



TO: Carrie Mears, Chair, Valuation of Securities (E) Task Force
Members of the Valuation of Securities (E) Task Force

FROM: Charles A. Therriault, Director, NAIC Securities Valuation Office (SVO)
Marc Perlman, Managing Investment Counsel, NAIC Securities Valuation Office (SVO)

CC: Eric Kolchinsky, Director, NAIC Structured Securities Group (SSG) and Capital Markets Bureau

RE: Possible Options for Additional Market Data Fields for Bond Investments

DATE: July 14, 2022

Summary - The SVO proposed adding additional market-data fields for bond investments to the annual statement instructions in its memo dated Feb. 25, 2022, titled "Additional Market Data Fields for Bond Investments" that was discussed at the 2022 Spring National Meeting. The recommendation was based, in part, on 2010 adopted recommendations of the Rating Agency (E) Working Group (RAWG) and the NAIC Investment Analysis Office's (IAO) staff's findings regarding the discrepancies between ratings, presented in its Nov. 29, 2021 memo, "Rating Issues and Proposed Changes to the Filing Exemption Process." In this memo the SVO further outlines the regulatory benefits and proposes two possible approaches.

The benefits of collecting additional market-data for each insurer bond investment are several:

- Assist in SVO identification of securities with credit rating provider (CRP) ratings which may be inconsistent with a security's actual overall risk.
- Greater transparency for regulators into the risks and characteristics of insurer investments.
- Incorporation of insurer investment portfolio analysis into the examination process.
- Availability of more Level 1 and 2 Inputs which will be included in the AVS+ pricing data for all securities compared to the mostly Level 3 Inputs for only some securities today.
- Allow state insurance regulators to assess the capabilities of an insurer's investment management or risk management processes by reviewing the quality and accuracy the market data fields.
- Provide NAIC staff with the capability to run cash flow simulations on insurer investments.

Regarding the first bullet, the SVO would use this market-data information to help identify securities with credit rating provider (CRP) ratings that may be inconsistent with the security's actual overall risk. The SVO and SSG have raised concerns over the years about a number of asset classes (e.g. residential

mortgage backed securities (RMBS), commercial mortgage backed securities (CMBS), public and private fund investments, principal protected securities (PPS) including CLO Combo Notes, regulatory transactions, residual interests, and now collateralized loan obligations (CLO), and structure equity and funds) and specific securities in other asset classes where a rating agency rating often does not adequately reflect the investment risk for NAIC purposes. The SVO needs this analytical information so that it can identify and take potential action on investment risk assessment inaccuracies. Without this data and potentially other information in the future, coupled with some level of discretion over NAIC Designations derived from ratings, the SVO and regulators will remain in the dark about these risks. Additionally, the incentive for significant risk-based capital arbitrage utilizing CRP ratings will likely continue to increase and rating agencies will effectively remain a de-facto “super regulator” in that any investment they assign a rating to is automatically accepted by the NAIC without any regulatory discussion, analysis, oversight or consideration as to how the rating agency’s decisions align to the NAIC’s statutory framework.

Inconsistent and potentially inaccurate assessments of investment risk is a critical issue not only for the Valuation of Securities (E) Task Force but for other state insurance regulatory groups that are interested in identifying and analyzing investment risks, whether it be at the individual security, asset class, legal entity or industry level. The following are just a few groups that have active work streams involving investment risk: Life Actuarial (A) Task Force, Capital Adequacy (E) Task Force and its Working Groups, Statutory Accounting Principles (E) Working Group, Financial Stability (E) Task Force, Macroprudential (E) Working Group and Financial Analysis (E) Working Group. The proposed market data fields will benefit each of these groups in their work assessing insurer investments and portfolio risks.

The requested market data fields other than purchase yield, which should be available from any investment accounting system, are all at the security issue level (i.e. CUSIP). Any insurer system that can receive security issue level data such as a market prices, credit ratings, bond factors, cashflows, or NAIC Designations should be able to accommodate these proposed security issue-level data fields. The SVO acknowledges this change will require time for insurer system providers to accommodate these new data fields into their data structures and Schedule D reporting applications. However, these data fields are very common in the management of a bond portfolio, and it would be a significant enterprise risk deficiency if an insurer’s investment managers did not have them.

Some alternate measures of risk (e.g. Sharpe Ratio and Sortino Ratio) were mentioned during the Task Force discussion. These metrics, however, would require insurers to calculate the total return and the standard deviation of those returns for each security they own in order to produce and report these metrics which would be significantly more costly and more appropriate for assessing relative value and less applicable for assessing investment risk.

Alternatives – The SVO was asked to consider industry’s recommendation that the NAIC produce these fields. Below are our thoughts on each alternative.

- **NAIC Produced Analytics** – The SVO can take on the responsibility for producing the analytical data elements requested in this proposal. To do so it would require enhancements to the SVO’s existing systems (VISION, AVS+ and STS), and vendor pricing data, investments in new systems to provide the modeling, more staff for the incremental and on-going support of these systems and processes, new data feeds to support the modeling software, and new data bases and reporting capabilities to provide the information to regulators. Enhancements would also

need to include the ability for insurers to provide electronically to the SVO the full security structure of any security that the modeling software does not know about. We strongly believe that the benefits to be gained by state regulators, the SVO and other NAIC groups with interests in investment risk of bringing this modelling capability in-house greatly outweigh, in the long run, the initial costs and effort to make these capabilities operational.

- **Pros:**
 - Market analytical information would be independently and consistently produced.
 - The SVO's pricing data would need to include more Level 1 and 2 Inputs for all securities versus primarily Level 3 Inputs for only some securities today.
 - Regulators would eventually be able to ask NAIC staff to model the risks or cash flows of any bond security or insurer bond portfolio, including, stress testing those securities and portfolios.
 - Regulators would have significantly greater transparency into the risks and characteristics of insurer investments.
 - Analytical analysis of insurer investment portfolios could be incorporated into the examination process.
 - The overall cost to insurers through any increased fee would likely be much less than each insurer building out its own capability to provide the data.
- **Cons:**
 - The NAIC would need to make significant enhancements to VISION, AVS+, and STS, and develop new reporting data bases.
 - The NAIC will need to license a security analytic modelling system and provide it with the data it requires, some of which may require new data licenses. This includes full access to vendor applications like Bloomberg or Aladdin.
 - The NAIC will incur additional fees for higher level of security pricing data. The NAIC will also need additional staff to develop and support the technology enhancements and to support the on-going modeling of securities and portfolios.
 - It may take longer for the NAIC to build this capability.
 - Insurers would still need to report some of this information on their Schedule D filings from data published through AVS+.
 - Insurers would need to provide the SVO with full security structure modeling and supporting data (e.g. collateral, payments, actions) for any security the analytic modelling system does not have within its data base.
- **Insurer Produced Analytics** – Insurer investment managers should already have the market data fields requested in this proposal. Insurers would need to get this information into their systems that produce their Schedule D filings. This option would require more up-front work on the part of the insurers and less by the NAIC. The uses of the data, however, whether by regulators, the SVO or other interested

NAIC groups, could be significantly more limited than in the first option, because of the inconsistency in data between insurers.

○ **Pros:**

- Insurers already have this information as part of their investment management or risk management processes.
- State insurance regulators could assess the capabilities of an insurer's investment management or risk management processes by reviewing the quality and accuracy the market data fields.
- The timeframe to implement would likely be shorter than the SVO having to build out this capability.

○ **Cons:**

- Insurer security pricing is very inconsistent today which will lead to a high degree of variability in these analytical values.
- The modeling software and assumptions used by insurers to produce these analytical value can vary significantly which will also lead to a high degree of variability in the values.
- Insurers and their system providers will need to develop new interfaces to ingest this data and produce it in their Schedule D filing. That time frame could vary significantly by vendor and insurer.
- State insurance regulators would not be able to request the modeling of any investment security or portfolio.
- Insurers would directly bear the expense of these changes which will likely be greater than it would be if the NAIC produced this information.

Next Steps – The SVO continues to strongly believe that these market data fields are an important first step in finding alternative ways to measure insurers investment risk and reducing the NAIC reliance rating agency ratings. As noted by the RAWG and reflected in the IAO's memo, there persists a situation where *"... ratings are neither consistent nor uniform for individual securities, nor across different types and classes of securities..."* yet the role of the SVO has not been expanded to include using these alternatives in *"... evaluating credit and other risks of securities."* The objective of this request is to begin addressing these investment risk issues but this may not be the only information needed.

Both alternatives will involve a commitment of resources either by the NAIC or industry. The major question before the Task Force is whether it has a preferred source for these market data fields: the NAIC's SVO or insurer reporting? The SVO believes that the first option would provide the most standardization in data and utility to regulators, the SVO and other interested NAIC groups and would be worth the slightly longer time and cost needed to develop the capabilities.

If, as the SVO recommends, the Task Force prefers the NAIC's SVO as the source of this analysis, then the next step would be a referral to the Financial Condition (E) Committee to request their sponsorship for this initiative and, if provided, begin a fiscal request. If Financial Condition (E) Committee declines to sponsor the initiative or if insurer reporting is the preferred source, we would recommend reverting to insurer reporting and directing the SVO staff to prepare the Blanks referral.

<https://naiconline.sharepoint.com/teams/SVOVOSTaskForce/Shared Documents/Meetings/2022/2022-08-11 - Summer National Meeting/07 - Blanks Referral Analytical Risk Measures/2021-053.XX Blanks Market Data Options.docx>