AMERICAN ACADEMY *of* ACTUARIES

Report of the American Academy of Actuaries Life Risk-Based Capital Task Force on Requirements for Mandatorily Convertible Securities to the National Association of Insurance Commissioners' Life Risk-Based Capital Working Group

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The American Academy of Actuaries' Life Risk-Based Capital Task Force prepared this report.

Life Risk-Based Capital Task Force

Michael L. Zurcher, F.S.A., M.A.A.A., Chair

Gerald A. Anderson, F.S.A., M.A.A.A.
Martin Claire, F.S.A., M.A.A.A.
Joseph L. Dunn, F.S.A., M.A.A.A
Norman E. Hill, F.S.A., M.A.A.A
Dennis P. Lauzon, F.S.A., M.A.A.A
Jan L. Pollnow, F.S.A., M.A.A.A
Mark C. Rowley, F.S.A., M.A.A.A.
James A. Tolliver, F.S.A., M.A.A.A.
Robert A. Brown, F.S.A., M.A.A.A
Errol Cramer, F.S.A., M.A.A.A.
Larry Gorski, F.S.A., M.A.A.A.
Paul Kollel, F.S.A., M.A.A.A.
Timothy L. Patria, F.S.A., M.A.A.A.
James F. Reiskytl, F.S.A., M.A.A.A.
Harold Summer, F.S.A., M.A.A.A.
Bill Wilton, F.S.A., M.A.A.A.

Background

On a November 12, 1999 conference call, the NAIC's Invested Asset Working Group (IAWG) affirmed its decision requiring companies reporting on mandatorily convertible securities to continue to report them on Schedule D as preferred stock or bonds, in accordance with the NAIC designation they would normally have received but for the mandatory conversion feature. The IAWG also indicated their expectation that the RBC requirement would be the difference between that already in the RBC calculation for such securities and the 20/30% equity factor.

Discussion and Recommendation

A mandatorily convertible security possesses characteristics of both the original security shorn of its conversion feature and the security that is acquired as a result of the conversion. For instance, a bond that is mandatorily convertible into a fixed number of common shares will make fixed interest payments prior to the conversion, but poses many of the risks of common stock since the principal amount is used to purchase the common stock. However, if the conversion feature calls for the conversion to take place at the market prices that are current at the time of conversion, then the holder does not assume the risk of the common stock until the conversion takes place. This recommendation will therefore focus on securities at prices different from the market prices at the time of conversion.

In principle, a mandatorily convertible security's market value can be split into a component arising from the fixed income payments and a component arising from the security that results from conversion. However, since the NAIC has already made the decision to report these securities as though the conversion feature does not exist, they will be valued at amortized cost until they convert or default. Therefore, a split of the security's carrying value will be difficult to accomplish in practice. In view of the limited holdings of such securities in the life insurance industry, the American Academy of Actuaries' Life Risk-Based Capital Task Force makes the following recommendation, which will establish a conservative risk-based capital requirement consistent with the expectation of the IAWG:

> *For securities that are mandatorily convertible into a different type of security at prices different from the market prices at the time of conversion, the risk-based capital requirement should equal the statement value times the higher of: (1) the factor appropriate to the security in the absence of the conversion feature; and (2) the factor appropriate to the security that is acquired as a result of the conversion.*

This method has the further virtue that it is more general than the procedure contemplated by the IAWG in that it would appropriately treat the case of a bond that is convertible into preferred stock.

Since this calculation is similar to the calculation currently specified for replication transactions, the Task Force recommends that the NAIC implement the change by modifying the RBC instructions and worksheets currently used for replications. The RBC requirement for the mandatorily convertible security is removed and the RBC requirement for the security that results from the conversion is substituted subject to the constraint that the average RBC factor cannot be reduced in the process. A copy of the recommended instructions and worksheet is attached. Our changes are underlined in the document.

REPLICATION (SYNTHETIC ASSET) TRANSACTIONS AND MANDATORILY CONVERTIBLE SECURITIES

LR0012

Basis of Factors

A replication (synthetic asset) transaction is a derivative transaction entered into in conjunction with other investments in order to reproduce the investment characteristics of otherwise permissible investments. A derivative transaction entered into by an insurer as a hedging or income generation transaction shall not be considered a replication (synthetic asset) transaction. All replication transactions must be reviewed and approved by the NAIC Securities Valuation Office and assigned an RSAT number. The transactions are disclosed in Schedule DB Part F.

A replication (synthetic asset) transaction increases the insurer's exposure to one type of asset, the replicated (synthetic) asset, and may reduce the insurer's exposure to the asset risk associated with the cash market components of the transaction. Both effects are captured and quantified in the worksheet for replication transactions.

For the purposes of this worksheet a mandatorily convertible security is a security that is convertible at prices different from the market prices at the time of conversion. Such securities are classified on the annual statement by ignoring the conversion feature. This worksheet adjusts the RBC requirement upward if the security that results from the conversion is more risky than the original security.

Specific Instructions for Application of Formula

This worksheet should contain a line for each replicated (synthetic) asset and each cash instrument component of all replication (synthetic asset) transactions undertaken by the insurer. It should also contain a line for each mandatorily convertible security and a line for the security that will result from the conversion. The assets should be sorted first by RSAT number, next by type (replicated assets first, then cash instruments, then mandatorily convertible securities, and the security that results from the conversion) and finally by CUSIP.

Column 1: The RSAT number for each transaction should be that used in Schedule DB Part F. Leave this column blank for mandatorily convertible securities.

Column 2: Enter an R (for replicated asset) if the line describes one of the replicated (synthetic) assets, a CW (for cash instrument with RBC credit) if the line describes one of the cash instruments constituting the transaction and the transaction either (1) is a swap of prospectively determined interest rates or (2) eliminates the asset risk associated with the cash instrument, and a CN (for cash instrument with no RBC credit) if the line describes one of the cash instruments constituting the transaction and the transaction does not eliminate the insurer's exposure to the asset risk associated with the instrument. Enter a MC for a mandatorily convertible security and a MCC for the security that will result from the conversion.

Column 3: Show the CUSIP for all cash instruments that are securities and all mandatorily convertible securities and all securities that will result from a mandatory conversion.

Column 4: Give the description of the replicated (synthetic) asset(s) or cash instruments as found on Schedule DB – Part F. Leave blank for mandatorily convertible securities.

Column 5: Give the NAIC designation or other description that will best identify the asset risk class of the asset. For replications (synthetic assets) this is ~~as~~ contained in columns 3 or 12 of Schedule DB – Part F.

Column 6: Give the statement value of the asset. For replications (synthetic assets) this is ~~as~~ contained in columns 4 or 10 of Schedule DB – Part F.

Column 7: For replicated (synthetic) assets and for the securities that will result from the conversion of a mandatorily convertible security multiply the risk-based capital factor appropriate to the asset class of the ~~replicated (synthetic)~~ asset times the statement value contained in column 6. For cash instrument components that qualify for a RBC credit and for mandatorily convertible securities the amount contained in this column is the product of

(a) the risk-based capital factor appropriate to the asset class of the cash instrument or mandatorily convertible security, but not higher than the average risk-based capital factor for the replicated (synthetic) asset(s) or the securities that result from the conversion of the mandatorily convertible security, times

(b) the statement value contained in column 6, times

(c) –1.

For other cash instrument components this column should contain 0.

Replications (Synthetic Asset) Transactions and Mandatorily Convertible Securities

	(1) RSAT Number	(2) Type	(3) CUSIP	(4) Description of Asset(s)	(5) NAIC Designation or Other Description of Asset	(6) Value of Asset	(7) RBC Requirement
(1)							
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
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(33)							
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(35)							
(9999)	xxxxx	xxxxx	xxxxx	Total	xxxxx		