BRIDGEWAY ANALYTICS

Supporting the investment and regulatory community to navigate increasingly complex capital markets

Investment Risk Oversight

September 2023

Synopsis:

Following the Global Financial Crisis (GFC), insurers faced a low-yield environment, prompting a significant shift towards higher-yielding alternative assets. This transition encompassed various strategies, such as private debt and equity placements, structured products, and cost-effective investment vehicles, including custom-designed, non-SEC registered funds tailored to their specific requirements. Up to the present, regulations have been tactically modified to evolving market dynamics. An August 2023 memo from the Financial Condition (E) Committee proposes a comprehensive reassessment of the regulatory framework for insurers' investments. This initiative acknowledges the imperative to modernize the existing structure to better align with contemporary needs.

This report builds on the memo's aspirational vision to modernize the NAIC's oversight of investment risk and to use available resources cost-effectively, aiming to achieve the principle of "Equal Capital for Equal Risk." Given the complexities involved with the needed depth and breadth of tools with considerations for the broad set of capital markets, statutory accounting, RBC, etc., this report introduces candidate core principles for investment risk oversight:

1. **Clarity** – ensuring each component of the framework has a well-articulated objective and definition.
2. **Consistency** – ensuring different types of investments are handled objectively and consistently across the framework.
3. **Governance** – ensuring ongoing governance across the framework, including a model risk management framework with defined standards.

This report also introduced supervisory roles and responsibilities for insurers, NAIC staff, regulators, and external consultants, with deliberate considerations for potential conflicts of interest that tie back to the core principles.

By deliberately leveraging resources efficiently and approaching the redesign to balance prudence and cost-efficiency while incorporating lessons learned from initiatives such as CCAR and Solvency II, we are confident that the U.S. insurance regulatory framework can be adapted to benefit policyholders and insurers.

We hope you find this resource helpful
It is consistent with our goal of bringing value to our community

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Asset Regulatory Treatment (ART)
STANDARDS & SYSTEM is Bridgeway Analytics' machine learning-assisted platform that efficiently and effectively organizes insurers' current and proposed investment guidelines including NAIC and state rules. Users are kept current and provided timely notifications on changes and their impacts, overcoming challenges with navigating the multitude of complex regulations across jurisdictions that use disparate language, with varied rulemaking processes. The platform is used by insurers' investment, risk, compliance, legal, government affairs, accounting, and reporting functions, as well as their regulators.

- **ART System** provides users access to codified state investment guidelines in a searchable and understandable format.
- **ART Newsreels** alert users of the changes to the investment landscape, including NAIC and state investment guidelines, packaging, and delivering what matters most through timely, concise, and clear messaging.
- **ART Chronicles** are a centralized repository of recent and possible future changes to the landscape, including NAIC and state investment guidelines. Our Chronicles consolidate Newsreels in a distilled and easy-to-navigate format.
- **ART Heatmaps** provide a visualization of the varying investment limits that govern asset classes across states.
- **ART Investment Classification** assists with the classification of assets, which includes requirements under the proposed principles-based bond definition which consists of possible heightened reporting requirements.

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1 Executive Summary

Insurers have shifted their investment strategy since the post-Great Financial Crisis (GFC) onset of the low-yield era toward higher-yielding alternative assets. These assets include private placements of debt and equity, structured products, and lower-cost, efficient investment vehicles, often bespoke private, non-SEC registered funds designed to address insurers' unique needs.[1] Part of this trend is due to the changing landscape in banking, where post-GFC regulation has resulted in classes of transactions being more capital-efficient for insurers than banks.[2] In many respects, the illiquid nature of this lending is a much better match to the illiquid nature of life insurance policies than for bank deposits. This symbiosis has spurned significant economic benefits; however, it has created a need for insurance regulators to realign the rules to the new investment landscape.

To date, regulators and the NAIC have responded to these shifting trends by tactically refining the rules to the new landscape, leaving essential elements of the framework disjointed. The E-Committee has taken notice, and its August 15, 2023, meeting included deliberations over a memo outlining a holistic rethink of how insurers' investments are regulated.

This report builds on the memo's aspirational vision to modernize the NAIC's oversight of investment risk, which outlines a shift in strategy whereby the NAIC would prioritize resources to establish a robust and effective governance structure. It highlights the need for the NAIC to provide due diligence over rating agencies to reduce/eliminate "blind" reliance on their ratings and de-emphasize its role in assigning NAIC-derived designations. At the most basic level, the memo explores the most effective use of regulatory resources in the modern environment of insurance regulation for investments, with aspirations of achieving the principle of "Equal Capital for Equal Risk."

Core to the investment risk oversight framework is the tension between keeping policies affordable by allowing insurers to invest in higher-yielding instruments while protecting policyholders from the risk of insolvency. When designing an update to the framework, this trade-off must be top of mind, providing guardrails and certainty for insurers and transparency for regulators. Various jurisdictions have chosen different balances with significant macroeconomic impacts – from the scope of property policies, the affordability of retirement savings, and the availability of capital.

To address this tension, this report identifies the core components of the traditional 'three-legged' stool of the NAIC's investment risk framework (i.e., accounting, risk assessment, and capital): classification, designation, and Risk Based Capital (RBC) as well as reserving that play key roles in investment oversight for life companies. We then outline some of the challenges associated with investment risk oversight:

1. **Heterogeneous characteristics and multiple risk factors** resulting from the myriad and growing forms of asset classes whose performance is impacted by a complex set of risk factors that can be unique.
2. **Lack of transparency** resulting from increasingly opaque private or complex assets.
3. **Difficulties with quantifying risk, including those of rare events,** resulting from challenges with their measurement, both in terms of accessing comparable data across asset classes and paucity of data associated with rare events such as credit defaults.

Given the complexities involved with tools that consider nuances with capital markets, statutory accounting, RBC, etc., we introduce candidate core **Principles for Investment Risk Oversight (PIRO)**:

1. **Clarity** – ensuring each component of the framework has a well-articulated objective and definition.
2. **Consistency** – ensuring different types of investments are handled objectively and consistently across the framework.

[1] Amnon Levy, Bill Poutsiaka, and Scott White, Trends in the Ownership Structure of U.S. Insurers and the Evolving Regulatory Landscape. Insurance AUM Journal, Q3 2023.

[2] See Michael Schwert, Does borrowing from banks cost more than borrowing from the market?, Journal of Finance, 2020.

3. **Governance** – ensuring ongoing governance across the framework, including a model risk management framework with defined standards.

We introduce supervisory roles and responsibilities for insurers, NAIC staff, regulators, and external consultants, with deliberate considerations for potential conflicts of interest that tie back to PIRO.

We propose concrete next steps for regulators to consider, building a plan toward a long-term aspirational vision that, in the process, addresses considerations for stop-gap interim measures that include:

1. **Principles.** Regulators should agree on principles for investment risk oversight.
2. **Roles and responsibilities.** Agree on mandates and immediate priorities.
3. **Designation oversight.** A step toward the aspirational vision that addresses the need for stop-gap measures.
4. **Design an investment risk oversight framework** that builds off PIRO.
5. **Feasibility assessment and costing**. Engage with external consultants and vendors to map out the needed data, tools, and subject matter expertise required to achieve oversight that addresses desired standards.

The report concludes with optimism, highlighting that the seemingly overwhelming task of overseeing investment risk can be managed cost-effectively by deliberately leveraging resources efficiently (e.g., rating agencies with prudent oversight).

2 Statutory Accounting and RBC Investment Risk Toolbox

The investment risk framework sits on top of statutory accounting and RBC frameworks, which provide regulators with a toolbox to help them assess insurers' solvency. This section describes the components of the traditional 'three-legged stool' of the NAIC's investment risk framework (i.e., accounting, risk assessment, and capital) referenced in the E-Committee memo, along with reserving that, in some circumstances, can consider investment risk. *Figure 1* provides a schematic for key components of the 'Investment risk toolbox,' acknowledging other tools available to regulators, such as liquidity stress tests, that we abstract from in this report.

The process of building out the toolbox begins with the **classification and reporting** of investments that have been and continue to be revised toward principles-based approaches in response to increases in more complex strategies that include investments with blended characteristics (e.g., debt with equity-like performance features). Bonds receive designations that ultimately result in favorable capital treatment, for example, and in the case of structured assets, can require demonstration of sufficient subordination, a process that the revised investment risk oversight framework should oversee.

Designation assignments provide a rank order of credit risk; they are ordinal. They are defined in the Purposes and Procedures Manual, with revisions currently being deliberated and discussed in our report What's Next for the rules governing insurers' investments. Designations rely heavily on agency ratings and determine the degree to which a bond is treated favorably or punitively, primarily in the calculation of Risk Based Capital (RBC) but also when used in reserves. They are also relevant in adhering to state investment limits and other guidelines, such as those that govern securities lending. The designation process involves ongoing monitoring of individual counterparties and their credit quality. The United States SEC, which oversees rating agencies, requires a description of credit ratings to be published. For example, Moody's Rating Symbols and Definitions describes credit ratings as opinions of ordinal, horizon-free credit risk and, as such, do not target specific default rates or expected loss rates. By their nature of rank ordering credit risk across the credit spectrum (e.g., with Moody's Aa 10-year historic corporate default rates in the order of 50 bps), ratings consider extreme tail events.[3] They don't describe a cardinal level of risk as is the case with, say, C-1 bond factors that measure expected tail loss from

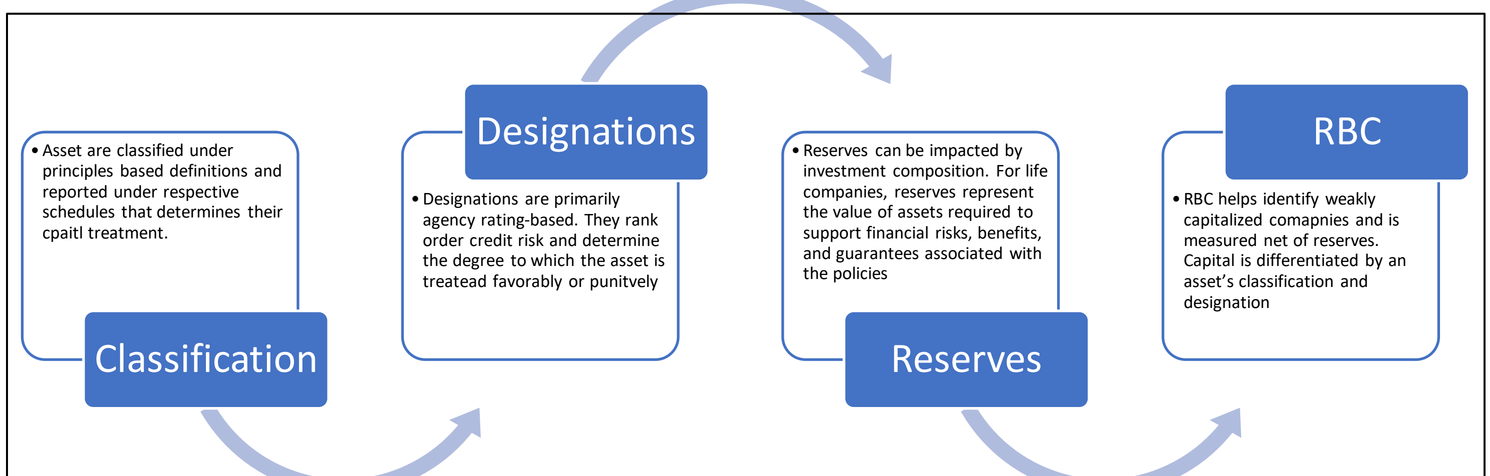
[3] See, for example, Revisions to the RBC C-1 Bond Factors Prepared for the NAIC and ACLI.

credit events across the credit spectrum. The E-Committee memo specifically highlights the need for the NAIC to provide due diligence over rating agencies to reduce/eliminate “blind” reliance on their ratings and de-emphasize its role in assigning NAIC-derived designations. We propose principles to address this need in our report, Overseeing Designations and the Prudent Use of Agency Ratings, which include adherence to the overarching principles outlined in this report.

For life companies, **reserves** represent the value of assets required to support financial risks, benefits, and guarantees associated with the policies. They are being updated to consider the nature of complex assets more explicitly for life companies, as an example, which is now analyzed in Asset Adequacy Testing (AAT) under Actuarial Guideline (AG) 53. The additional complexity of assets presents two distinct challenges for regulators: (1) understanding the likelihood of promised cashflows materializing, allowing for payments to policyholders in the context of asset-liability management (ALM), and (2) understanding market liquidity and its implications for solvency. What we propose seeks to support oversight on both these fronts as well as overseeing investment risk in reserves more broadly, including, for example, consistent credit risk modeling and the use of designations.

RBC helps identify weakly capitalized companies and, when applicable, is measured net of reserves. It establishes a minimum threshold below which regulators can take control of an insurer. It is often described as a blunt tool. An investment’s classification and designation determine its capital charge. It is being revised to determine risks more granularly, initially to address potential capital arbitrage for structured assets and investment vehicles. Designations are ordinal and rank order risk and feed into RBC, which is cardinal and assigns a level of capital. Designations don’t describe a quantitative level of risk as with, say, C-1 bond factors that measure expected tail loss from credit events across the credit spectrum. The C-1 bond framework specifies a target probability (96%) along with a horizon of 10 years and considers various offsets, including those within the statutory accounting framework.

Figure 1: The investment risk oversight



3 The Challenges with Investment Risk Oversight

Insurers' investment trends have heightened the need for the NAIC and regulators to access subject matter experts and better tools to aid in their efforts to oversee investment risks, to which the E-Committee memo calls attention. Investment risk oversight involves identifying and assessing the various risks associated with a broad set of investment activities, with each asset class presenting a distinct and unique set of challenges and multiple stakeholders, such as rating agencies and insurers, possibly facing conflicts of interest. These challenges must be deliberately considered when designing principles for oversight and laying out supervisory roles and responsibilities. The challenges are broad but not insurmountable:

1. **Heterogeneous characteristics and multiple risk factors**. Insurers participate in broad swathes of capital markets that cater to varying funding needs of the market segments they service. Identifying and assessing investment risks, even for seemingly similar assets, can require specialist knowledge and skills. Take, for example, a typical vanilla floating-rate loan and a fixed-rate bond with similar terms and counterparties of similar characteristics. Various features must be identified and quantified when assessing credit risk, such as expected recovery in the event of default, that are often difficult to disentangle and attribute. As the scope of asset classes expands, so do nuances. Acknowledging the increased heterogeneity in investment composition, the NAIC has embarked on efforts to increase granularity with virtually every aspect of its toolbox.
   Identifying and measuring differentiated risks is also increasingly challenged by insurer's increasingly complex investments. Variation in premia across assets of seemingly similar profiles muddles an assessment of variation in their risks. Progress has been made with the regulatory toolbox measuring differentiated risks. Premiums for illiquidity and other risks of complex assets, including structured assets in Asset Adequacy Testing through Actuarial Guideline 53, but the efforts are in a formative stage.
2. **Lack of transparency**. A natural byproduct of insurers' increased footprint in private and more complex assets, including a spectrum of SEC- and non-SEC registered investment vehicles, has resulted in less transparent portfolio holdings. There is an important distinction to the source of opacity that can result from lack of disclosure or complexity:
   a. **Disclosure**. Private assets, equity or residual interests under Schedule BA, or debt under Schedule D have been flagged by NAIC staff and regulators as opaque. Concerns have been raised with privately rated bonds, in particular given their de facto favorable regulatory treatment. While Private letter ratings (PLRs) provide a rationale, they are not standardized and cannot be analyzed in mass. This is a significant and growing issue, with well over 8000 PLRs accounting for nearly 6% of admitted assets reported under Schedule D in 2022, compared with 4.1% in 2021. In 2022, four companies were reporting more than 30% of their admitted assets in bonds with private ratings
   b. **Complexity**. More complex assets, including structured assets and investment vehicles that contain non-vanilla instruments, often require subject matter expertise to assess their risk, regardless of the level of disclosure and data quality.
3. **Difficulties with quantifying risk**. Several factors challenge quantifying risks across asset classes:
   a. **Non-comparable data across asset classes** results in limitations to easy comparably
      i. **Disclosure**. Capital markets span multiple jurisdictions (e.g., equity interests in a member of the S&P 500 that is SEC-registered vs. a small non-SEC registered private firm), and each has its own set of regulations and standards with variations in disclosure and risks that result in challenges with comparably assessing risks. Reporting requirements differ across market segments, which includes considerations for audited standardized financial statement data that can be analyzed in mass.
      ii. **Market data**. Variations in available market data across asset classes can lead to a lack of comparability. This is tied to the degree to which price data reflect transaction prices that are representative of the prices that will manifest in practice.
      iii. **Accounting standards**. Variations in statutory accounting treatment (e.g., bonds are generally reported under amortized cost, while public equity at fair value) can result in imprecise comparability.
   b. **Challenges to quantifying the risk of rare events.** Discussed extensively in Assessment of the Proposed Revisions to the RBC C-1 Bond Factors, substantial practical challenges exist with categorizing and measuring credit and other tail risks across assets. Overseeing Designations and the Prudent Use of Agency Ratings discusses approaches to overcome challenges with overseeing Credit Assessments, which we define more formally below, such as agency ratings, parts of which can be used to address other challenges with investment risk oversight more broadly, including:
      i. Measures of default risk, an inherently remote event, cannot be assessed robustly given the dearth of default data.
      ii. Level-setting risk across asset classes is challenging because different risk factors impact different credit segments (e.g., corporate vs. municipal).

iii. Controlling for variation in methods and standards across Credit Assessment Providers whose methods necessarily involve subjectivity.
iv. Avoiding conflicts of interest driven by rating agencies' commercial incentives and insurers' interest in improved capital ratios.

We now explore principles and supervisory roles and responsibilities for overseeing investment risk that deliberately address these challenges.

4 Investment Risk Oversight

Investment risk oversight involves a governance framework along with a supervisory function. The governance framework outlines the overarching structure of investment risk oversight through a set of principles that guide both regulators and practitioners. Supervision includes specific operational roles and responsibilities, including overseeing and monitoring day-to-day activities and performance. This section proposes PIRO along with roles and responsibilities for investment risk supervision. The principles deliberately consider the challenges with investment risk oversight and balance varying stakeholder interests:

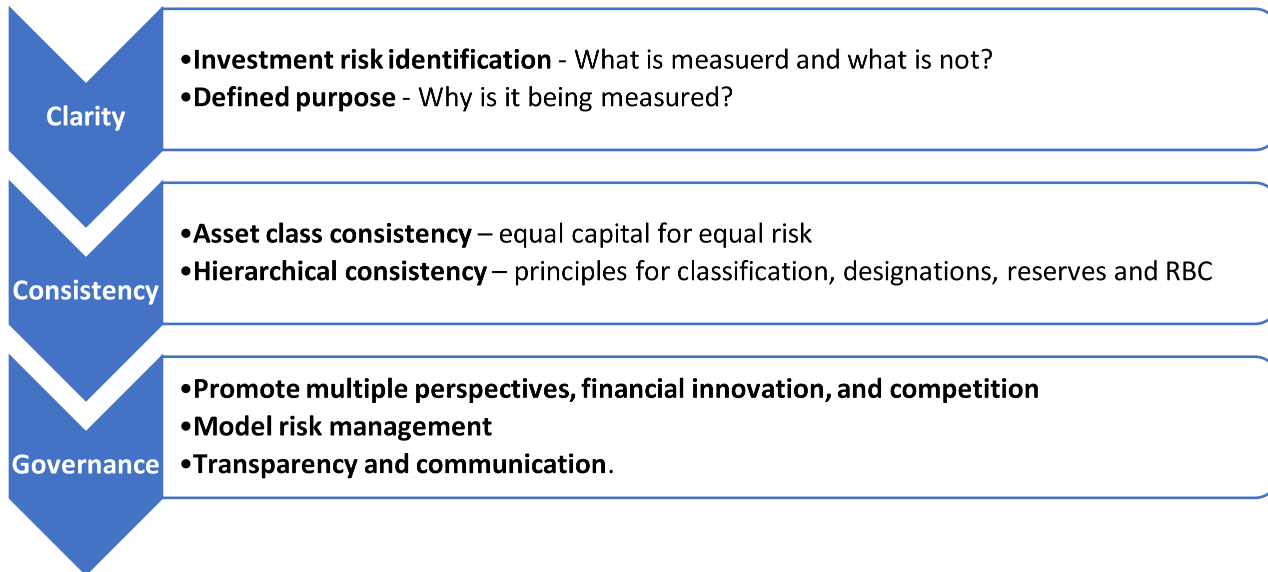
1. **Insurers** need a predictable and understandable regulatory framework that equates treatment with economic risks. In addition, sensitivities to the wide spectrum of investment strategies across insurance segments (e.g., life vs. property and casualty) and varying complexity, sophistication, and entity size require consideration. While a key goal should be to protect policyholders, there must be a deliberate avoidance of undue burden, allowing insurers to comply efficiently and effectively. This is critical to ensuring policyholders are best served. Conflict of interests, whereby insurers are incented to choose measures that present themselves as overly financially secure by, say, 'shopping for ratings' and using overly favorable agency ratings to obfuscate the risks of their credit portfolio, need to be acknowledged and deliberately considered.
2. **Regulators** need tools that will help identify weakly capitalized companies and the ability to identify insurers' chosen methodologies that are questionable without undue burden. The tools should not, a priori, bias any insurance segment and should promote competition and new entrants.
3. **Policyholders** need access to affordable and reliable coverage. The link between investment guidelines and policy coverage should be understood. For example, more punitive treatment of long-dated investments, a feature prevalent in many jurisdictions (e.g., Solvency II), will lead to more expensive long-dated life and annuities.[4]

4.1 Principles for Investment Risk Oversight (PIRO)

We now lay out PIRO, which has three core principles summarized in *Figure 2*, subsequent to which further details are provided.

[4] See our report, Benchmarking the treatment of CLOs.

Figure 2: Principles for risk oversight



The approach detailed by the American Academy of Actuaries for Principles for Structured Securities RBC presentation included in the Risk Based Capital Investment Risk and Evaluation (E) Working Group 2023 Summer Meeting Agenda & Materials demonstrates the spirit of these principles applied to the case of RBC for Asset Backed Securities. However, we prefer risk measures to be consistent across all asset classes. We believe this framework supports the Academy's work, and below, we outline a broader application of our thinking.

4.1.1 Clarity of purpose

Ensuring stakeholders understand the purpose and rationale behind each component of the framework is vital to ensure that the system is understandable and predictable. This needs to cover two key areas:

1. **Investment risk identification** – a clear articulation of risks that are intended to be measured or not. This is a nuanced issue under the current framework that lacks a comprehensive inventory, and with significant variation in the extent to which different risks are captured within the statutory accounting and RBC frameworks. In many cases the exclusion of a risk is intentional (e.g., life RBC does not generally capture spread risk for bonds), and in other cases it is a byproduct of convenience (e.g., C-1 factors are measured in excess of reserves for which low quality credit holdings are generally not used).
2. **Defined purpose** – a clear articulation of the risk measure's intended use within the framework, with the possibility of an identified risk, referenced in Principle 1, being measured through multiple lenses.
    - **Classification** is used to differentiate the treatment of investments, including capital and reserves, and is determined by SAP reporting guidelines. Classification is a risk measure and may require analytic and documented justification.[5]
    - **Designations** rank order credit risk of instruments that qualify as bonds with guidance provided under *SSAP No. 26*, *SSAP No. 43*, and references therein.[6]
    - **Reserves** can include investment risk. For life companies, reserves represent the value of assets required to support financial risks, benefits, and guarantees associated with the policies described in the NAIC

[5] Several notable characteristics that impact reporting include those that allow investments to qualify as: (1) a bond issued by an Issuer Credit Obligation (ICO) or an Asset Backed Security (ABS) under *SSAP No. 26*, *SSAP No. 43*, and references therein, and (2) an equity interest in an ICO or residual interest of an ABS (with revisions to clarify the scope of residual interests currently being deliberated).

[6] NAIC designations are defined in the Purposes and Procedures Manual, with revisions that are currently being deliberated and discussed in our report What's next for the rules that govern insurers' investments.

Valuation Manual. There is significant variation in the extent to which investment risk impacts reserving across insurance entity types and lines of business. This leads to downstream challenges and possible imprecision in the treatment of reserves in RBC.

- **Risk Based Capital** (RBC) helps identify weakly capitalized companies and ensures an adequate margin of safety is available to support policyholders. As a practical matter, RBC generally measures portfolio tail loss with considerations for their treatment under statutory accounting, including offsets related to the likes of reserves. The varying treatment across asset cases is notable, with tail risk not currently well defined; it could represent a target probability or conditional tail expectation (CTE).

4.1.2 Consistency of approach

The framework should aspire to equate the treatment of assets with their risks and apply principles consistently, not a priory biasing specific business models or strategies.

1. **Asset class consistency** – an aspiration for models to equal treatment for equal risk.
    a. **Classification** should adhere to consistent standards across asset classes, including reporting under the principles-based bond definition and reporting of residual interests.
    b. **Designations** should aspire to rank order credit risk across asset classes consistently.
    c. **Reserves** should consistently treat investment risks, including credit, across asset classes. The same confidence level (e.g., CTE-70) should be used for all asset classes and designation buckets. This includes considerations with Asset Adequacy Testing (AAT) and Actuarial Guidance (AG) 53.
    d. **RBC** should represent the same confidence level (e.g., CTE-90) over the same, say, 10-year horizon for all asset classes.
2. **Hierarchical consistency** - principles should flow down the waterfall of risk measures: Classification, Designations, Reserves, and RBC.

4.1.3 Governance

Insurers and regulators should hold themselves and each other to the highest governance standards, ensuring rules are followed and boundaries respected.

1. **Promote multiple perspectives, financial innovation, and competition** - avoid mechanistically relying on any single model or statistic and ensure that no single point of failure will lead to systemic events. Fundamental to prudent risk management is the need for measuring risks from multiple perspectives, with incumbent opinions not de facto being favored.
2. **Model risk management** - including governance and validation to control model risk arising from model use. Valuable points of reference include standards outlined in the following:
    a. American Academy of Actuaries guidelines on Model Risk Management (Academy Guidelines).
    b. Principle Based Reserving (PBR) governance rules in the Valuation Manual discuss assumption-setting
    c. Federal Reserve SR 11-7
3. **Transparency and communication**.
    a. **Initiatives and processes, including underlying methodologies**, should include
        i. Clear objectives, boundaries, and limitations
        ii. Stakeholders, along with their roles and responsibilities
        iii. Assessment of implications and impact analysis
        iv. A periodic assessment of the overall performance of the oversight process, including making changes or enhancements as warranted.
    b. **Public communication,** including potential changes to guidelines, should consider possible reactions from capital markets. Proposed changes should speak to downstream implications as part of adhering to the principles of clarity of purpose and defined purpose.

4.2 Investment Risk Supervision- Roles and Responsibilities

In this Section, we map out the roles and responsibilities, inspired, in part, by the spirit of the frameworks outlined in the Academy Guidelines and Federal Reserve SR 11-7 that focus narrowly on model risk management that we apply in the context of investment risk oversight. While regulators can assign roles and responsibilities in several ways, resources must be used efficiently, which is fundamental to addressing the need outlined in the E-Committee memo. A fundamental challenge to the current framework is the desire for, say, RBC to help regulators identify weakly capitalized companies with risk measures, such as agency ratings, that are often chosen by the insurers themselves or other participants in capital markets, with no mechanism of incenting a robust choice. In addition, as discussed in Overseeing Designations and the Prudent Use of Agency Ratings, rating agencies are incented to provide overly favorable ratings as a way of increasing market share. This section maps out the core incentives and potential conflicts of interest, followed by articulated roles and responsibilities that can help address those concerns.

1. **Insurers** should ultimately be responsible for defending the models and parameters they use, including an agency rating. To align insurers' incentives, they must demonstrate business use of their models and chosen parameters, including the use of an agency rating, beyond regulatory compliance, demonstrating their genuine belief that the risk assessment is prudent and accurate, avoiding flagrant misrepresenting risk. As a corollary, different insurers might report different ratings for the same asset, as would be the case if an internal process of one insurer, but not another, deems an agency rating appropriate for use.
2. **NAIC staff should oversee the investment risk framework and adhere to PIRO,** including model risk management processes:
    a. **Oversee a governance framework over model risk that includes:**
        i. A monitoring and reporting framework that provides transparency on model performance.
        ii. Have a particular focus on the use of agency ratings and reduce/eliminate "blind" reliance on rating agencies but retain overall utilization of rating agencies by implementing a strong due diligence framework that includes assessment of agency rating performance.
    b. **Oversee risk analytics tools** for purposes that include:
        i. Company-specific risk analytics at the request of regulators and utilize regulatory discretion when needed under well-documented and governed parameters. This "backstop" should be embedded in the regulatory regime but ideally would be rarely used if other governance is optimized. This includes bond reporting under the principles-based bond definition and designations.
        ii. Have a particular focus on structured asset modeling capabilities to support due diligence, validation, and stress testing.
        iii. Identification of industry-wide risks for use in macroprudential and emerging risk detection.
        iv. Investment-related support to risk-based capital and reserving teams, understanding the key functions of asset-liability management and resulting portfolio impacts.
    c. **Oversee a policy advisory function** that can consider and recommend future policy changes to regulators under a holistic lens, considering input from all impacted processes.
2. **Regulators**
    a. Should set the tone and ensure the investment risk oversight framework is integrated into the NAIC's overall strategy and decision-making processes.
    b. Should be provided with the tools that will help identify weakly capitalized companies and the ability to identify insurers' chosen methodologies that are questionable without undue burden.
3. **Rating agencies** should be utilized with an oversight framework that deliberately addresses potential conflicts of interest that would lead them to provide overly favorable ratings.
4. **External consultants** should be used when needed and cost-effective, acknowledging limits to internal NAIC expertise, data, and tools. External consultants should adhere to PIRO, including model governance processes, and be leveraged for purposes that include:

a. Ongoing guidance on the design and implementation of new initiatives.
b. Stop gap resources given needed expertise
c. Ongoing external audit.

5 What Immediate Next Steps Should the NAIC Consider Taking?

Regulators should consider parallel tracks, building a plan toward a long-term aspirational vision that, in the process, addresses considerations for stop-gap interim measures.

1. **Principles.** Regulators should agree on principles for investment risk oversight. That should provide a foundation for the aspirational framework and priorities.
2. **Roles and responsibilities.** Agree on mandates and immediate priorities. External consultants should be used for needed subject matter expertise.
3. **Designation oversight. A step toward the aspirational vision that addresses the need for a stop-gap measure.** Inventory and assess the effort needed to achieve appropriate standards for the asset classes of most significant concern. Given the lack of market oversight, we suspect that privately rated credit is likely most concerning. Since corporate credit is reasonably uniform and understood, compared to, say, feeder notes, start with privately rated corporate credit.

4. **Build guidelines for an investment risk oversight framework incorporating the PIRO.** Do so iteratively by first assessing what can be measured before suggesting NAIC staff have the authority to take specific action. In the case of designations, for example, initiate a program to demonstrate which mechanisms can legitimately be used in identifying overly favorable ratings and, in doing so, publish data and reports that would provide regulators transparency over misuse of agency ratings. Once the data and systems are in place that allow for the identification of overly favorable ratings, it will be more natural to explore the mechanisms by which the NAIC can manage agency ratings.
5. **Feasibility assessment and costing – much-needed partnerships.**
    a. Engage with external consultants and vendors to map out the needed data, tools, and subject expertise required to achieve a level of oversight that is viewed as addressing standards.
    b. Prioritize inventoried assets of greatest concern.
6. **Prepare to answer the following question:**

Are regulators and the industry prepared to make significant investments in the needed infrastructure and prepared for a heightened level of disclosure and development of methodologies required to achieve an appropriate investment risk oversight framework?

6 What Are We Optimistic About?

By deliberately leveraging resources efficiently (e.g., rating agencies with prudent oversight), the seemingly overwhelming task of overseeing investment risk can be managed cost-effectively. Lessons learned from expensive regulatory initiatives, including CCAR and Solvency II, can provide important guidance on governance and the effectiveness of various mechanisms, and we are confident that the U.S. insurance regulatory framework can be adapted in a way that benefits both policyholders and insurers.

We are also optimistic that by applying principles that ensure Clarity, Consistency, and Governance for all of the tools used in insurance supervision, the system will be both easier to implement, easier to supervise, and more robust. In the same way that the transition from CLO 1.0 to 2.0 was a boon to the industry, resulting in an expansion of the asset class, we

believe that the increased transparency and higher standards will help to expand the insurance capital base, ensuring the long-term viability of this crucial industry.

We are optimistic that NAIC's communal approach to policy design will have regulators and industry come together to solve the most critical issues.

Bridgeway Analytics and its product suite ART provide opinions related to the business implications of regulations and accounting standards. While Bridgeway Analytics aspires to provide accurate and timely information, the nature of distilling information to what we deem as most relevant and the evolving and subjective nature of the rules implies that the data represents our opinion of the rules and not the rules themselves. Users of ART agree to consult their legal, compliance, and accounting professionals before applying any data generated by or resulting from the use of the data in business processes. Bridgeway Analytics does not guarantee the accuracy, adequacy, completeness, timeliness, or availability of data and/or content, and is not responsible for errors or omissions (negligent or otherwise), regardless of the cause, and is not liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the data and/or content.