

Invested Asset (E) Working Group  
Investment Risk Assessment Work Sheet

**1. Background and Information.**

About this Form: This form is used by the Invested Asset (E) Working Group (IAWG) of the Valuation of Securities (E) Task Force as part of the process by which it evaluates investment risks in securities that come under regulatory review. A primary purpose of this form is to expedite the review of securities by providing a uniform definitional and analytical framework in which technical features, characteristics and investment risks of a security can be considered. When finalized by the IAWG for any security under regulatory review, the form also serves as a permanent record of its conclusions and analysis for use by other state insurance regulators.

About the IAWG: The IAWG was formed in 2006 and tasked with serving as the NAIC forum responsible for reviewing securities and then recommending and coordinating the process for formulating and communicating comprehensive regulatory guidance. As used here, regulatory guidance means and refers to NAIC developed tools in use by the States, such as: annual statement instructions, statutory accounting principles, valuation rules, methodology for assessment of credit and other risks, risk-based capital charges, and other mechanisms that collectively form the financial solvency reporting process for US insurance companies. The IAWG serves as the point of contact for investment advisors interested in understanding regulatory concerns about securities. For more information about the NAIC process for reviewing investments, please refer to the NAIC Policy Statement on Transparency at [www.naic.org](http://www.naic.org).

Securities under Regulatory Review: A security or an asset class is placed under regulatory review by the Valuation of Securities (E) Task Force in a public meeting. Typically, a security or an asset class will be placed under regulatory review if the Valuation of Securities (E) Task Force determines that a security requires the NAIC to formulate new financial reporting policies or new or additional analytical methodologies and instructions for the SVO. The applicable NAIC procedure is specified in Part Two, Section 3 (d) and (e) of the Purposes and Procedures Manual of the NAIC Securities Valuation Office, available on the NAIC website from the Publications Department.

**2. Name of Security under Review:** The security under regulatory review is known or referred to as:

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The security was declared to be under regulatory review by the Valuation of Securities (E) Task Force on:

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(The minutes of that meeting and any relevant findings are attached to this form.)

**3. Definitional Framework:** This section consists of a comprehensive list of known investment risks for fixed income securities and definitions which the IAWG will use when evaluating the security under regulatory review. Please familiarize yourself with the terms, definitions and commentary provided below and use these terms when interacting with the IAWG, including when completing Section 4 of this Form. If you believe the security under regulatory review contains a risk that is not mentioned in this list, please so indicate in your written response to section 4.

Known Investment Risks and Commentary:

- **Credit Risk** is the risk of non-performance of contractual payment obligations on bonds, cash equivalents and other invested assets with the characteristics of fixed income instruments.

Commentary: This risk is present when the terms of an investment require the borrower to repay money. Therefore, credit risk does not exist in equity instruments because equity instruments do not contain a promise to pay. This risk is mitigated by the presence of collateral if the lender is given legally and practically effective

rights in the collateral. This risk is assessed by analyzing the extent to which the borrower's cash generating activity will be sufficient to service debt on a timely basis. Credit assessment is primarily based on quantitative and qualitative analysis but may also incorporate or require an analysis of transaction structure and legal issues.

- **Event Risk** is the risk of regulatory changes or other external occurrences that are significant, unanticipated and external, which impact the value of a security.<sup>1</sup>

Commentary: While unanticipated and external event risk is present when an industry has been targeted for products litigation or regulatory scrutiny but the potential impact on any given firm in the industry is as of yet unclear. Asbestos makers and tobacco firms are examples of event risk in the period before it was clear how litigation would impact the prospect of these industry sectors. Typically subsequent events will clarify the event risk and the impact on the issuer or industry can be measured through the credit assessment process. This risk is mitigated by? This risk is assessed by an understanding of the macro economic, regulatory and legal issues, if any, unique to an industry or market segment.

- **Liquidity Risk** is the risk that an investor will not be able to buy or sell an asset into the market with the expected bid/ask spread, anticipated price continuity or sufficient depth; thus causing price realization or execution that is unfavorable or nonexistent.

Commentary: This risk is known to be present in specific population of securities such as private placement and restricted securities. Liquidity risk is also present for other securities when the general market is in turmoil or distress. Treasury securities are considered a benchmark for liquidity. Other asset classes, i.e., commercial mortgages, private placements, and some hybrids may not be as liquid. Complexity, opaqueness and subordination contribute to illiquidity in distress environments. This risk is mitigated by? This risk is assessed by?

- **Call Risk** is the risk that an issuer may elect to retire an asset, in whole or in part, when the investor would have preferred that the asset remain outstanding.<sup>2</sup>

Commentary: This risk is always present in declining interest rate environments assuming the instrument is subject to prepayment. Therefore, call risk is generally regarded as an element of interest rate risk since. Calls expose the insurer to the need to reinvestment the repaid principal at lower rates. Call risk is often mitigated by prepayment penalty provisions (call premiums). This risk is assessed by examining the agreement between the parties and analyzing the probability that a call can be made in a given economic environment.

- **Extension Risk** is the risk that an issuer may elect not to retire an asset, in whole or in part, prior to its maturity date when the investor might have anticipated and might have preferred early retirement.

Commentary: Most securities have an expected life (which is shorter than stated maturity) which reflects an assessment of the interaction between the issuer's credit quality, economic conditions prevailing and anticipated during the life of the loan and the attractiveness of the terms of the agreement to the issuer. This risk is therefore present in most securities. This risk is mitigated by? This risk is assessed by?

- **Deferral Risk** is the risk of the issuer's right to delay payments of interest or dividends (temporarily or indefinitely) on certain instruments.

Commentary: This risk is present in specific type of securities such as preferred and common stock and hybrid securities that have been structured to defer the payment of interest or dividends to the investor subject to specified contractual constraints. Obligations to make up missed payments may be cumulative or

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<sup>1</sup> Includes governmental actions that limit payments from borrowers that are otherwise willing and able to fulfill their obligations.

<sup>2</sup> In the case of mortgage-backed securities, the cash flow depends on the timing of principal payments made by the borrowers in the pool of mortgages that serve as collateral for the security. Prepayment risk is the risk that borrowers will repay all or part of their mortgage sooner than anticipated. Extension risk is the risk that prepayments will be slower than anticipated.

noncumulative. With cumulative deferral, the issuer is eventually required to pay all missed payments with interest. This risk is mitigated by? This risk is assessed by examining the agreement between the parties with respect to payments of interest or dividends.

- **Currency Risk** is the risk that a nondollar-denominated bond (i.e., a bond whose payments occur in a foreign currency) has uncertain U.S. dollar cash flows. The dollar cash flows are dependent on the foreign exchange rate at the time the payments are received.

Commentary: This risk is present in all securities where the obligor agrees to pay in local currency. Hedging techniques such as swap agreements can mitigate this risk. This risk is assessed by examining the agreement between the parties to ascertain currency exposure and ascertain if the risk is being hedged.

- **Leverage Risk** is the risk associated with increasing the volatility of periodic payments. Using leverage, principal repayment terms may be also structured to increase their uncertainty, which increases credit risk. Security specific leverage is generally accomplished through structuring periodic payments according to formulae.<sup>3</sup>

Commentary: This risk is present in? This risk is mitigated by? This risk is assessed by?

#### Other Investment Risks

- **Financial Innovation**

Fixed income investments may be subject to risk risks related to financial innovation (also known as financial engineering or financial structuring), including modeling risk, information risk, and complexity risk. Fixed income investments subject to such risks include, but are not limited to: municipal bonds subject to call or escrow, municipal inverse floaters, auction rate securities (ARS), mortgage backed securities (including pass-through, CMOs, IOs/POs and other MBS variants), asset backed securities, and cash market and funded synthetic collateralized debt/loan obligations (CDOs/CLOs). Any security that is not a straightforward non-callable bond would be subject to some degree of the risks attendant to financial innovation. However, a true statement for the general category may not be true (in a practical sense at least) for an individual security in that category. For example, a cash market AAA CDO tranche would arguably have less risk under almost all conceivable circumstances than the underlying pool of collateral, financial engineering notwithstanding. Further, a true statement for the general category may not be true for an individual security when considered in an asset portfolio context – for example, MBS IOs (which may be used as a tool to reduce portfolio duration – arguably reducing interest rate risk). These examples begin to illustrate the challenge of a one-size-fits-all approach, or a security specific approach, to characterizing financial innovation risk.

As evidenced by the instruments listed above, financial innovation is not a new market phenomenon. Relative to non-callable fixed income instruments, financially engineered instruments generally require more sophisticated analysis (including modeling) and more information to properly characterize their expected cash flows, the risks associated with timely (either premature or belated) and complete receipt of these cash flows, and as events have recently unfolded, in some cases, their liquidity.

There is general agreement that financial engineering risk is, at least conceptually, security specific. For instance, the risks presented by student loan ARS are completely different from the risks presented by funded synthetic corporate CDOs, and derive from the respective nature of the underlying collateral and the structure of the instruments. Analysis of the risk, therefore, naturally requires an understanding of the specific characteristics of the instrument in question. However, comprehensive characterization of the risks generally extends beyond instrument specifics, and for many instruments includes an underlying interest rate simulator/generator (generally monte carlo

or lattice based, depending on the particulars of the instrument). Interest rate simulators are at the heart of many fixed income instrument risk analyses, and their implementation involves as much judgment and skill as the

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<sup>3</sup> As an example of leverage risk under this definition, Inverse Floating Rate instruments may be used to lever the risk and returns of periodic payments (e.g. interest payments). Other instruments, such as Collateralized Debt Obligations, or CDOs, can be used to lever credit risk (as defined herein) and the effect of this leverage is reflected in rating agency ratings, NAIC Designations and C-1 factors.

modeling of the specific instruments. In some cases, the nature of the instrument requires modeling of default correlations – a non-security specific (more accurately a cross security) parameter. These realities complicate a myopic focus on the security specific aspects of the risk in question.

#### Possible Regulatory Approaches to Other Investment Risks

Option One: Regulators would impose a small, defined, admittedly arbitrary charge when the consensus exists that analysis confirms that the security seems to create additional risks, even when the risk cannot be quantified or named at this point in time. The primary benefit of this approach is that it conserves scarce resources that would otherwise be expended in an attempt to understand and quantify the potential risk.

Option Two: Rely on diversification and internal risk management measures to mitigate downside attendant on the occurrence of the risk. Use SVO to monitor market developments or impose other requirements on the company (such as cash flow modeling) while risks are clarified over time.

Other Options: There may be other useful approaches.

#### **4. Work Sheet**

Section 4 requires a detailed description of the technical aspects of the security and an analysis of the known and potential investment risks it contains. This analysis is supplemented by an assessment of the economic conditions that would have to obtain for identified investment risk to materialize, a discussion of how the risks in the security can interact with each other and in a diversified portfolio and a discussion of other relevant considerations, if any.

- a. Analysis of Security (Provide an analysis of the terms, features, characteristics and structure of the security.)
- b. Identification of Investment Risks in This Security (Identify any risks mentioned in Section 3 that you feel are contained in this security. Identify any feature or aspect of the security that you feel may cause an interruption in expected cash-flows that is not discussed in Section 3, whether or not this would be attributable to a risk described in Section 3. Discuss the potential impact of the investment risk on the insurer or on a portfolio.)
- c. Economic Scenarios Assessment (Describe the economic environment in which the investments risks associated with this security would be expected to manifest.)
- d. Risk Interactions and Portfolio Considerations (Discuss the manner in which the investment risks in the security may interact with each other and with other risks in a portfolio).
- e. Other Issues or Considerations (Discuss any other issue or consideration.)

#### **5. Conclusions of the IAWG; Recommended Regulatory Guidance** Conclusions

- a. Terms, features, characteristics and structure of the security.
- b. Investment Risks in This Security
- c. Economic Scenarios Assessment
- d. Risk Interactions and Portfolio Considerations
- e. Other Issues or Considerations

#### Recommendations

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