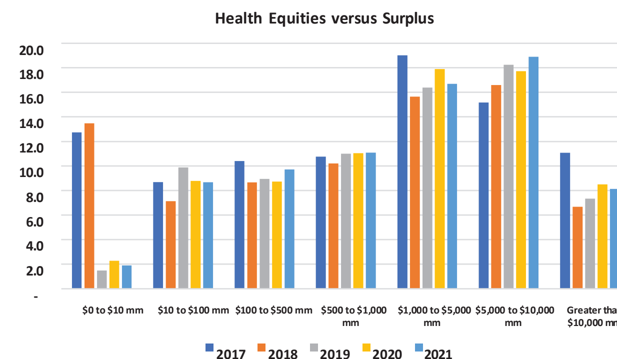
With the exception of the group of smallest Health insurers, credit risk has increased significantly among Health companies in recent years. The average credit score for each of the other groups has been weakening driven by increases in below investment grade Bond holdings. These increases were most pronounced among the largest Health insurers in 2020 and 2021 where below investment grade Bonds now account for more than 12% of the total.

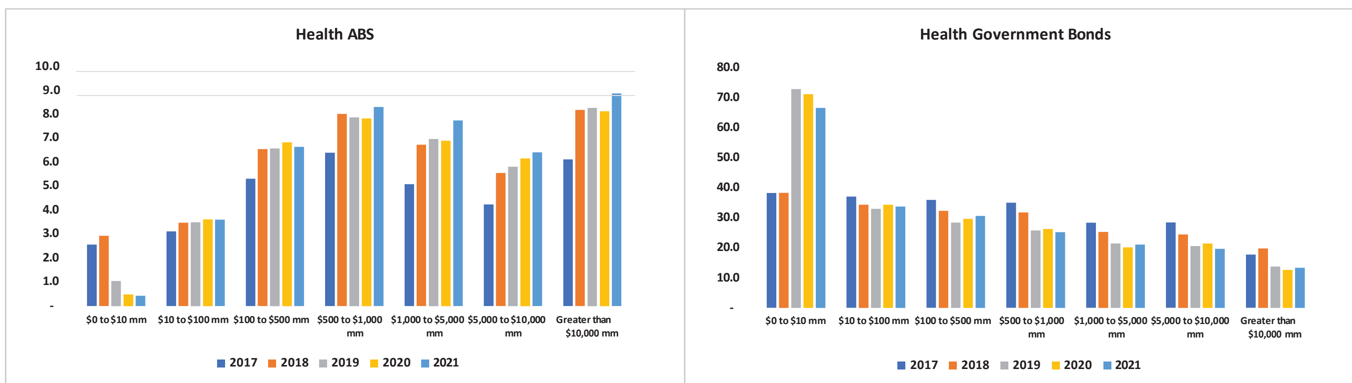




Similar to the P&C industry, Health insurers tend to maintain Bond portfolios that have shorter maturities, which includes limited holdings of Bonds with maturities of ten years or longer. This has remained relatively consistent over the last five years. There is some higher degree of duration risk at the larger Health insurers.





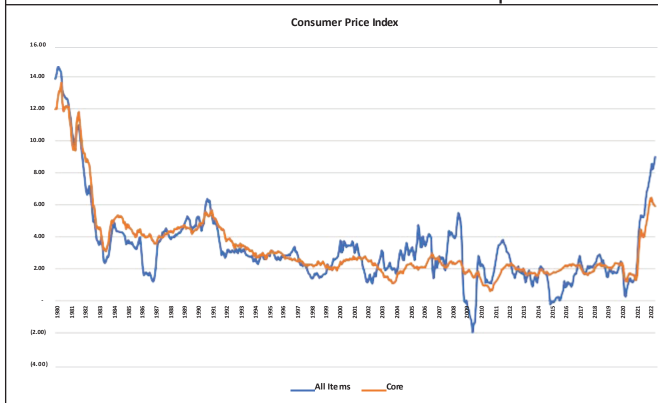


The groups of smaller Health insurers maintain high degrees of liquidity through both Cash & Short-Term Investments as well as holdings of Government Bonds. This is less the case with larger Health companies. There has been some decline in the percent of Government Bond holdings among the larger Health companies. Equity holdings as a percent of Surplus is significant at the larger Health insurers. There has also been increases in allocations to ABS at the larger Health insurers, pulling them farther away from the smaller companies in this respect.

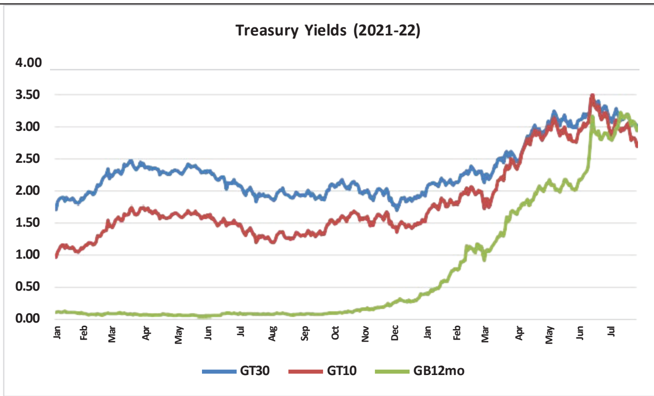
Markets (through July 28, 2022)

A Market Briefing would, of course, be incomplete without some discussion about what has been happening with various market metrics. A major economic indicator has weighed on all of the markets in recent months, and that is reported inflation numbers. The June data was announced with an overall inflation rate of 9.1% and a core inflation rate of 5.9%. The inflation numbers have not been this high since the early 1980's.

The last week of July also included two substantive announcements that had a material impact on the capital markets. The Federal Reserve Board (the "Fed") through the Federal Open Market Committee ("FOMC") announced an increase in the target for the Fed Funds rate of 75 basis points. Immediately following on that announcement, economic data was released indicating a decline in U.S. Gross Domestic Product ("GDP") of 0.9% for the second quarter. This was after a decline of 1.6% in the first quarter. Under the older, simpler metric that would mean that the U.S. is in a recession. However, going back a few years, the National Bureau of Economic Research ("NBER"), the body that officially declares whether or not the country is in a recession, decided that the metric was prone to false positive and false negative designations. The NBER now looks at a dozen or so individual economic statistics. Altogether there is substantial overlap between the new and old method. For now it looks like those metrics will not lead to a designation of a recession quite yet. The various statistics are published monthly, so a designation of a recession could still come in the next couple months if the economy does not turn back around.

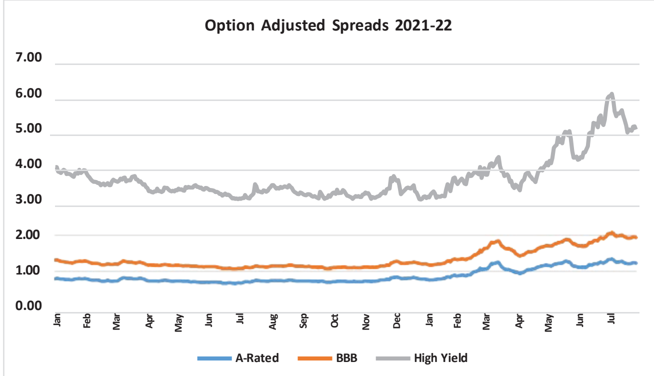


The current inflationary environment began at the end of 2021, driven by supply chain issues that began in 2020 with the COVID-19 Pandemic, and were exacerbated by multiple issues emanating from the Russian invasion of the Ukraine, principal among the latter was a dramatic uptick in oil prices. The Fed began unwinding its accommodative policies at the end of 2021 and in 2022 has been aggressively raising interest rates. This increase has led most analysts to consider the likelihood of a global recession in the next two years as being relatively high.

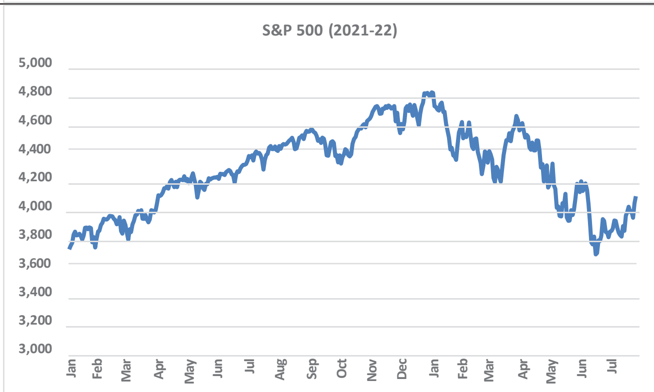


The Fed took extraordinary actions in 2020 to reduce interest rates. At the end of 2021, the Fed announced that it would begin unwinding these accommodative policies to combat high inflation rates. Such actions included several substantial rate increases since the beginning of 2022. With the latest announcement, the Fed has raised the target rate for Fed Funds by 225 basis points. The Fed also began unwinding its balance sheet, which had grown to nearly $10 trillion in 2020. This latter effort is expected to be very gradual to avoid a significant market impact.

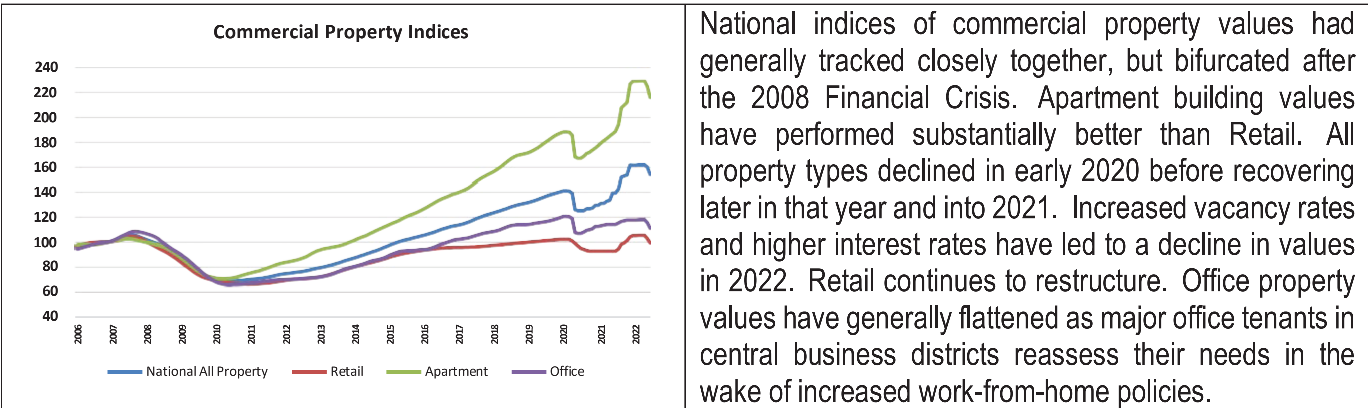
Efforts to raise longer term interest rates through asset sales have been offset by other market forces that are concerned about and expecting a recession. This has led to a flattening of the curve between the one-year, ten-year and thirty-year Treasury yields. While the one-year Treasury yield has risen by 250 basis points in 2022, the ten- and thirty year Treasury yields have risen only 120 and 110 basis points, respectively. This results in a modestly inverted yield curve beyond the one-year Treasury.



Corporate Bond spreads have generally widened since the beginning of 2022 as investors are expressing concerns over prospective defaults that may result from a recession in the next year or two. This has been most noted in below investment grade bonds that have widened by 200 basis points and also results in an increasing differential in spreads and yields between rating qualities. Increasing interest rates and widening spreads will impact the fair market value of Bonds held.



Equity markets, as exemplified by the S&P 500, recovered rapidly at the end of 2020 and into 2021. In 2022, the S&P 500 declined by as much as 20% at one point, which is usually referred to as a “bear market”. Investors have grown concerned about the likelihood of a recession which will impact earnings. Higher interest rates also impacts valuations. Since the end of 2021, the estimated price-earning multiple of the S&P 500 has declined to 19.4 from a high of nearly 40.0 in December 2020.



National indices of commercial property values had generally tracked closely together, but bifurcated after the 2008 Financial Crisis. Apartment building values have performed substantially better than Retail. All property types declined in early 2020 before recovering later in that year and into 2021. Increased vacancy rates and higher interest rates have led to a decline in values in 2022. Retail continues to restructure. Office property values have generally flattened as major office tenants in central business districts reassess their needs in the wake of increased work-from-home policies.

Closing Thoughts

Market volatility has returned in 2022 and is expected to continue for the near term. Rising interest rates will improve new money rates on fixed income investments going forward, but will also present new challenges to insurers. In this environment we note that U.S. insurers have generally increased the risk profile of their investment portfolios. While a substantial degree of that increased risk is among the larger companies within each insurer type, smaller companies have also modestly increased their risk profiles. This trend is reflected in many of the individual metrics, but should also be considered as a whole.

A substantive question to be addressed is, have the different sized organizations also made significant enough improvements in their risk control and management systems to reflect that increased risk? Investment portfolios that are more susceptible to market volatility and are less liquid require different levels of experience and understanding within senior management and on the Boards of companies. Reporting and portfolio tracking also have to be more robust to understand the impact of the increased volatility on holdings. Some key questions to consider include the following: Are investment guidelines appropriately structured? Is compliance monitoring, including structures for tracking the activities of investment managers, up to the task?

SOFE Editor's Note: This Market Briefing was originally distributed by Risk & Regulatory Consulting, LLC on August 9, 2022. Reprinted with permission.

About the Author

Edward Toy is a Senior Manager at Risk & Regulatory Consulting, LLC who performs investment and risk management consulting services for state insurance departments. He has extensive knowledge of insurer investments and investment strategies, and how they fit within regulatory guidance. Ed's professional experience in investments includes 25 years as an analyst, trader, and portfolio manager across multiple asset classes and investment strategies. Prior to his employment with RRC, he served as Senior Technical Policy Advisor, Capital Markets & Macro Prudential Surveillance at the NAIC. His responsibilities included working with state insurance regulators in the development of tools for oversight of the insurance industry as they relate to investment portfolios and coordinating with other NAIC staff and state insurance regulators on matters impacting financial/solvency regulation of insurers and capital markets. While at the NAIC, Ed also founded and served as Director of, the Capital Markets Bureau.

PwC NAIC Newsletter

Summer 2022

The National Association of Insurance Commissioners met in Portland, Oregon for the Summer National Meeting. This newsletter contains information on activities that occurred in meetings from May 2 to October 7, 2022. For questions or comments on this Newsletter, please feel free to contact us at the address given on the last page.

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Executive summary

- The Statutory Accounting Principles Working Group (SAPWG) exposed the following four documents for comment related to the principles-based bond definition project: i) updated principle-based bond definition, ii) updated issue paper, iii) proposed revisions to SSAP 26R, and iv) proposed revisions to SSAP 43R. The updates, based on discussion of comments received, were relatively limited, and were substantially consistent with what was previously exposed. The working group also exposed two documents proposing financial reporting revisions related to the principle-based bond definition project: i) proposed reporting lines and ii) Schedule D-1 Annual Statement Instructions. The comment period ended October 7th and the earliest the project is likely to be effective is January 1, 2025.

- SAPWG adopted guidance on derivatives and hedge effectiveness to more fully integrate ASU 2017-12 and clarify the accounting for excluded components in the hedge effectiveness test. The working group also exposed proposed guidance related to subsequently adopted GAAP guidance in ASU 2022-01 to incorporate portfolio layer method hedging for statutory accounting.

- SAPWG also exposed two INTs related to the Inflation Reduction Act. The working group concluded that a reasonable estimate of the effect of the corporate alternative minimum tax cannot be made for September 30, 2022 and provided a limited-time exception to the valuation allowance and DTA calculations under SSAP 101 and Type I subsequent event requirements in SSAP 9. For fourth quarter 2022 and interim 2023 reporting, SAPWG concluded that a company should recognize the effects of the corporate alternative minimum tax when a reasonable estimate is determinable and if the company cannot make a reasonable estimate they should disclose that they will be subject to the Inflation Reduction Act but that a reasonable estimate cannot be made. However, estimates need to be recognized fully by year-end 2023.

- The newly formed RBC Investment Risk and Evaluation Working Group adopted its working agenda which included a long-term focus on developing an approach for determining RBC charges for CLOs and an interim focus on addressing concerns of potential RBC arbitrage involving residual tranches in structuring assets through CLOs.

- The Life RBC Working Group adopted new factors and an expanded category reporting structure for the C-2 mortality risk calculation component. Capital Adequacy Task Force (CADTF) decided not to adopt a proposed three-year phase-in of the new factors because based on additional analysis done at the end of June, the factors were more favorable than additionally thought.

- The Valuation of Securities Task Force (VOSTF) exposed alternative options to collect additional market data fields for bonds on Schedule D as part of its project to reconsider the SVO's reliance on credit rating agencies. The task force also adopted an amendment which expands the Principle Protected Securities (PPS) definition to capture structures that did not meet the original definition, yet which proposed the same risks.

- The Blanks Working Group adopted several updates including adding new electronic only columns to capture investments issued by a related party or through a related party transaction.

- The Life Actuarial Task Force adopted several valuation manual updates and a new actuarial guideline, *Actuarial Guideline LIII—Application of the Valuation Manual for Testing the Adequacy of Life Insurer Reserves* (AG 53), on modeling complex or high-yielding assets as part of asset adequacy testing, with an effective date of year-end 2022. The NAIC staff also indicated the 2024 project timeline for implementation of an economic scenario generator, capable of producing interest rate, equity, and bond fund return scenarios for VM-20, VM 21, and RBC, is likely to be extended.

Special Committee on Race and Insurance

During the Summer National Meeting, the Special Committee on Race and Insurance, which has been organized into five workstreams, heard updates on the progress of each workstream. Workstream 1, the diversity and inclusion (D&I) initiatives within the insurance industry and insurance products, is the only workstream that exposed their proposed recommendations with comments due October 13th.

Innovation, cybersecurity, technology, and privacy initiatives

During its Summer National Meeting, the Innovation, Cybersecurity and Technology Task Force discussed multiple issues around the accelerating use of technology within the insurance industry, as well as concerns on the use of data related to that technology. In addition to hearing from its working groups, the task force discussed the newly formed Collaboration Forum that will serve as a platform for multiple NAIC committees to work together to identify and address foundational issues and develop a common framework. As part of the National Meeting, the task force received the following significant reports from its working groups:

Cybersecurity Working Group – During its July 14 meeting, the working group discussed updates to the implementation efforts related to the adoption of Insurance Data Security Model Law (#668), noting 21 states have now adopted the model law and Rhode Island will consider adopt in its upcoming legislative session. The working group also made a change to its work plan, noting it will first issue a state insurance regulator survey, instead of the industry focused survey as originally planned. The working group noted the regulator survey will allow regulators the opportunity to first compare notes and identify risks and potential responses to cybersecurity issues. The working group also discussed various state and federal programs on-going to identify and respond to cybersecurity issues across the insurance sector.

Big Data and AI Working Group – The working group met during July to hold a Collaboration Forum on Algorithmic Bias, which included a presentation on different perspectives on artificial intelligence (AI) risk management and governance and a presentation on bias detection methods and tools. The working group also met in August at the Summer National Meeting to discuss the recent developments around the AI/machine learning (ML) surveys led by one of its workstreams (which is expected to be released in early Fall) and as well as additional work focusing on determining the appropriate regulatory evaluation of third-party data and model vendors.

Privacy Protections Working Group – The working group presented its request for an NAIC Model Law Development, noting that it will incorporate some aspects of the NAIC Insurance Information and Privacy Protection Model Act (#670) and the Privacy of Consumer Financial and Health Information Regulation (#672) into a new model. In line with the working group's charge to recommend changes to existing models, they noted Model #670 and Model #672 need to be modernized considering changes to industry practices, and adopting this request will provide the appropriate next steps for discussing substantive issues regarding the appropriate privacy protections for the insurance.

Accelerated Underwriting – Last spring, the Accelerated Underwriting Working Group of the Life Insurance and Annuities Committee finalized and adopted its Accelerated Underwriting in Life Insurance Educational Report, the goal of which is to "consider the use of external data and data analytics in accelerated life insurance underwriting, including consideration of the ongoing work of the Life Actuarial Task Force on the issue and, if appropriate, draft guidance for the states." The committee chair noted that the working group will now begin to draft regulatory guidance reflecting the broad recommendations included in the Report.

NAIC Legislative Update - The NAIC legislative team provided updates on the status of two recently passed model rule updates related to innovation and technology:

- Insurance Data Security Model Law (#668) - this model has been adopted in 21 jurisdictions and is pending in 6 other states

- Unfair Trade Practices Act (#880) - this update includes revised language specific to rebating. As of the Spring National Meeting, it has been adopted in 2 states and is pending in 7 others

Statutory Accounting Principles Working Group

Significant actions taken by the SAP Working Group are summarized below. (Appendix A to this Newsletter summarizes all actions taken by the working group and the status of all open projects.) Comments on exposed items were due October 7th unless stated otherwise.

Newly adopted guidance

SSAP 25, related party and affiliated investments (#2021-21) – On May 24, 2022, the working group revised SSAPs 25 and 43R to clarify application of the existing affiliate definition and incorporate disclosure requirements for all investments that involve related parties, regardless of whether they meet the affiliate definition. The revisions to SSAP 25 focus on entities not controlled by voting interests (e.g., limited partnerships or trusts) which may allow an insurer or its affiliates to control the entity by directing its management and policies through a general partner, servicer or other arrangements. If direct or indirect control exists, whether through voting securities, contracts, common management or otherwise, the arrangement is considered to be affiliated. SSAP 43R clarified that investments within its scope are also in the scope of SSAP 25 if they are issued by a related party or acquired through a related party transaction or arrangement. This SAP clarification was effective upon its adoption.

The working group also expressed support for the Blanks Working Group proposal (subsequently adopted) which incorporates six reporting codes to identify the role of the related party in any investment, on any reporting line across several investments' schedules. See the Blanks Working Group summary for discussion of the related investment schedule revisions (#2021-22BWG).

SSAP 86, effective derivatives and ASU 2017-12 (#2021-20) – At the end of 2018, the SAP Working Group adopted limited guidance from ASU 2017-12, Derivative and Hedging, to simplify hedge accounting in certain scenarios. At the 2021 Fall National Meeting, the working group restarted discussion of other concepts in the ASU and whether the NAIC should consider a "fundamental change" to the measurement method of derivatives to be consistent with U.S. GAAP, including expanding the determination of highly effective hedging derivatives. At the 2022 Spring National Meeting, the working group discussed comments submitted by interested parties, including industry-proposed edits to SSAP 86, and concluded that "more robust edits are warranted." As a result, NAIC staff drafted a new Exhibit A to SSAP 86, Discussion of Hedge Effectiveness, which would replace the current Exhibits A and B, which proposed to adopt the U.S. GAAP guidance more explicitly and remove potential internal consistencies within SSAP 86 for assessing hedge effectiveness and included revisions from ASU 2017-12, but with some modifications. The working group also exposed a related document on the proposed accounting and measurement of excluded components in determining hedge effectiveness, which industry has identified as an area where additional guidance with respect to foreign currency forward points and cross-currency spread basis would be helpful. The intent of the guidance was to converge with U.S. GAAP on hedge effectiveness however, measurement will still follow statutory accounting principles. On August 10, 2022, the working group adopted as final the exposed revisions which are effective January 1, 2023, with early adoption permitted.

The working group also directed the staff to draft an Issue paper to detail the derivative revisions from this agenda item and other statutory derivative revisions resulting from ASU 2017-12 and other recent U.S. GAAP issuances.

Significant exposures/discussions

Principles-based bond proposal project (#2019-21) – Increased innovation has led to asset structures involving the securitization of an increasing variety of collateral, which transforms the underlying collateral into a bond. Regulators have expressed that this evolution has created challenges in understanding the risks, and underlying cash flows, involved in bond portfolios. The current statutory accounting bond definition, which is focused on legal form rather than substance, generally allows any security that represents a creditor relationship to qualify for bond reporting, either as a bond, loan-backed security, or structured security. The classification of an investment as a bond comes with a variety of benefits, including: generally not being subject to investment limitations, asset admissibility, and lower RBC charges based on the NAIC designation. As an example, the potential opportunity exists to report inadmissible assets, or assets that would require a higher RBC charge like equities, as a bond by acquiring it through an SPV as a debt instrument from the SPV. This is true even though the insurer may or may not be in a different economic position than as if they held the underlying assets directly. The intent of the project is to establish principle-based guidance for determining what is a bond, with a focus on substance over form, that will provide regulators and other financial statement users with transparency to understanding the risks present in an insurer's investment portfolio.

The proposed bond definition introduces the concepts of "issuer credit obligations" and "asset backed securities". A bond will be classified as an issuer obligation if the investment represents an instrument where the repayment is primarily supported by the general creditworthiness of an operating entity, and the note is an obligation that has direct or indirect recourse to the operating entity. A bond will be classified as an asset backed security (ABS), if the instruments are issued by entities that have a primary purpose of raising debt capital backed by collateral (financial assets or non-financial assets) that provides cashflows to service debt, and the instrument provides the holder with substantive credit enhancement. Substantive credit enhancement can be summarized as putting the holder of the investment in a different economic position than had had they held the collateral directly. There are additional assessments required for ABS based on whether the ABS is backed by financial or non-financial assets.

On August 11, 2022, the working group exposed four documents for public comment: i) updated principle-based bond definition, ii) updated issue paper, iii) proposed revisions to SSAP 26R, and iv) proposed revisions to SSAP 43R. The updates, made after discussion of comments received, were relatively limited, and the revised documents were substantially consistent with what was previously exposed in March. The updates included guidance to clarify that plain-vanilla inflation adjustment mechanisms in Treasury Inflation Protected Securities would not restrict bond classification, that securitization tranches that do not have contractual principal and interest payments along with substantive credit enhancement do not qualify for bond classification, and guidance on application of the bond principles to feeder fund structures. The comment period ended October 7th. On August 11, 2022, the working group also exposed two documents that proposed financial reporting revisions related to the principle-based bond definition project. The documents were exposed for public comment, but not yet referred to the Blanks Working Group as the intent of the exposure was to gather initial feedback regarding the proposed direction. The first document (Proposed Reporting Lines) proposes changes for suggested reporting lines to capture issuer credit obligations and ABS on Schedule D-1. The second document (Schedule D-1 Annual Statement Instructions) details the overall approach to split Schedule D-1 into a schedule capturing issuer credit obligations (Schedule D-1-1) and a separate schedule capturing ABS (Schedule D-1-2). The separation of schedules is intended to enable the use of different columns based on the type of security. NAIC staff shared the view that due to the extent of the revisions, and the related blanks deadlines, the earliest these revisions are likely to be in effect is Jan. 1, 2025; although, the potential still exists for Jan. 1, 2024.

The proposed revisions to SSAP 26R and SSAP 43R are significant and their application could result in certain structures no longer being reported as bonds. Additional new statutory accounting concepts are expected to be developed to detail the accounting and reporting for such structures. While the reporting of an investment as a bond versus another investment type may have downstream implications, the working group expressed that these revisions are focused on accounting and reporting changes, and elements pertaining to NAIC designations or RBC charges would be addressed by the respective groups.

SSAPs 19 & 23, leasehold improvements after lease termination (#2021-25) – At the 2021 Fall National Meeting, the working group exposed for comment proposed revisions to SSAP 19 *Furniture, Fixtures, Equipment and Leasehold Improvements* and SSAP 23 *Health Care Delivery Assets and Leasehold Improvements in Health Care Facilities* to address the accounting for leasehold improvements when a leased property is purchased by lessee during the lease term, which would require immediate expensing of all improvements in any scenario when the lease terminates early. After review of industry comments, the working group directed staff to continue to work with industry on a solution that is not punitive when the leasehold improvements on purchased real estate have a future economic benefit. The agenda item was updated and exposed for comment on August 10, 2022. The proposed language, which was the result of interested parties from the health care industry requesting consideration of an exception in specific circumstances, will allow companies that provide direct health care to exclude situations where the real estate lease agreement has a purchase option that contains language that allows leasehold improvements necessary for the functionality of specific health care delivery assets to be excluded from the purchase price of the real estate. In these limited scenarios, after purchase, the leasehold improvements necessary for the functionality of health care delivery assets would follow existing guidance for health care delivery assets in SSAP No. 73.

Proposed nullification of INT 03-02: Modification to an Existing Intercompany Pooling Arrangement (#2022-12): A proposal to nullify INT 03-02 was exposed for public comment on August 10, 2022. INT 03-02 calls for certain transfers between affiliates related to the modification of intercompany pooling arrangements to be recorded at book value instead of fair value.

INT 22-02 and INT 22-03: Inflation Reduction Act – Corporate alternative minimum tax (CAMT): The first interpretation concludes that a reasonable estimate of the effect of the CAMT cannot be made for September 30, 2022 interim financial statements and provides a limited-time exception to the valuation allowance and DTA calculations under SSAP 101 and Type I subsequent event requirements in SSAP 9. The second interpretation relates to fourth quarter 2022 and interim 2023 reporting and concludes that a company should recognize the effects of the CAMT when a reasonable estimate is determinable and if the company cannot make a reasonable estimate, they should disclose that they will be subject to the Act but that a reasonable estimate cannot be made. However, estimates need to be recognized fully by year end 2023. The INT also provides guidance on accounting for updates to previously recognized estimates.

Risk-based capital

Affiliated investments instructions and structures exposure – The Life, P/C, and Health RBC working groups previously exposed for comment a proposal to comprehensively revise the RBC formula and instructions for affiliated investments. The proposal includes an expansion of individual affiliate types from 15 to 21 to more closely align with the affiliate types used in the group capital calculation. For example, Subsidiary, Controlled and Affiliated Investments would now include "non-insurance entities with a capital requirement imposed by a regulatory body" and "non-insurance other financial entity without regulatory capital requirements." The proposed instructions would also provide additional detailed examples to assist in implementation. The chair noted that the goal of the revisions is to make the treatment of affiliated entities consistent across all three formulas and better align with their treatment in the GCC. The Life and P/C RBC working groups did not receive any comments and during the Summer National meeting referred the affiliated investment instructions and blanks to the CADTF for further discussion. One comment received by the Life RBC Working Group was related to the treatment of non-admitted affiliates and the working group suggested a referral to SAPWG to align statutory accounting and RBC however, the chair of SAPWG did not think this was an accounting issue. During the Summer National meeting, the parent committee of the working group, CADTF, exposed the affiliated investment proposals for comment ending October 10th.

Investment risk-based capital

The Risk-Based Capital Investment Risk and Evaluation (Investment RBC) Working Group was created to perform a "comprehensive review" of the RBC investment framework in light of a significant number of investment-focused proposals from other task forces and working groups. The Financial Condition Committee

handed off two projects: 1) consider a second phase of the bond factors for structured securities and other asset-backed securities, including collateralized loan obligations, and 2) consider specific RBC charges for residual tranches that will now be reported on Schedule BA. Following the adoption of new bond factors for the life RBC formula and as the industry shifts towards more structured securities, regulators believe that they need to start thinking about the increased tail risk of these investments more explicitly in the RBC formula.

During the Summer National meeting, the working group adopted its working agenda and discussed next steps which are to prioritize the items referred to by the Financial Condition committee including a long-term focus developing a scheme for determining RBC charges for CLOs and an interim focus on addressing concerns of potential RBC arbitrage involving residual tranches in structuring assets through CLOs.

Life RBC

C-2 Mortality Risk – Previously, the Life RBC Working Group adopted structural updates for more granular product categorizations for C-2 Mortality (LR025) ahead of the adoption of the new factors. The categories include life policies with pricing flexibility (e.g., participating whole life insurance), term life without pricing flexibility (e.g., level term insurance with guaranteed level premiums) and permanent life without pricing flexibility (e.g., universal life with secondary guarantees) plus group and credit with remaining rate terms 36 months and less, group and credit with remaining rate terms over 36 months and FEGLI/SGLI. These six categories are an expansion over the current two categories of Individual & Industrial and Group & Credit. The Life RBC Working Group also previously re-exposed for comment the related instructional and Academy-proposed factor changes necessary to fully implement the revised morality risk proposal. The factors are tiered into three "buckets" based on reserves held, i.e., higher charges for the first $500 million, and lower charges for the next $24,500 million and over $25,000 million (compared to the current four tiers). Per the Academy, the proposed factors reflect mortality improvement compared to the current RBC mortality factors, which were established in the early 1990s.

During June, the Life RBC Working Group heard comments and adopted the alternative factors proposal with a three year phase in of the factors to give the industry more time to implement. The working group discussed the ACLI's concerns at length including an issue related to products without pricing flexibility being reinsured via YRT where the reinsurer can change the rate annually so there is a mismatch between the ceding and assuming companies' flexibility but ultimately concluded this "is an extreme example, and unlikely to affect too many companies".

Later at the June 30 meeting of the parent committee of the working group, CADTF, adopted the instructions and new factors but decided not to adopt the three-year phase-in of the factors because based on additional analysis done at the end of June, the factors were more favorable than additionally thought, so no phase-in was needed.

The Life RBC working group also adopted its working agenda which included working with the academy on the development of additional guidance on the implementation of the adopted C-2 mortality factors with the goal of having a final version in Q4 ahead of the adoption.

Residual tranches – Adopted a proposal to update the instructions to include the total of residual tranches on Life RBC formula page LR008 consistent with the changes to Schedule BA and AVR which were both modified for year-end 2022 to separate residual tranches.

P/C RBC

Catastrophe risk – After years of studying wildfire risk and various catastrophes models for estimating that risk, the Catastrophe Risk Subgroup previously adopted its final "informational only" risk charge (2021-17-CR MOD) for wildfire peril for 2022 RBC filings. (The calculated charge will not be part of the "official" RBC ratio for an as of yet undetermined period.) It also provides an exemption from wildfire modeling for smaller companies and only applies during the informational-only phase of the wildfire risk charge.

Modeled losses for wildfire risk include exposures written in California, Idaho, Montana, Oregon, Nevada, Wyoming, Colorado, New Mexico, Washington, Arizona and Utah. Consistent with hurricane and earthquake risk, insurers can qualify for an exemption from completing the charge, e.g., the company has written Insured Value-Property that includes wildfire coverage in the wildfire-prone areas representing less than 10% of policyholders surplus.

During the Summer National Meeting, the Catastrophe Risk Subgroup adopted a proposal (2022-04-CR) which includes the 2013–2021 list of U.S. and non-U.S. wildfire events for 2022 RBC reporting.

The subgroup will be considering adding other perils to the Rcat component of P/C RBC. Earlier in the year, the subgroup had an extensive discussion of whether to consider flood risk and heard several presenters conclude that private flood insurance is very immaterial to U. S. insurers. The subgroup decided they should consider convective storms next and will arrange for experts to present to the subgroup.

Health RBC

H2—Underwriting Risk Component –The Health RBC Working Group previously asked the Academy's Health Solvency Committee to comprehensively review the H2—Underwriting Risk component and the managed care credit calculation in the Health formula to better align the risk factors to economic risk, with a goal of completing the work in time for 2023 RBC filings. The working group received a report from the Academy outlining six options for revising the H2 risk factors: "1) refresh factors based on updated insurer data; 2) develop factors at a more granular product level; 3) develop factors specific to more relevant block sizes and consider indexing factors for cut points to change over time; 4) model risk factors over an NAIC-defined prospective time horizon with a defined safety level that can be refreshed regularly; 5) refresh the managed care credit formula and factors to be more relevant and reflective of common contracting approaches and other risk factors associated with these contracting approaches; and 6) analyze long-term care insurance underwriting performance to create a more nuanced set of risk factors that considers pricing changes over time."

The working group is now considering what methodologies should be used to revise the H2 risk factors and has been holding educational sessions. During its May meeting the working group heard a presentation from the Academy on the methodologies to be considered in the H2 – Underwriting Risk Review including consideration of the P/C RBC methodology which is similar to the Health formula and focusing on risk premium and reserve factors. The working group then asked the Academy to move forward drafting their proposal. During its July meeting the working group exposed the Academy's response letter on its recommendation and timeline for a 31-day public comment period which ended on August 22. The estimated time frame to complete the work is 18 weeks for the 2023 year-end RBC filings or later.

Request for input on run-off companies – Subsequent to the Summer National meeting, the working group requested comments by October 11th on several questions including if there are any concerns with the current Health RBC formula for health companies in run-off and if any changes are needed.

Market-based affiliated service agreements

As a result of an increase in the number of affiliated service agreements being filed for regulatory review with "complex, market-based expense allocations," the Risk-Focused Surveillance Working Group previously exposed for comment proposed revisions to the Financial Analysis Handbook and Financial Examiners Handbook. The revisions would provide guidance to regulators in their review of such market-based expense allocations as to whether they meet the "fair and reasonable" standard of holding company requirements. During its meeting in late 2021, the working group heard comments from industry indicating significant concerns that the proposed guidance could result in previously approved service agreements being disapproved. A working group member noted that their state cannot revoke previously approved Form Ds for affiliated agreements. The working group formed a joint regulator-interested party drafting group to update the Handbook guidance but did not expose anything at the Summer National Meeting.

Valuation of Securities Task Force

The task force discussed the following significant projects and issues.

Rating issues and proposed changes to the Filing Exemption process – Previously at the 2021 Fall National Meeting the task force discussed a memo from the SVO staff on concerns around private securities and the reliance on CRP ratings. These securities are not broadly syndicated and are usually privately rated by only one credit rating provider. The memo recommends that the task force consider several alternatives to address this issue. The VOS Task Force formed a small study group to coordinate this effort and met for the first time this spring in March to discuss its objectives which include the following:

- Establish a framework of qualitative and quantitative criteria for being a CRP to the NAIC
- Eliminate/minimize RBC arbitrage opportunities between CRP ratings and asset classes
- Define a repeatable quantitative process to evaluate rating performance for all rating agencies
- Incorporate market data to help identify potential misalignments of risk

During the 2022 Spring National Meeting, to address the fourth objective above, the task force exposed for comment a possible referral to the Blanks Working Group to add fixed income analytical risk measures for investments reported on Schedule D, Part 1. The proposal would require the addition of new market data fields including market yield, market price, purchase yield, weighted average life, option adjusted spread, effective duration and convexity, which are intended to help the SVO identify "market perceived risk inconsistent with the assigned rating" and which could ultimately be used by the SVO to develop their own analytical processes to assess investment risk as a supplement or an alternative to CRP ratings. Comments on the proposal were discussed at the 2022 Summer National Meeting and the SVO staff prepared a memo to consider optional paths to collect this additional market data along with pros and cons of both. The first alternative is to assign the SVO the responsibility of producing the analytical data elements. The second alternative is to have insurers calculate the information and provide to the NAIC. The memo was exposed for a 30-day public comment period which ended September 12, 2022.

Principal protected securities (PPS) - Previously the task force adopted a significant amendment to revise the definition of PPS and remove this class of security from eligibility for filing exemption. The regulatory concern is that these instruments may have other than non-payment risk and the debt rating of the PPS "obscure the overall risk" of the performance assets. The amendment was effective January 1, 2021.

In 2021, the SVO discussed a proposal to expand the definition for a security type which poses the same risks as a PPS but is not issued by an SPV holding both the underlying bonds and the performance assets, referred to as a synthetic PPS. The security is an issuer obligation of a financial institution whose obligation it is to pay principal at maturity and a premium based on the performance of referenced assets or referenced index. VOSTF exposed a revised definition that would also include issuer obligations. At the 2022 Spring National Meeting, the task force was directed to continue to work with industry who requested that the wording be "thoroughly discussed" to ensure there are no unintended consequences and then re-expose for an abbreviated comment period. An amendment was proposed and adopted at the 2022 Summer National Meeting, which expands the PPS definition to capture the structures that did not meet the original definition, yet which proposed the same risks.

Blanks Working Group

The working group did not meet at the Summer National Meeting but did meet beforehand in May and took the following significant actions. All adopted revisions and exposed proposals are shown on the Blanks Working Group webpage.

Adopted proposals

- Adopted a proposal to add new electronic columns to capture investments issued by a related party or through a related party transaction, regardless as to whether the related party meets the definition of an affiliate or there is a disclaimer of affiliation or control. The proposal also includes information involving securitizations where the related party is a sponsor or originator and whether the underlying investment is in a related party. The proposed effective date is for year-end 2022. (2021-22BWG Modified & SAPWG #2021-21)
- Adopted a proposal to add six new questions in the general interrogatories for companies directly owning cryptocurrencies or accepting cryptocurrency for payment of premiums; the proposed effective date is for year-end 2022. (2022-01 BWG and SAPWG #2021-24)
- Adopted a proposal to add a new supplement to the P/C Annual Statement to capture additional columns of premium and loss data for the "Other Liability" lines of business (Lines 17.1-17.3) of the Exhibit of Premiums and Losses to expand them into more granular classifications. The proposed effective date is year-end 2023. (2022-04BWG)
- Adopted a proposal to revise the Health Annual Statement Test language (2022-06BWG).
- Adopted a proposal to modify the instructions of the Health Annual Statement Actuarial Opinion to ensure that the actuary's opinion covers actuarial assets as well as actuarial liabilities and that the instructions provide guidance to appointed actuaries on actuarial assets. (2022-07 BWG)
- Add instructions to the Health, P/C, and Life Annual Statements Schedule T, State pages and Accident and Health Policy Experience Exhibit to allocate premium adjustments, including Affordable Care Act premium adjustments, by jurisdiction. (2022-10 BWG & SAPWG Ref #2022-03)
- Update the AVR factors to be consistent with Life RBC factors adopted in 2021 for the expanded bond designation categories. (2022-11 BWG)
- Modify the Five-Year Historical Data questions 68 and 69 to reference group comprehensive and modify questions 70 and 71 to reflect inclusion of all health lines of business other than group. (2022-13BWG)

The working group also exposed for comment the following significant new proposals:

- Combine the Health Analysis of Operations by Lines of Business Supplement page and the Health Care Receivable Supplement pages into one supplement for health pages filed as a supplement in the Life Annual Statement. (2022-12BWG)
- Modify the Life Insurance (State Page) to include the line of business detail reported on the Analysis of Operations by Lines of Business pages. Adds definitions for life and annuity products to the lines of business definitions in the health appendix. (2022-19BWG)

Financial Stability Task Force and Macroprudential Working Group

Private equity considerations – Over the summer, the Macroprudential Working Group adopted a final document entitled "Plan for the List of MWG Considerations - PE Related and Other." The document identifies 13 types of risks, such as companies structuring agreements to avoid regulatory disclosures or requirements and operational, governance and market conduct practices that are influenced by different priorities and level of insurance industry expertise. The final document also includes documentation of "regulatory responses" to the 13 types of risk listed, interested party comments, and referrals to other NAIC committee groups.

Macroprudential Risk Assessment Process – The task force and working group previously adopted their final Macroprudential Risk Assessment Process document, which has a key objective to "identify and assess industry-wide insurance risks." The guidance includes both qualitative and quantitative assessment factors to reach baseline assessments of industry exposure to various macroprudential risks. The four assessment levels are High, Moderate-high, Moderate-low or Low.

Liquidity Stress Test Framework – The Financial Stability Task Force previously adopted its Liquidity Stress Test (LST) Framework for 2021 filings, LST Framework with Lead State Guidance, the goal of which is to allow regulators to "identify amounts of asset sales by insurers that could impact the markets under stressed environments," which is a life insurance-specific framework. Changes from the guidance for filing for 2020 were not substantive. Filings for the 21 companies triggering the analysis that were due June 30 are currently under review and some preliminary observations include that the "results continue to show that the amount of asset sales from the U.S. life insurance industry during these stress events would not be significant to the broader financial markets". A public summary of the results will be made available later in the year. There is a newly formed LST Separate Account Study Group that had its first meeting in July and that is considering how to include non-insulated separate accounts into the 2022 Liquidity Stress Testing Framework.

Climate and Resiliency Task Force

The Climate and Resiliency Task Force met at the Summer National Meeting and heard reports from its various workstreams, including presentations from the Innovation and Technology workstreams around the use of predictive software to identify and reduce exposure to upcoming weather events as well as pre-disaster, namely wildfire, mitigation strategies. While the Climate Disclosure workstream has not met recently, it did host two events to assist insurers who are required to submit this year's Climate Risk Disclosure Survey in the 15 participating states. The task force noted certain state and industry sources remain available to assist insurers required to submit the survey. The report also noted that as the Financial Stability Board (FSB) has developed multiple resources to support the Taskforce on Climate-Related Financial Disclosure (TCFD) framework, and because the state climate risk disclosure survey aligns to the TCFD, those resources could be used by insurers filling it out this year.

Solvency Workstream – Following recent efforts and receipt of comments, the Solvency Workstream developed three referrals. The referrals—to the Financial Analysis Solvency Tools (E) Working Group, the Financial Examiners Handbook (E) Technical Group, and the Own Risk and Solvency Assessment (ORSA) Implementation (E) Subgroup—provide high-level principles for the groups to consider and develop as appropriate for inclusion in relevant financial solvency regulation manuals. The referrals will be taken up by the groups following the Summer National Meeting, where they will be discussed by the members before determining how to implement any revisions.

Restructuring Mechanisms Working Group

The Restructuring Mechanisms Working Group did not meet at the Summer National Meeting but for several years has been working to develop a white paper to summarize the various industry wide processes for insurance companies to restructure liabilities with finality, primarily through the use of two types of transactions: insurance business transfer (IBT) and corporate division (CD). The working group previously exposed a list of comments received with a request that parties develop specific language that could be added to the white paper to address the comments. (While the working group did discuss certain specific edits, the white paper itself is not being re-exposed at this time, i.e., only the interested party comments' list to consider suggestive edits.)

In July, the Financial Condition Committee adopted a referral that the working group previously sent to the Receivership and Insolvency Task Force to consider an amendment to the Property and Casualty Insurance Guaranty Association Model Act (#540) to address the issue of guaranty fund coverage in the event of the insolvency of the insurer who has assumed the restructured policies.

The Restructuring Mechanisms Subgroup did meet in the Spring and exposed its draft documents Foundational Principles and Best Practices Procedures for IBT/ Corporate Divisions for regulator review of proposed restructuring transactions. The subgroup also discussed several proposed options for modifying the P/C RBC formula for "runoff companies."

Reinsurance Task Force

During the Summer National Meeting, the Reinsurance Task Force adopted the revised Uniform Checklist for Reciprocal Jurisdiction Reinsurers, which assists states in the review of certified reinsurers for passporting purposes. The revisions added guidance on the calculation related to the prompt payment of claims and that NAIC staff should review the Schedule S and Schedule F of U.S. domiciled ceding companies as part of the passporting approval process.

The task force reported that they will perform a review by the end of 2022 to re-approve the status of Bermuda, France, Germany, Ireland, Japan, Switzerland, and the UK as qualified jurisdictions and Bermuda, Japan, and Switzerland as reciprocal jurisdictions.

There has also been progress in adoption of the revised Credit for Reinsurance Model Law and Regulation; as of August, all 56 jurisdictions have adopted model law, and 52 jurisdictions have adopted the revised Model Regulation. The goal of the NAIC is to have all jurisdictions adopting ahead of the required date under the Covered Agreement and they are optimistic that they all will.

The Term and Universal Life Insurance Reserve Financing Model Regulation (#787) became an accreditation standard on September 1 and during the meeting it was noted that a state may meet the accreditation requirements by adopting AG 48.

Principles-based reserving

Valuation Manual amendments
During LATF calls between the 2022 Spring National Meeting and the 2022 Summer National Meeting several Amendment Proposal Forms (APFs) and related guidance were discussed, exposed and/or adopted as follows:

Adopted guidance
APF 2020-12 creates consistency between clearly defined hedging strategy (CDHS) requirements in VM-20 and VM-21 and requires modeling all of a company's future hedging strategies but reflect the additional error (VM-21 E-factor) or residual risk (VM-20) when a future hedging strategy is not clearly defined. This APF was crafted over a two-year period and is focused on modeling of hedges when there are future hedging programs.

APF 2022-04 updates to VM-20 address the transition of LIBOR to the Secured Overnight Financing Rate (SOFR) in January 2022. The APF describes the calculation of current (short) and long-term benchmark swap rates prescribed for principle-based reserving valuations in 2023 and later. Both current and long-term swap spreads will reflect averaging of data from at least two nationally recognized sources. A separate NAIC memorandum will address transition requirements for the remainder of 2022.

APF 2022-05 reflects non-substantive modifications and corrections to VM-51 including implementation of a specific code for death claims due to COVID-19. The updated codes will be mandatory for the 2023 data submission, and companies will be asked to voluntarily use the new codes for the 2022 data submission.

Exposed guidance
VM-51 Data Dictionary developed by NAIC staff is intended to clarify how to populate certain fields. The data dictionary is posted on the NAIC Industry tab.

Mortality Improvement during LATF calls in May thru July and at the meeting in Portland LATF members discussed the 2022 historical and future mortality improvement scales being developed by the SOA Mortality Improvements Life Work Group (MILWG) and Mortality and Longevity Oversight Advisory Council (MLOAC).

An initial proposal was exposed for comment on July 7 (comment period ended July 27), and the SOA is working on revisions to that proposal based on regulator input during discussions.

The initial historical mortality improvement (HMI) proposal reflected zero mortality improvement for 2020 (i.e. discounted COVID-19 impacts) and small amounts of improvement for 2021 and 2022. The initial future mortality improvement (FMI) proposal reflected a 25% general margin and a specific COVID-19 margin of 25% grading down over five years. Regulators expressed concern over the exclusion of COVID-19 experience from the proposed HMI scale. The SOA team noted that including pandemic shock mortality in valuation mortality is inconsistent with the principle established by the Mortality/MI Industry Group that valuation mortality should include "the expected ongoing mortality impact".

On August 25 LATF members met to discuss a revised SOA mortality improvement scale recommendation for 2022 which reflects the original HMI proposal (zero improvement for 2020) and an FMI proposal that reflects deterioration in the early years of the projection scale (to reflect COVID-19 impacts) and a 25% general margin for uncertainty. The SOA presentation included alternative approaches to establish both HMI and FMI scales, and LATF members voted to expose the SOA recommended alternatives as well as additional alternatives. The recommended and additional alternatives were exposed on September 14 for a 21-day comment period. Comments on the revised proposal were discussed during the LATF call on September 22, when LATF ultimately adopted the original recommendation (referred to as "Approach 2"). The 2022 recommendation is considered an interim approach until more information is known about long term mortality impacts from COVID-19. Comments on the revised proposal will be discussed on a LATF call in September, when LATF adoption is expected.

Other VM Project Updates

VM-22 - PBR for fixed annuities
LATF heard an update from the VM-22 Subgroup on activities related to fixed annuity PBR. The subgroup met routinely from April thru July to address comments from multiple interested parties and regulators on the July 2021 exposed draft of NAIC Valuation Manual Section II and VM-22 requirements associated with the Academy proposed framework, "Preliminary Framework Elements for Fixed Annuity PBR."

Comments were divided into four tiers ranging from foundational and critical issues to editorial or non-substantive comments. The subgroup has worked through all tier 1 and tier 2 comments and is in the midst of discussing tier 3 comments, upon resolution of which the VM-22 document will be re-exposed with modifications reflecting agreed changes as well as non-substantive edits to address tier 4 comments.

Timing of the VM-22 field test is now targeted for Spring 2023, which may result in a VM-22 effective date of January 1, 2025; the timeline will be revisited as progress continues.

Life Actuarial Task Force

Actuarial Guidelines

Actuarial Guideline on AAT - *Actuarial Guideline LIII—Application of the Valuation Manual for Testing the Adequacy of Life Insurer Reserves* (AG 53) was adopted LATF in June and by the NAIC at the meeting in Portland, following several exposures. The guideline defines and prescribes requirements for modeling, testing

and documenting valuation of complex (high yielding) assets used in asset adequacy testing, and is effective for reserves reported in the December 31, 2022 and subsequent annual statutory financial statements. AG 53 is applicable to life insurers with over $5 billion of general account reserves, or over $100 million of general account reserves and over 5% of assets selected for adequacy analysis categorized as "Projected High Net Yield Assets" as defined in the guideline. Key elements of the guideline include required documentation of net return and risk, considerations around model rigor, fair value determination, valuation of privately-originated assets, and sensitivity testing and attribution analysis.

Following adoption of the guideline, LATF members exposed a collection of templates referenced in the guideline to report summarized assets, components of net asset yields, sensitivity test aspects and results, and the prescribed attribution analysis. At the meeting in Portland LATF members briefly discussed the templates, recognizing that further discussion would occur after the comment period closed on August 19. Fred Andersen (MN), lead drafter of AG 53, indicated the templates are "on track" but anticipated tweaks following the comment period. AG 53 templates were subsequently re-exposed for comment through September 6, with changes reflecting modifications to asset type rows and clarification of disclosure requirements, clarifying updates to footnotes, instructions and tab labels, and addition of a zero floor for the "Guideline Excess Spread" field in the attribution exhibits. LATF adopted the final templates on September 8.

Other LATF Activity

Economic scenario generator (ESG) implementation project

Following the Spring National Meeting and at the meeting in Portland LATF members received updates from the Academy ESG Work Group and NAIC staff on matters related to the ESG Field Test, equity model calibration and ESG implementation considerations. During these calls LATF members exposed ESG Field Test Specifications, Instructions and Templates. The field test began on June 1 and results are due from participants at the end of August. The ESG field test includes treasury, equity and corporate return scenarios tested under a variety of different runs (7 required, 5 optional) and reserve/capital frameworks. Participants represent 29 insurance groups and 42 legal entities, and are expected to generate approximately 600 field test results templates for evaluation. While the current project timeline targets implementation in 2024 (VM amendments approved by June 2023), NAIC staff indicated the timeline is likely to be extended due to the large amount of field test results to compile, aggregate and present and the complexity of discussions anticipated.

One topic of debate in these discussions was inclusion in the field test of a run using the ACLI GEMS Equity Model Calibration, which produces higher growth wealth factors (i.e. less conservative) than the Conning baseline equity calibration and increases alignment with results under the current Academy Interest Rate Generator equity model. The ACLI Equity Model Calibration run was ultimately included in the field test as an optional run.

At the meeting in Portland LATF also heard an Academy presentation on ESG Model Governance which covered basic considerations as outlined in ASOP No. 56, *Modeling*, the importance of model governance, core components of an ESG model governance program and other considerations. It was noted that the life insurance industry has invested extraordinary amounts into model governance, reflecting companies' understanding of potential risk exposure. While ASOP 56 applies to practicing actuaries, the standard provides a good framework for non-actuaries also.

At three sessions during the meeting in Portland LATF members heard presentations from the Academy on a framework for developing, evaluating and implementing ESGs including development of "stylized facts" and acceptance criteria for evaluating stochastic sets of economic scenarios produced by an ESG. Stylized facts are qualitative statements about the economic variables being simulated, and acceptance criteria are quantitative in nature and used to validate stochastic sets of economic scenarios prior to use. A comprehensive set of qualitative stylized facts are a key prerequisite for model selection and development of acceptance criteria; a set of quantitative acceptance criteria are key to evaluation of scenario sets and helps ensure the ESG is performing consistent with stylized facts.

The initial presentation covered foundational components of a sound process for developing and maintaining an ESG, explained the role of stylized facts and provided an understanding of how stylized facts and acceptance criteria can be used to select and assess model and/or calibrations to generate scenarios that are suitable for purpose. Two subsequent presentations focused on eight identified stylized facts that should be reflected in equity scenarios in particular. Over the next 2-3 months the Academy will deliver similar presentations to LATF covering equity model acceptance criteria, and both stylized facts and acceptance criteria for corporate credit rates and Treasury rates, with the goal being to establish a full set of quantitative acceptance criteria, for corporate credit, equity and interest rates, that can be used to evaluate any set of scenarios. Materials are posted on the NAIC website under the Economic Scenarios section of the Principle-Based Reserving webpage.

Index-Linked Variable Annuity Subgroup
The Index-Linked Variable Annuity (ILVA) subgroup continued to review comments from its exposure draft of the second version of the ILVA Actuarial Guideline proposal, which was exposed on June 7. As a refresher, the purpose of this guideline is to clarify the application of the Standard Nonforfeiture Law for Individual Deferred Annuities (#805) and the Variable Annuity Model Regulation (#250) to ILVA products. Many issuers of ILVA products believe they are exempt from Model #805 since the products are registered with the SEC as variable annuities. On the other hand, ILVA products are not unit-linked, which leads to the question of applicability of Model #250.

The comment letters mostly sought clarification or modification of the treatment of market value adjustments (MVA) and the fixed asset proxy definition. Based on the comments, the ILVA subgroup exposed a third version of the actuarial guideline proposal. The comment period ended on August 23, 2022.

Indexed Universal Life Illustration Subgroup
The Indexed Universal Life (IUL) Illustration Subgroup met in July to continue discussion on how to address issues that have arisen following implementation of *Actuarial Guideline XLIX-A—The Application of the Life Illustrations Model Regulation to Policies With Index-Based Interest Sold On or After December 14, 2020* (AG 49-A). The current concern is that companies are illustrating the combination of uncapped volatility-controlled funds and a fixed bonus more favorably than illustrations based on a traditional capped S&P 500 index. At the meeting in July subgroup members exposed four options for public comment:

- Attempt a quick fix on the current concern with a brief revision to AG 49-A; discuss with the Life Insurance and Annuities (A) Committee any plans to address broader issues with life illustrations
- No changes (allow current practice)
- Attempt to revise AG 49-A more extensively to address the current concern and any other identified potential concerns
- Apply a hard cap on various IUL illustration metrics

At the meeting in Portland, subgroup members and other LATF members discussed comments received on the latest exposure. Written comments were received from several insurers and the Academy, and at the meeting oral comments were provided by the ACLI and the Center for Economic Justice. The comments indicate general consensus that change is needed, and recommendations include the quick-fix option, adoption of a principles based approach to illustrations, and broader changes to life illustration regulations and disclosure requirements. Considering the high volume of comments received during the initial one-week exposure period, despite indication of plans for a second exposure after the Summer National Meeting, the subgroup voted to extend the original comment period for 3 weeks, to September 6. Discussion will continue on a future call, including the potential to recommend to parent groups a broader study of illustration issues.

Accelerated Underwriting Working Group

The Accelerated Underwriting in Life Insurance Educational Report was released in April. The Accelerated Underwriting Working Group will draft regulatory guidance reflecting the broad recommendations included in the Report. The working group has not met publicly since the Spring National Meeting but has identified

market conduct as one of the areas where additional guidance for state insurance regulators about accelerated underwriting in life insurance may be helpful and plans to meet late fall.

International Insurance Relations Committee

IAIS update – The International Association of Insurance Supervisors (IAIS) concluded their data collection activities during June and July as part of their Global Monitoring Exercise, which includes individual insurer monitoring and sector-wide monitoring, with additional climate data and new data on cyber being collected. The IAIS is expected to issue their 2022 Global Insurance Market Report by the end of the year which will include a new chapter on climate related risk. Work on potential revisions to the individual systemic risk assessment methodology is being done now as part of a three-year cycle review, which is similar to the global systemically important insurer (G-SII) identification process that was replaced with the IAIS Holistic Framework for systemic risk. Implementation of the Framework is currently being reviewed by the IAIS, and the Financial Stability Board will decide by the end of 2022 whether to eliminate the G-SII identification process permanently or restart the process.

Work continues on assessing the Aggregation Method (AM) and data for the monitoring period is being collected now to develop draft criteria for assessing comparability of the AM developed by the U.S. to the Insurance Capital Standard. The public consultation on draft comparability criteria was released in June and comments were due Aug 15. IAIS expects to finalize the criteria by the end of the year.

The IAIS's public consultation on The Development of Liquidity Metrics: Phase 2, which will serve as a tool to facilitate the IAIS' monitoring of the global insurance industry's liquidity risk, has now ended and the IAIS is currently in the process of reviewing comments.

The 2022 Fall National Meeting of the NAIC is scheduled for December 12-15 in Tampa, FL. We welcome your comments regarding issues raised in this newsletter. Please provide your comments or email address changes to your PwC LLP engagement team, or directly to the NAIC Meeting Notes' new editor, Jen Abruzzi, at jennifer.abruzzi@pwc.com. **Newsletter Disclaimer.** Since a variety of viewpoints and issues are discussed at task force and committee meetings taking place at the NAIC meetings, and because not all task forces and committees provide copies of meeting materials to industry observers at the meetings, it can be often difficult to characterize all of the conclusions reached. The items included in this Newsletter may differ from the formal task force or committee meeting minutes.

In addition, the NAIC operates through a hierarchy of subcommittees, task forces and committees. Decisions of a task force may be modified or overturned at a later meeting of the appropriate higher-level committee. Although we make every effort to accurately report the results of meetings we observe and to follow issues through to their conclusion at senior committee level, no assurance can be given that the items reported on in this Newsletter represent the ultimate decisions of the NAIC. Final actions of the NAIC are taken only by the entire membership of the NAIC meeting in Plenary session

Appendix A

This table summarizes actions taken by the SAP Working Group since the Spring National Meeting on open agenda items. For full proposals exposed, see the SAP Working Group webpage.

Issue/ Reference #	Status	Action Taken/Discussion	Proposed Effective Date
SSAPs 68 & 97 – Goodwill (#2019-12 and #2019-14)	Deferred	No discussion at the Summer National Meeting.	TBD
Principles-based bond proposal project – (#2019-21)	Exposed	The working group exposed four documents for public comment: i) updated principle-based bond definition, ii) updated issue paper, iii) proposed revisions to SSAP 26R, and iv) proposed revisions to SSAP 43R. See further discussion in the SAPWG summary above.	TBD
SSAP 62R – Retroactive Reinsurance Exception (#2019-49)	Deferred	The SAP Working Group asked the Casualty Actuarial Task Force to take the lead in proposing changes to Schedule P.	TBD
SSAP 108 – VM-21 Scenario Consistency Update (#2021-18)	Adopted	Revisions to SSAP 108 were adopted during the working group's January 2022 meeting to replace the term "VM-21 Standard Scenario" with "VM-21 Standard Projection" and add a footnote defining the Standard Projection.	December 31, 2021
SSAP 86 – Effective Derivatives, ASU 2017-12 (#2021-20)	Adopted	See discussion of broad reconsideration of ASU 2017-12 by the working group in the SAPWG summary above.	January 1, 2023
SSAP 25/43R – Related Party Reporting (#2021-21)	Adopted	The working group adopted SAP clarifications which revised SSAPs 25 and 43R to clarify application of the existing affiliate definition and incorporate disclosure requirements for all investments that involve related parties, regardless of if they meet the affiliate definition. See SAPWG discussion above.	Effective upon adoption on May 24, 2022
Schedule D-6-1 –	Adopted	Adopted by Blanks (2021-22BWG Modified). See the Blanks Working Group discussion above.	December 31, 2022

Supplemental SCA Reporting (#2021-22 and 2021-22BWG)			
SSAP 43R – Updated Financial Modeling Guidance (#2021-23)	Adopted	The working group adopted "option 1" for revised guidance for SSAP 43R, which retains summarized financial modeling guidance for RMBS and CMBS.	April 4, 2022
Cryptocurrency General Interrogatory (#2021-24 and #2022-01BWG)	Adopted	Blanks adopted a new general interrogatory to all annual statements, requiring additional disclosure of the use of cryptocurrencies. See the discussion of the Blanks Working Group above for further detail.	December 31, 2022 annual statements
SSAPs 19 and 73 – Leasehold Improvements after Lease Termination (#2021-25)	Re-exposed	The SAP Working Group directed NAIC staff to work with industry on further revisions to this proposal. See the SAPWG discussion above.	TBD
Rejection of new GAAP literature (#2021-27 through #2021-30)	Adopted	As part of its SAP maintenance process, the working group considered and adopted rejection of the following newly issued U.S. GAAP guidance as not applicable to statutory accounting: ASU 2021-04, Issuer's Accounting for Certain Modifications; ASU 2021-3, Intangibles – Goodwill and Other; ASU 2021-05 – Variable Lease Payments; and ASU 2021-06 – Amendments to SEC Paragraphs.	April 4, 2022
Conceptual Framework – Updates (#2022-01)	Adopted/ Exposed	The working group adopted changes to the APP Manual Preamble and SSAP 4 to incorporate recent changes to the FASB's Conceptual Framework for Financial Reporting. The SSAP No. 5 revisions are still pending and have been exposed.	December 31, 2022 annual statements
SSAP 48 – Alternative Valuation of Minority Ownership Interests	Adopted	The regulators adopted changes to SSAP 48 to address the use of audited tax basis equity as a valuation basis for investments in LPs, JVs and LLCs to continue to allow audited tax basis equity but with the clarification that the audit must reside at the investee level.	December 31, 2022 annual statements

(#2022-02)			
Premium Adjustments Allocated to Jurisdictions (#2202-03 and 2022-10BWG)	Adopted	Adopted annual statement changes (Schedule T, the State Page and the A&H Policy Experience Exhibit) to clarify reporting for health premium adjustments. All premium adjustments, including those related to federal Affordable Care Act, should be allocated to appropriate jurisdiction.	December 31, 2022 annual statements
SSAP 24 – ASU 2021-10 – Government Assistance (#2022-04)	Adopted	The working group adopted revisions to SSAP 24, Discontinued Operations and Unusual or Infrequent Items, to incorporate most of the disclosures from ASU 2021-10 on disclosures by business entities about government assistance which are not covered in scope by other accounting standards. For example, loans from the Paycheck Protection Program are not in scope.	December 31, 2022 annual statements
SSAP 22R – ASU 2021-09 – Leases (#2022 -05)	Adopted	The working group rejected this guidance as almost all leases are classified as operating leases for statutory accounting purposes.	December 31, 2022 annual statements
SSAP 104R – ASU 2021-07 – Compensation (#2022-06)	Adopted	Adoption in SSAP 104R of new U.S. GAAP guidance to allow the use of a practical expedient for the current price input which is a required component in option pricing models, and which are used to determine fair value of share-based payments.	December 31, 2022 annual statements
SSAPs 47 and 68 – ASU 2021-08 – Business Combinations (#2022-07)	Adopted	SAPWG is proposing rejection in SSAP 47 and SSAP 68 of the guidance in ASU 2021-08 – Business Combinations, Accounting for Contract Assets and Contract Liabilities from Contracts with Customers.	December 31, 2022 annual statements
SSAP 86 – Fair Value Hedging – Portfolio Layer Method (#2022-09)	Exposed	Exposed revisions to SSAP 86 incorporate guidance from ASU 2022-01, Fair Value Hedging – Portfolio Layer Method and certain guidance from ASU 2017-12, Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities to incorporate concepts for the	TBD

		portfolio layer method and partial term hedges for recognized assets.	
SSAP 36 – Troubled Debt Restructuring and Vintage Disclosures (#2022-10)	Exposed	Exposed revisions reject ASU 2022-02: Troubled Debt Restructurings and Vintage Disclosures for statutory accounting SSAP 36.	TBD
SSAP 21R – Collateral for Loans (#2022-11)	Exposed	Exposed revisions clarify that invested assets pledged as collateral for admitted collateral loans must qualify as admitted invested assets.	TBD
SSAP 61R, 62R, and 63 – Review of INT 03-02 (#2022-12)	Exposed	Exposure proposes to nullify Interpretation 03-02: Modification to an Existing Intercompany Pooling Arrangement.	TBD
SSAP 25 and 97 – Related Party – Footnote Updates (#2022-13)	Exposed	Exposed revisions incorporate language to exempt foreign open-end investment funds governed and authorized in accordance with regulations established by the applicable foreign jurisdiction from the look-through provisions included in SSAP No. 25.	TBD
SSAP 9 and 101 – Inflation Reduction Act – Corporate Alternative Minimum Tax (#INT 22-02)	Exposed	This INT does not require financial reporting changes for third quarter 2022 because a reasonable estimate cannot be made.	TBD
SSAP 9 and 101 – Inflation Reduction Act – Corporate Alternative Minimum Tax (#INT 22-03)	Exposed	This INT addresses fourth quarter 2022 and interim 2023 reporting. It requires reporting when reasonable estimates can be made. It provides some subsequent events exceptions regarding the CAMT, to allow estimates to be updated as information becomes available.	TBD

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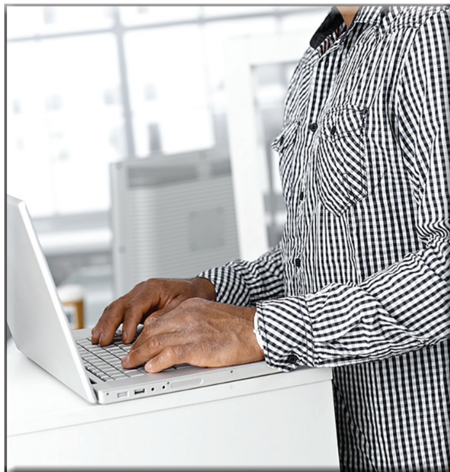
2023 July 16–19	**2024 July 28-Aug. 1**	**2025 July 19-22**
Louisville, KY	Oklahoma City, OK	San Diego, CA
Omni Louisville	Omni Oklahoma City Hotel	Omni San Diego Hotel



AUTHORS WANTED

The Publications Committee is looking for members to write articles for *The Examiner* magazine. **Authors will receive six Continuing Regulatory Credits (CRE) for each technical article selected for publication.**

Interested authors should contact the Publications Committee Co-Chairs, **Shawn Frederick or Robin Roberts**, via **sofe@sofe.org.**

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