



AMERICAN ACADEMY *of* ACTUARIES

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**Hybrid Securities Work Plan  
from the American Academy of Actuaries' Invested Asset Work Group**

**Presented to the National Association of Insurance Commissioners'  
Hybrid RBC (E) Working Group**

**November 2006**

The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.

Invested Asset Work Group

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On October 3, 2006 the National Association of Insurance Commissioners' (NAIC) Hybrid RBC (E) Working Group approved an official charge to the American Academy of Actuaries' Invested Asset Work Group (IAWG) to review appropriate capital charges for hybrid securities. The official charge is as follows:

“By Nov. 17, 2006, the American Academy of Actuaries (AAA) will develop and present to the Hybrid RBC (E) Working Group, a work plan for reviewing the existing RBC charges for hybrid securities, including preferred stocks and surplus notes. The work plan will incorporate input from regulators, the NAIC SVO and interested parties (including various investment stakeholders and experts).”

“This charge will be completed via interim meetings or conference calls as scheduled by the AAA using staff resources identified by the AAA. The AAA will provide interim reports and an eventual final report and recommendation at the Hybrid RBC (E) Working Group's quarterly NAIC meetings or other interim meetings or conference calls as scheduled by said Working Group. By the fall 2007 NAIC National Meeting, the AAA's final report will identify those hybrid securities, including preferred stocks and surplus notes, for which the AAA recommends changes from existing RBC treatment.”

The Invested Asset Work Group of the Academy's Life Practice Council has accepted this charge from the NAIC Hybrid RBC Working Group and will provide an independent review of the risks inherent to the assets generically referred to as hybrid securities.

The plan of the IAWG is to recommend the appropriate risk based capital treatment for hybrid securities for life insurers, health insurers, and property & casualty insurers. The expectation from the NAIC Hybrid Task Force is that the three risk based capital formulas will treat hybrid securities identically. The plan of the IAWG is to represent the Academy's Life, Health, and Casualty Practice Councils. The IAWG is seeking representatives from each of the Academy's Practice Councils to assist with this charge.

In the remainder of this document, the work plan for the AAA's IAWG is described. Upon review and discussion of this plan with the NAIC's Hybrid RBC Working Group, the IAWG will begin executing the work plan.

## **1. Define Hybrid Securities**

For the purpose of this project, hybrid securities are defined as those securities whose proceeds are accorded some degree of equity treatment to the issuer by one or more of the nationally recognized statistical rating organizations and/or which are recognized as regulatory capital by the issuer's primary regulatory authority. Hybrid securities tend to be subordinated in nature in the capital structure. Hybrid securities are sometimes referred to as capital securities. Examples of hybrid securities include all preferred securities, surplus notes, preferred stock, trust preferreds, Yankee Tier 1 & 2, and other securities with long term maturities and deep subordination. Securities that do not have a credit component will be excluded.

In discussing this charge with the Hybrid RBC Working Group, the IAWG will review surplus notes only from the perspective of the investor, or when an insurer has invested funds in a surplus note issued by another insurer. The IAWG will not review the RBC treatment of surplus notes issued by an insurer as part of this particular charge. In addition, the IAWG will not review convertible bonds as part of this charge since mandatory convertibles are classified as equity and optional convertibles are classified as debt for RBC purposes.

## **2. Identify and define all appropriate risks associated with Hybrid Securities**

Risks reviewed will be those as viewed from the investor's perspective. In examining hybrid securities, we will consider certain risks from an issuer's perspective as these risks affect the pricing, rating, and certain operational aspects of the security. However, since the focus of our charge is the determination of risk based capital for the investor, we will only consider issuer risks to the extent those risks affect the investor. The IAWG notes that few, if any, insurers issue hybrid securities in the insurance company, but rather, issue the hybrid securities in the holding company.

Examples of risks to the investor include the following:

- Extension Risk
- Complexity / Lack of Historical Data
- Regulatory / Tax / Accounting
- Rating Volatility
- Price Volatility
- Credit
- Liquidity
- Deferral

Note that the focus of the IAWG is the risk profile of these securities and how these risks could affect an insurer's capital position. While the classification between debt and equity is a focus of the rating agencies and the Annual Statement, our review of risks will emphasize the underlying risks and will not consider the debt /equity classification per se.

## **3. Compare Risk Analysis between the SVO and the NRSROs**

We will review the methodology for evaluating hybrids by the SVO and will also review how the NRSRO ratings are used in the the SVO classification. In particular, we will review those risks not captured in the rating agencies' review and review the extent to which the RBC formula captures those risks not captured by the NRSRO ratings.

## **4. Review typical features of hybrid securities, comparing the hybrid features to the risks of traditional debt and equity securities**

We will compare these typical features to the characteristics of the risks of pure equity and pure debt securities. Typical features include:

- Maturity

- Call Options
- Conversion features
- Step-up rate
- Cumulative versus non-cumulative
- Replacement language
- Subordination language
- Alternative payment mechanism
- Event of default language
- Other covenants (e.g. Priority of claim in liquidation, where equity features include no maturity, no ongoing payments that could trigger a default if unpaid, or loss absorption for all creditors)

Our review will focus on the unique features that could give rise to additional capital requirements not captured in the C-1 default charge or the C-3 component for callable securities. Generally, those risks fall into the categories of subordination, call options, and deferral features.

## **5. Model the Risks and Cash Flow Characteristics of Hybrid Securities**

The work group will model generalized hybrid securities, reflecting the different characteristics in order to capture the impact on the securities' future cash flow(s). Quantifying the variability to future cash flow will capture the risk to a company's surplus position, hence supporting the quantification of capital requirements for hybrid securities. We will model representative hybrid securities, recognizing that while hybrids are unique, some models for typical or representative hybrid securities can be constructed.

The work group will recommend a process for obtaining information on hybrid securities from the SVO, rating agencies, and possibly, investment banks. The collection of any competitively sensitive, or confidential data will be the responsibility of the NAIC.

## **6. Compare the risks associated with hybrid securities to other rated securities**

In evaluating the risks and capital requirements for hybrid securities, we will compare the risks and capital requirements for other securities including bonds, MBS, preferred stocks, and common stocks.

## **7. Review different methodologies to determine the RBC charge**

We will review different methodologies for calculating the required capital charge for hybrid securities. While the current RBC is based on factors applied to annual statement values, we will consider the appropriateness of calculating capital requirements using different methodologies. In establishing capital requirements, we will focus on those risks that could affect a company's capital position if the risks materialized. We will consider different methods for evaluating capital requirements including, but not limited to, the following:

- Factor-Based: (current methodology for fixed income / unadjusted equity charges in the NAIC RBC model)

- Factor-Based with adjustment for company experience (current methodology for mortgages)
- Principles-Based Approach (current methodology for certain types of C-3 risk)

Consideration will be given to the practical aspects of the data available in the financial statements in recommending a particular methodology and the ability of current actuarial cash flow models to model the risks associated with hybrid securities. We will also consider where hybrid risks should be placed in the RBC formula (i.e., C-1 Common Stock, C-1 All Other, C-2, C-3, or C-4) and also the calculation of the covariance adjustment.

## **8. Recommend methodology for calculating risk based capital**

The IAWG recognizes the importance of defining appropriate capital charges for hybrid securities and will undertake an objective examination of the RBC treatment for this growing hybrid securities market. The IAWG will obtain information from various non-actuarial interested parties with expertise in the hybrid securities market on an ad hoc basis, as appropriate.