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Securities Valuation Office

SVO Special Report

Hybrid Securities

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Classification: A Regulatory Response to Hybridization

This is the second in a planned series of five articles that discusses the classification process developed by state insurance regulators in 1994, and how it is applied to hybrid securities (sometimes hereinafter referred to as equity content or high equity content securities). Classification reflects a decision that credit ratings do not reflect all potential or likely risks in hybrids. This article discusses this regulatory rationale. A third article discusses the components of the classification model, the application of the classification methodology and identifies the analytical principles that guide and constrain analytical discretion in the classification decision making process. This article will be published on the NAIC website on May 14. The fourth article reviews SVO experience in classification of hybrid securities over the past 10 years and will be published on the NAIC website on May 21. It focuses on both the development of securities with higher equity content and the classification implications for such securities. The fifth article discusses synergistic analysis in the context of actual examples and will be published on the NAIC website on May 29.

These articles were given to the Task Force for review and comment prior to their publication.

A. INTRODUCTION

Historically, the SVO has performed classification analysis of securities for regulators, focusing on the contract between the issuer and investor, including obligations and expectations. The objective of classification analysis is to determine where the security falls within the NAIC categories of debt, preferred securities, and common equity.

The NAIC assists state insurance regulators, individually and collectively, in furthering fundamental insurance regulatory goals such as promoting the reliability, solvency and financial solidity of insurance institutions. This is accomplished, in part, through the application of risk based capital (RBC) guidelines. RBC reserve requirements vary by the classification of the security in question, and by the NRSRO rating or NAIC Designation assigned. Currently the RBC guidelines recognize three types: common equity, preferred securities, and bonds. RBC reserve requirements are much lower for traditional bonds and preferred securities, recognizing their statistical history of defaults and comparative price stability. RBC reserve requirements for common equities are much higher, recognizing that class of securities' statistical history of market volatility.

B. THE THRESHOLD ISSUE

Hybrid securities have been present in insurance company portfolios for well over a decade. Their features have not remained static throughout that time, however, but have evolved. In some instances, recent innovations have resulted in a security with more equity like characteristics. Factors that have contributed to this environment for innovation include:

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- Structural changes in the financial services sector, including privatization, have fueled issuer demand for incremental capital while minimizing the dilutive effects on existing equity holders;
- Increased appetite among public corporations for cost of capital and tax efficient acquisition activity;
- Willingness of the rating agencies (NRSROs) to extend their criteria and methodologies to accommodate newer, nontraditional, types of securities.

The new developments with hybrid securities brought the SVO classification analysis into prominence when certain hybrids received a “more common like” classification, and thereby potentially increased risk-based reserve requirements for insurance company investors.

The idea that the risks in hybrid securities are different than those normally captured in traditional credit analysis rests on the recognition that the promise to the investor in the hybrid security is different than the promise to the investor in a traditional bond or preferred security. On its face, the conclusion seems intuitive enough: credit opinions measure the likelihood that a payment promise can be kept. A credit rating cannot have anything to communicate if a payment is not due under the terms of a security. That is why equity securities, which carry no obligation for a regular payment, cannot be rated. Hybrid securities are purposely structured to incorporate bond like features, including scheduled interest payments and certain priorities of claims over traditional common equity. However, they are at the same time structured to incorporate equity like features. Typical equity like features found in hybrids include provisions to defer, or even avoid, scheduled payments without triggering an event of default or the acceleration of those payments.

The NRSROs now provide credit ratings for many of the latest generation of hybrid securities using a subordination and notching process. They have also developed and published analytical frameworks and methodologies for addressing the unique attributes of this class of securities in the issuer’s capital structure. A detailed discussion of the approaches taken by the NRSROs is outside the scope of this article, but examining two aspects of NRSRO hybrids analysis can help shed light on important differences between the approach taken by the NRSROs and the approach taken by the SVO with respect to these securities. The fundamental question is whether the credit ratings assigned to the hybrids by NRSROs accounts for all risks in the security flowing from its equity characteristics, which NRSRO acknowledge when they assign equity credit to the issuer of the security.

C. SYSTEMIC CHARACTERISTICS AND LIMITATIONS OF CREDIT RATING METHODOLOGIES

To best understand the differences in perspective, it is helpful to keep in mind what ratings are meant to address: primarily default risk, including recovery in default. Each NRSRO takes a slightly different approach, but this passage from Standard & Poor’s (S&P) sufficiently illustrates the point:

“...both the issuer and issue rating definitions are expressed in terms of default risk, which refers to the capacity and willingness of the obligor to meet its financial commitments on time, in accordance with the terms of the obligation. As noted, issue credit ratings also take into account the protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors’ rights.”

(Source: Standard & Poors “Corporate Ratings Criteria 2006” p. 11)

NRSROs, in evaluating hybrid securities, use notching to reflect the greater credit and recovery risk inherent in hybrid securities.

As important as credit ratings are, it is also important to recognize what credit ratings are not. There are a number of risk factors that ratings are not designed to address. These factors are such things as market risk, event risk, or extension risk which can contribute to volatility in the price of a security. Also important from the NAIC’s perspective with respect to hybrids is the fact that *ratings are not designed to address equity like risks*.

While equity risk is outside the scope of the NRSROs’ ratings framework, it is of concern to the NAIC in the context of RBC reserve requirements.

Historically speaking, hybrids required the NAIC to decide how its regulatory framework should accommodate securities intentionally structured to give an issuer a right not to pay and not trigger an event of default. In addressing the issue, the NAIC focused on classification, a process that reviews the contractual obligations of the issuer, and the rights and expectations of the investor. The focus was not simply on subordination and notching of ratings or NAIC designations, but instead on measuring the degree of flexibility not to pay accorded an issuer by the investor. The method chosen to conduct the evaluation, and the comparative framework that guides the evaluation, is discussed in the third article in this series.

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In the SVO's view, hybrids contain a very different kind of promise from that associated with traditional securities for which notching was developed. This difference in promise is most clearly evident in recent versions of hybrids which have high equity content. The unique risk we see in high equity content securities is not necessarily related to issuer default but to credit deterioration far short of default. The risk is that in some cases, such as in the case of optional deferral, the issuer might rationally choose to exercise its contractual rights to defer payment to the hybrid investor in order to protect senior bondholders and lenders. In the case of banks and other financial institutions, regulators may order such deferrals. There is no traditional security in the issuer's capital structure except equity that permits this degree of flexibility to an issuer. The introduction of this kind of issuer financial flexibility as to payment transforms what may be characterized as a rational expectation of payment based on a *binary* outcome (i.e., either you pay me or I can call a default and accelerate, in the case of a bond, or yes I am at risk of not being paid but only in dire financial circumstances, in the case of traditional preferred) — into a more speculative *multivariate* expectation of payment (i.e., the point of the bargain is that the issuer may, despite the lack of significant credit quality transition, decide that a deferral is in the interest of senior bondholders and lenders). A variety of circumstances may meet the condition that permits the issuer not to pay.

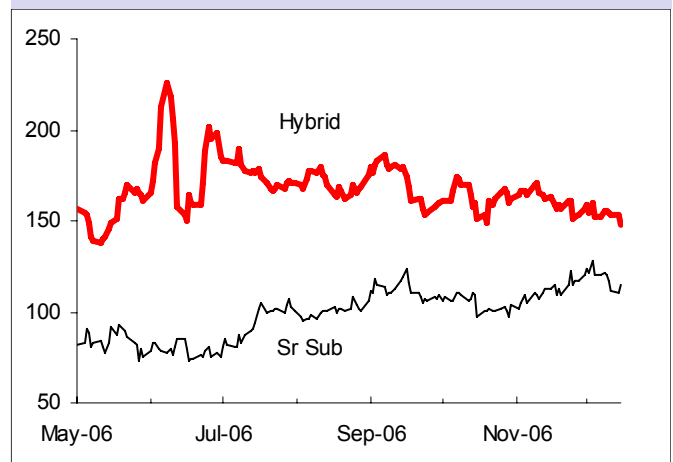
The issuer's right not to make payments on the high equity content security such as debt equity hybrids therefore requires an analysis of a much more complex system of relative issuer incentives and disincentives to payment. This system of disincentives is tied to the contract and not solely or predominately to the issuer's senior unsecured rating. *Since the promise has been transformed, the legitimate expectation of a hybrid investor can, or should, no longer be directly compared with the expectation of the holder of a traditional security of the same issuer.*

The SVO's concerns are heightened when we consider that newer hybrid securities differ widely in how they blend debt, preferred and/or common characteristics, the different and complex legal mechanisms that govern the rights of the parties and the different legal and regulatory regimes they are meant to appease. Not only are hybrids not similar to the issuer's traditional securities but they are also not similar to each other. We agree with the view that no two hybrid structures are identical or contain the same risk and cost.¹

D. OBSERVATIONS

There is a limited amount of data available on the performance of newer hybrid securities. At the same time, there are novel differences between newer and previous hybrids and preferred securities. Against this backdrop the

**FIGURE 1. BAYER AG CREDIT STABILITY
(YIELD V. TREASURY BENCHMARK, BASIS POINTS)**



issue is whether the use of notching and subordination captures all risks in hybrids.

If the statistics underlying NRSRO ratings were strictly applicable to deferral risk in hybrids we would expect to see evidence that the risk of deferral correlates solely with default risk or significant deteriorations or improvements in credit quality (changes in credit quality = changes in probability/risk of default). However, NRSRO literature² documents that regulators in the US, Japan and Germany have directed banks to defer hybrid coupons even in cases where the banks have been in compliance with regulatory capital standards. At least one NRSRO “expects to see a higher incidence of coupon deferrals and suspensions on hybrid securities of financial services companies in the future, as the amount of issuance grows and when the financial services industry experiences a cycle of weaker performance (emphasis added).”³ The question is whether this higher incidence of deferral is adequately captured in notched down ratings.

If the statistics underlying NRSRO ratings were strictly applicable to deferral risk in hybrids, we would also not expect to see a clear price divergence in the market in the response of equity content securities and that of traditional debt securities to perceived shifts in issuer credit quality beyond that suggested by their place in the capital structure. A recent article on European hybrid securities⁴ highlights behavior of the securities of Bayer Group during the time of its 2006 takeover offer for Schering AG (Figure 1) This

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¹ The Wall Street Journal, *U.S. Banks Seek Ways to Enhance Hybrid Formula*, 07/05/2006.

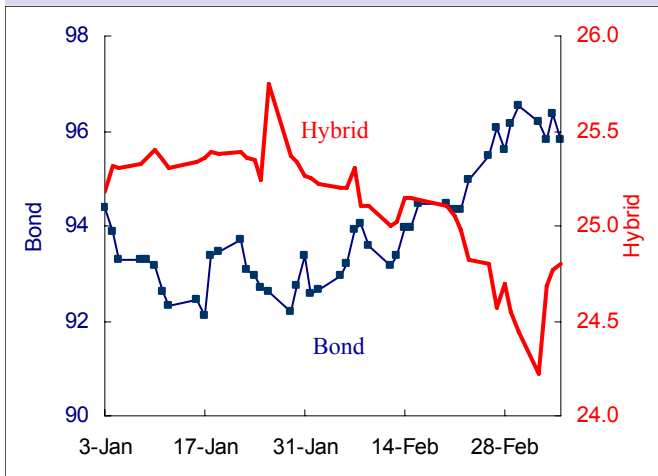
² See, S&P, *Financial Services Criteria: Equity Credit for Bank and Insurance Hybrid Capital, A Global Perspective*, Feb 2006, for a detailed analysis of these instances of deferral.

³ Ibid

⁴ See Bloomberg, *Hybrid Bonds Suffer Worst of Debt, Equity Convergence*, June 6, 2006.

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FIGURE 2. DISCOUNT IN BOND AND HYBRID PRICES NEGATIVELY (-88%) CORRELATED

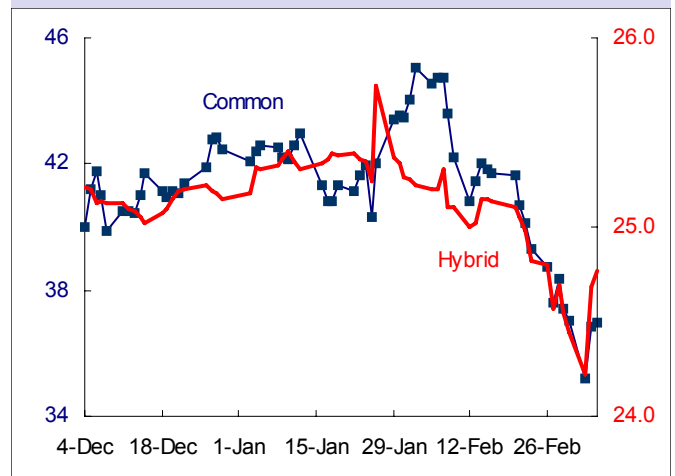


documents the reaction to *potential* shifts in the credit quality of an issuer of hybrids and the consequent performance of the issuer's traditional and hybrid securities. The SVO's subsequent research shows that the credit spread on Bayer's hybrid issue (Baa2, CUSIP EF025831) widened from 165bp on 20 June to 225bp on 26 June, back down to 160bp on 5 July, out to 200bp on 13 July before settling back down to 165bp in early August. The credit spread on a Bayer senior subordinate issue (A3, CUSIP EF433734) of similar tenor traded in an 80bp to 85bp range over the same period. The market reaction simply reflects that major acquisitions are event risks. However, in this instance, the hybrid issue bore the event risk on behalf of the senior subordinated issue. The point is that it is not clear that the disproportional burden of event risk carried by this hybrid is captured in the credit rating of Bayer.

The performance of the Countrywide (CFC) hybrid, under moderately stressful conditions, suggests the need for a closer structural comparison between older and newer hybrids and preferred. More data and study is needed before one can safely assume that historical performance of hybrid and preferred are adequate proxies for hybrid performance over a longer period or during more difficult credit environments.

Though there are strict limits to what can be inferred from limited case study samples, CFC provides an opportunity to observe how hybrid securities behave relative to other securities in a capital structure under more stressful conditions than have prevailed during the last several quarters. CFC placed a \$1.3-billion hybrid issue in October 2006 (CUSIP #222388209). The security was rated Baa3 by Moody's and BBB+ by S & P with Moody's

FIGURE 3. HYBRID AND CFC COMMON PRICES DISCOUNT OF MORTGAGE PROBLEMS (80%) CORRELATED



rating based on a two notch discount to CFC's Baa1 senior rating. The hybrid security achieved basket D (75% equity / 25% debt) treatment in Moody's matrix: meaning 75% of the issue is treated as common equity when rating CFC's more senior issues. The holders of the hybrid security have an undivided interest in Countrywide Capital V (a SPV) that holds 30 years junior subordinated notes from CFC with matching cash flows and deferral provisions. Proceeds from the notes service the hybrids. The hybrid represents a claim on an SPV, not CFC. In an involuntary liquidation, all claims on CFC senior to the notes that the SPV holds have to be settled in full before any value flows to the SPV. As part of a series of communications to the market to update performance guidance in February of this year, Countrywide announced that mortgages were performing more poorly than previously assumed.

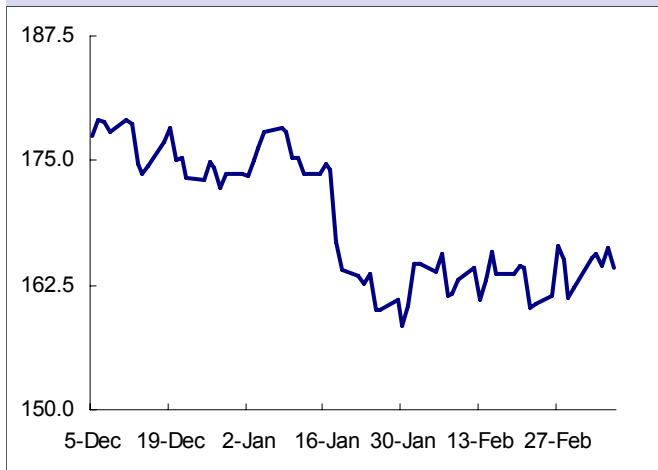
Figure 2 shows that the hybrid outperformed one of its bonds through most of January. The character of relative performance changed toward the end of January. Through most of February, the hybrid and bond moved in the opposite direction. Since the beginning of the year, the hybrid has not been particularly correlated with the bond. The correlation is a negative 88%, meaning that during this year more often than not, the hybrid and bond moved in opposite directions.

Figure 3 compares the hybrid with CFC common stock. Apparently, stock investors had not fully discounted the implications of mortgage deterioration and needed to recalibrate as news of poorer than anticipated performance came out. The hybrid and stock have tracked closely. The hybrid followed the stock lower in February. Since the

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FIGURE 4. CFC BOND MORE CORRELATED TO US TREASURY (YLD VS. TSY BENCHMARK, BASIS POINTS)



beginning of the year, the hybrid and CFC stock have been 80% correlated, quite strongly especially given the independence of hybrid and bond price action.

Figure 4 shows the credit spread of the reference CFC bond (CUSIP #22238HAR1). The credit spread tightened from about 175bp through January to the low 160s in February. Bond investors apparently do not believe that portfolio performance problems will become grave enough to threaten their position. The steady credit spread implies that the CFC bond is quite strongly correlated to the Treasury benchmark. The hybrid on the other hand is more strongly correlated to a residual claim.

We also find support for the SVO's analytical position in the conclusion reached by NRSROs⁵ that historical rating transition statistics data would have to be significantly refined before it could be used to assess the likelihood of the credit quality erosion needed to trigger non payment on the hybrid. One practical challenge noted in the report was that the interpretation of the transition data was made difficult because over an extended period of time a significant percentage of all ratings are withdrawn. We agree with those NRSROs⁶ who have noted that the rating for hybrid securities would transition much faster than the issuer's corporate ratings. The question is whether

transition speed of hybrids will be materially different than for traditional preferred securities and whether this difference represents a material shortcoming of notching procedures otherwise adequate for traditional preferred securities.

E. CONCLUSION

The regulatory mandate of the NAIC includes assessment of the solvency of insurers. NRSRO ratings of hybrid securities are meant to reflect default and recovery risks. Ratings of hybrids do not adequately address market risk, event risk, extension risk and other equity like risks that could adversely affect the value of the security (and thus insurer solvency) in circumstances far short of default. A separate process is needed to consider the degree of issuer financial flexibility in not making payment under a contract. The choice made by the NAIC is classification analysis. The primary regulatory objective of classification is identifying the primary characteristics of securities and assigning the securities to one of three RBC categories: bonds, preferred securities, or equity. Classification methodologies may not be perfect because specific equity-like risks of hybrids are not always clear; some features are not comparable across securities, some features may only present a risk under certain circumstances and some features may result in a hybrid that provides more equity-like benefit in certain circumstances than common equity itself. But classification analysis is one tool the NAIC can use to fulfill its regulatory mandate to assure the solvency of insurers.

⁵ Standard & Poor's Ratings Services, S&P Will Not Implement Alternative Rating Approach To Hybrid Capital Issues, May 8, 2006. See also comments by Moody's representatives on the conference call held November 28, 2006 and entitled Request for Comment - Rating Preferred Stock and Hybrid Securities. In response to a series of questions Moody's analysts said: "We ... have a study ... on the dividend omissions of preferred stock ... published in 1998 ... discuss(ing) actual historical ... dividend omission for preferred stock covering the period 1980-1998 (but this study) had very few non-cum preferred stock in it, ... the majority were cum-preferred ... We're working on (a new study) but we don't have final result to share at this point. ... One of the problems ... is that we had a different ratings for preferred stock between 1973 and 2001 ... and then in 2001 we switched to the long term rating scale for preferred stock so it's going to be ... a little bit messy because of the switch in the rating scale ... Unfortunately the work we're doing is really still examining the historical data which is largely a discussion of the performance of traditional, preferred in the United States and most of the investor interest ... in this proposal seems to be focused on the hybrids ..."

⁶ Standard & Poor's Ratings Services, May 8, 2006, Criteria: Assigning Ratings to Hybrid Capital Issues.



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