CAT Bonds: Tax Treatment of an Innovative Financial Product

The derivative feature embedded in catastrophe bonds permits transfer of insurance risk to the capital markets and requires a careful analysis of its tax consequences.

STEVEN KAPLAN and GUILLAUME LEFEBVRE

The October 2002 U.S. House Financial Services Committee's hearing on risk-linked securities stressed Congress' concern about the capacity of the insurance marketplace. The hearing also underscored Congress's preoccupation with facilitating the transfer of insurance risks to the capital markets. Large reinsurers and insurers face the need to remove catastrophic risk from their balance sheets and transfer this risk to the capital markets, possibly at lower cost. This has become increasingly important after the September 11th terrorist attacks, as reinsurance companies do not have the capacity to take on any more risk. The attacks caused an estimated $40 billion in insured losses, a significant portion of which were reinsured. Additionally, as reinsurance rates have risen and reinsurance capacity has tightened, the capital markets have become an attractive alternative for the transfer of risk. The product known as "CAT bonds" is the major vehicle providing for risk transfer to the capital markets.

Steven Kaplan is a Senior Manager, and Guillaume Lefebvre a Manager from the New York office of Deloitte & Touche LLP. They are members of the Global Capital Markets, Financial Products and Transactions Tax Group.
The authors want to thank Jeffrey Callender, Partner at Deloitte & Touche LLP and Head of the Global Capital Markets Tax Group, and Lawrence Zeff, Managing Director at American Express for their invaluable comments.

Catastrophe, or "CAT" bonds were designed as a technique of alternative risk transfer, to help property-casualty insurance companies manage their exposure to natural disasters such as earthquakes, hurricanes, typhoons, and tornados, by transferring these risks to the capital markets. Structured as corporate bonds, CAT bonds utilize special formulas that require the bondholders to forgive or defer some or all payments of interest and/or principal if actual catastrophe losses surpass a specified trigger. When the triggering event occurs, the insurance or reinsurance company that sponsored the issuance of the bonds can pay claims to its policyholders with the funds that would otherwise have been available to pay the CAT bondholders.

CAT bonds are attractive to investors because they yield a rate of return significantly higher than market rates, and because they constitute non-correlated portfolio assets which permit investors to enjoy additional diversification in their portfolios.[1] Investors in CAT bonds usually include insurance companies, reinsurance companies, mutual funds, hedge funds, banks, and money managers and their institutional clients. Several insurers and fund managers have set up CAT bond funds.

CAT bonds are attractive to issuers because they provide a significant market for risk transfer, they eliminate the reinsurer's credit risk,[2] they establish a forward price on the cost of reinsurance,[3] and they provide a flexible structure which allows for an efficient adaptation to the ceding insurer's needs.[4]

CAT bonds are now viewed as a relatively stable source of reinsurance. Over the last four years, the global catastrophe risk market has stood at a fairly constant volume of approximately $1 billion per year. However, with the anticipated rise in global reinsurance rates, the volume of CAT bond issuances could rise.

TYPICAL CAT BOND STRUCTURE

Insurance or reinsurance companies willing to use CAT bonds as a mean to transfer catastrophic risk to the capital markets normally sponsor the establishment of an offshore reinsurance special purpose vehicle (SPV), which generally is a special purpose reinsurance company holding a local insurer license.[5] (See Figure 1, Typical CAT Bond Structure, p. 7.) The SPV is typically registered in the Cayman Islands or in Bermuda.[6] Offshore entities are used for legal, regulatory capital, and tax reasons, the primary tax reason being the avoidance of risk of double taxation within the SPV.[7] These offshore entities are registered reinsurance companies with minimal regulatory capital requirements that have the ability to write insurance or reinsurance contracts and issue securities treated as such and not as reinsurance policies. From an accounting and rating perspective, it is important that the SPV not be consolidated with the ceding insurer or reinsurer.[8] Accordingly, in the same manner as many collateral debt obligation (CDO) transactions, the ceding insurer or reinsurer appears only as sponsor of the transaction. Usually, all of the SPV's issued and outstanding shares are issued for a nominal amount and are held by an offshore charitable trust unaffiliated with the ceding insurer.[9] In order to avoid consolidation on the part of the ceding company, it is also possible to issue equity tranches that are of the order of 3% of the deal.[10]

The SPV is generally a limited liability company that is tax-exempt under the laws of the offshore jurisdiction.[11] The SPV is treated as a corporation for federal income tax purposes. Steps must be taken to ensure that the SPV is not deemed to be engaged in a U.S. trade or business for tax purposes.[12]

The ceding insurance company agrees to pay a future stream of premiums to the SPV in return for a reinsurance contract to cover an identified portfolio of its catastrophe exposure.[13] The SPV issues the CAT bonds. The SPV's obligation to pay accrued interest and/or repay principal of the CAT bonds is reduced or varies in circumstances where the SPV would be required to make payments under the reinsurance contract. At the same time as the issuance of the CAT bonds, the SPV invests the proceeds of the issuance in high-grade debt securities. These securities are usually placed in a collateral account or in a trust and are used as collateral for the SPV's obligations with respect first to the reinsurance contract, and then to

---

1 CAT bonds carry a yield dependent on the probability of a grand-scale natural disaster. Therefore, they present no significant correlation to the stock market or interest rates. Indeed, there is no covariance between a CAT bond and a corporate bond. Diversifying into CAT bonds by substituting equally rated CAT bonds for corporate bonds can reduce overall portfolio market risk since CAT bonds have no market risk. Further, investors can maximize their diversification possibilities by investing in CAT bonds managing the exposure to different kinds of disasters.

2 The reinsurer's credit risk is a significant concern for the reinsurance of catastrophic exposure since the occurrence and the size of the losses consecutive to natural disasters are not easily predictable.

3 Depending on the occurrence of the risk events, pricing in the reinsurance market is extremely cyclical. Premiums for the same risks can vary from 1.5% to 10% within a few years.

4 The wave of consolidation in the reinsurance market has left a limited choice of counterparties. Therefore, it is not always easy to find a counterparty willing to reinsure certain catastrophe risk exposures in certain regions or countries.

5 It should be noted that in 1999, for the first time, a non-insurance company sponsored the issuance of CAT bonds. Such CAT bonds provided Oriental Land Co. Ltd., parent company of Tokyo Disneyland, with financial protection and contingent funding for five years against earthquakes in designated areas of Japan. The California Earthquake Authority ("CEA") and certain utilities recently used CAT bonds as a mean of transferring catastrophic risk to the financial markets.

6 Sometimes, the SPV is domiciled in Ireland or in the Netherlands if the insurance company is located in a country, like France, that would levy a withholding tax on reinsurance premiums paid to companies located in tax havens.

7 To date, only a couple of insurers have set up a securitization structure utilizing a U.S.-based reinsurance SPV. Accordingly, this article focuses on the tax treatment of CAT bondholders rather than issuers.

8 It is also possible to use an alternative structure in which the offshore reinsurance subsidiary of an investment bank, writes the reinsurance contract with this insurance company covering the catastrophic risk. Then, the unrelated reinsurance subsidiary cedes a large part of the reinsurance to a sponsored offshore SPV, who sells the CAT bond to investors.

9 The charitable trust generally provides that the eventual proceeds remaining after repayment of CAT bondholders will be paid to a non-profit charity.

10 Note that, as a result of Enron Corporation's catastrophic meltdown (pardon the pun), the Financial Accounting Standards Board (FASB) is in the process of proposing new standards, designed to define which transactions would be off-balance sheet and which would be consolidated for accounting purposes. Specifically, SPVs that lack "independent economic substance" would have to be consolidated with the primary beneficiary, if any. The "independent economic substance" test, although not a bright-line test, would be interpreted to mean less than 10% third-party equity - compared to an existing 3% rule. See FASB, *FASB Interpretation No. 46* (January 2003, available for download at www.fasb.org/int46.shtml).

11 If the SPV were established in the U.S., it would probably be subject to tax at its level as a corporation since it may be treated as an insurance company. Section 7701(a)(3). Reg. 301.7701-2(b)(4).

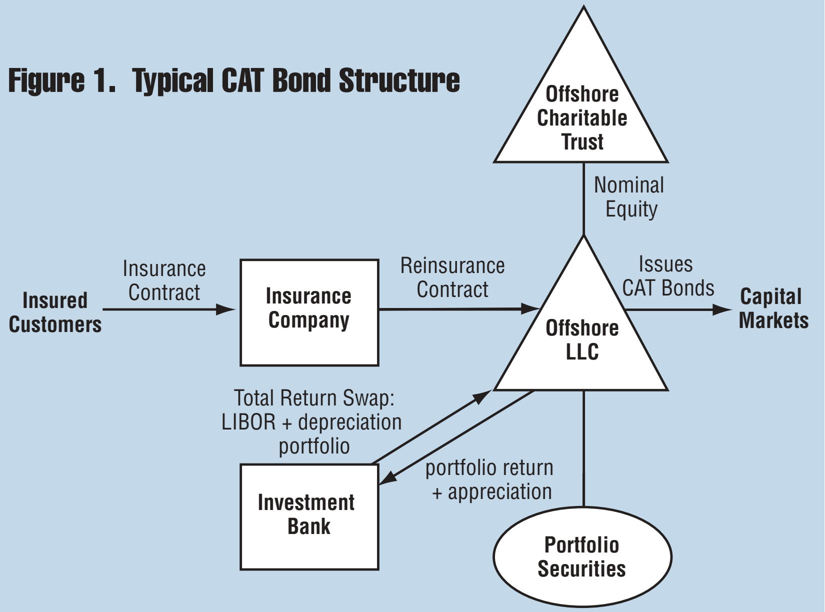
12 These steps might include conducting the SPV's business through its offshore office (if any), not maintaining an office or personnel in the U.S., negotiating, entering into, and executing the reinsurance contract, the total return swap, and other agreements outside the United States. Note that if the SPV were engaged in a U.S. trade or business, it would be subject to federal income tax on its profits and to an additional branch profits tax at the SPV level.

13 It should be noted that the federal excise tax of 1% is levied on premiums paid by the ceding insurer to the SPV when the risks transferred cover the United States. Section 4371(3). An increasingly important practice in the industry is to use a swap instead of an insurance contract between the ceding insurance company and the SPV.

the CAT bonds. Accordingly, all or a portion of the net proceeds from the sale of the CAT bonds is collateral to the full extent of the SPV's obligations under the reinsurance contract. The premiums paid by the insurance company, along with the interest on the high-grade debt securities, go directly to the CAT bondholders through the interest payments on the CAT bonds. Accordingly, CAT bondholders get a share of both the premiums and any losses according to formulas set in the CAT bonds.[14] CAT bondholders bear credit risk in the event that the offshore SPV is unable to pay the interest or principal on the CAT bonds.

The eventual risk of loss with respect to the securities used as collateral of the SPV's obligations under the CAT bonds is generally hedged by a total return swap that is entered into with an investment bank. Under this swap, the SPV receives LIBOR minus a slight spread and payments equal to any depreciation of the high-grade securities. At the same time, the SPV pays to the swap counterparty the investment earnings on the collateral securities in addition to any gain on these securities. This total return swap enables the SPV to convert the interest yield on the assets used as collateral to a spread to LIBOR that is consistent with the accrual of interest on the CAT bonds. Further, it enables the SPV to receive the principal amount of the securities used as collateral regardless of the amounts actually realized upon their eventual sale.

Figure 1. Typical CAT Bond Structure



FEATURES OF CAT BONDS

CAT bonds are structured so that interest payments will be reduced in whole or in part upon the occurrence of a trigger event. Most of the CAT bonds seen in the market have been issued in several tranches. Some of the tranches put the principal amount partially or totally at risk. Tranches that put the principal at risk usually pay an average of 250 to 750 basis points above LIBOR. (In the past, some principal at risk tranches of CAT bonds have offered coupons with a spread of more than 1,300 basis points over LIBOR.) CAT bonds with fully protected principal have historically returned as much as 100 to 300 basis points over LIBOR.

In some cases, the loss experience of the ceding insurer determines whether or not a trigger event has occurred. For example, if the ceding insurance company suffers hurricane claims in any given year of $1 billion or more, a trigger event will occur. In other cases, the trigger may be tied to an aggregate industry-wide exposure index which measures overall industry experience in a particular region.[15] The index is tailored to track the targeted region and the targeted risk event. Finally, the contingency can be linked to the occurrence of natural parameters of certain catastrophes provided by government geological and meteorological agencies, rather than any measure of actual insured losses. Typical examples of these parametric triggers are the magnitude and location of an earthquake, the central pressure of a hurricane, or the wind speed. It should be noted that these CAT bonds are designed so that losses on the CAT bonds are calculated by combining these parametric variables with the value of the insurance company's risk portfolio in the specific region or the value of a notional risk portfolio. A loss estimate on

[14] It should be noted that the ceding insurer sometimes retains a limited layer of the underlying insurance risk.

[15] Risk is analyzed by research firms like Applied Insurance Research, EQECAT, Guy Carpenter, Milliman & Robertson, Property Claims Services, Risk Management Solutions, or Tillinghast Towers Perrin. These companies provide modeling support to insurance-linked debt obligation issuances. They compile, report, and standardize data on property and casualty insurance losses suffered in different parts of the United States and the world. The indices developed by these companies permit the tracking of insured losses resulting from catastrophic events within different regions over specified periods of time.

the CAT bonds can thus be reached very quickly using this methodology as it avoids the long, complex, and morally hazardous process of claims processing.[16] This calculation is based on models relying on average losses for disasters with such parametric measures.

The contingency is structured so that the CAT bondholders will suffer a loss of the interest and/or the principal when the targeted catastrophic event occurs and, therefore, when the SPV is required to pay under the reinsurance contract. The triggering contingency is usually tailored to track the occurrence of catastrophic events in a specific geographic region of the United States or of a particular foreign country, or globally. The contingency is designed to track the occurrence of specific catastrophic events (hurricane, earthquake, typhoon, windstorm, hail, or a combination thereof) or, eventually, other insurance risks (claims related to all perils, aviation-related claims, marine drilling-related claims, or other types of related claims to the extent it is possible to model the underlying risk). In general, the trigger to put the full principal at risk is higher than the trigger to put the interest payments or a portion of the principal at risk. Many CAT bonds provide for several cumulative or alternative triggers.

In general, the trigger to put the full principal at risk is higher than the trigger to put the interest payments or a portion of the principal at risk.

Originally, many of the CAT bonds had short-term maturities of one year or less. However, the recent CAT bonds offerings provide for an average of three-to-five-year maturities due to the use of parametric triggering contingencies. It should be noted, however, that some CAT bonds have terms of up to 10 years.

TAX CLASSIFICATION OF CAT BONDS

Due to the lack of specific guidance with respect to the nature and the treatment of CAT bonds, their classification for U.S. federal income tax purposes remains uncertain and highly dependent on the particular features of each tranche of each issuance.

The first classification issue with respect to new financial products is whether they can be bifurcated into instruments for which there is already guidance as a means of analyzing the instrument. Indeed, bifurcation of principal at risk tranches of CAT bonds might make logical sense.[17] However, the strength of authorities supporting the proposition that a financial instrument can be bifurcated may not seem solid enough to sustain such position with respect to principal at risk tranches of CAT bonds.[18] Accordingly, it seems unclear whether a court or the IRS would be successful in bifurcating a principal at risk tranche of CAT bonds into a debt and a swap, or ultimately something else.

The second classification question with respect to any insurance-related financial product is whether such instrument could qualify as an insurance contract (i.e., insurance policy), and thus could potentially trigger the application of the insurance tax regime to certain CAT bondholders.[19] Qualification as an insurance contract rather than a capital markets instrument seems unlikely. Indeed, CAT bonds are different from insurance contracts for several reasons.[20] First, the concept of indemnification of loss does not appear to be present in CAT bonds linked to industry-wide exposure indexes or parametric measures. Indeed, the SPV may not necessarily (even though it is likely) suffer a loss from the underlying reinsurance contract when the contingency is triggered and vice versa. Further, the CAT bond investors make no ongoing undertaking or promise to make an additional payment in the future to anyone. The investment transaction

[16] Even though catastrophic event risks are highly exogenous, insurance companies generally may exert some degree of control over their losses. For example, insurance companies can often mitigate their losses through aggressive mitigation measures such as loss, cost, and payment monitoring. Accordingly, the benefit of such measures may not inure to the insurance company once such catastrophic risk has been transferred. As a result of the CAT bond protection, the insurance company may undertake fewer mitigating efforts, thus increasing potential losses. Contrary to triggers based on the specific underwriting loss of the insurance company or an index of losses of the insurance industry, such moral hazard does not exist when the contingency is based on parametric triggers.

[17] Principal at risk tranches of CAT bonds could be economically bifurcated in several ways. First, it could be argued that a CAT bond could be bifurcated into a callable variable-rate debt plus an insurance contract, assuming this second embedded feature qualifies as an insurance contract. An alternative bifurcation would be to split the CAT bond into a callable variable-rate debt and a swap construed on a model similar to a credit default swap. Finally, another bifurcation would be to split the CAT bond into a callable fixed-rate debt and a swap designed according to the same model as credit default swaps and requiring periodic payments indexed to LIBOR.

[18] See Farley Realty Corp., 279 F.2d 701 (2nd Cir. 1960); Richmond Fredericksburg & Potomac R.R. Co. v., 528 F.2d 917 (4th Cir. 1975) to be compared with Helvering v. Richmond, F&P Co., 90 F.2d 971 (4th Cir. 1937); Reg. 1.446-3(g)(4); Reg. 1.1275-4(c); FSA 200148039 and ILM 199952015 to be compared with FSA 199940007 (see also FSA 200130010, FSA 200131015, and FSA 200150012) and FSA 200111011.

[19] See Section 831 and Subchapter L.

is complete upon purchase. Additionally, CAT bonds are more freely transferable than insurance contracts. Moreover, an insurance contract generally does not trigger an upfront payment of the eventual insurance proceeds. Finally, the risk distribution element does not seem present since there is no increase in the predictability of the CAT bondholder's average loss. Therefore, CAT bonds should most likely not be insurance contracts and their holders should most likely not be deemed to be insurance companies for tax purposes. Accordingly, because of the inability of CAT bonds to be bifurcated, CAT bonds look more like some type of a financial instrument than an insurance contract.

It follows that the classification of CAT bonds for tax purposes must be scrutinized under the various criteria utilized in distinguishing debt from equity.[21] Although, courts and rulings have not established any comprehensive rule for determining the proper tax classification of an instrument, they have identified various factors to look at in resolving the question.[22] Among the factors that have been identified in determining whether a transaction is debt or equity include the following:

1. Whether there is an unconditional promise to pay a fixed sum on demand or on a specified date.
2. The presence or absence of a fixed maturity date.
3. Whether there is a specified rate of interest.
4. Whether the instrument is subordinated to the general creditors of the issuer.
5. The adequacy or inadequacy of capitalization of the issuer.
6. The identity between creditors and the equity interest holders.
7. The presence or absence of a sinking fund, a security to provide repayments, and/or protective provisions.
8. The intent of the parties.
9. Whether there is a right to enforce the payment of principal and interest.
10. Whether the instrument allows participation in the success of the venture.
11. Whether there is a right to participate in the management of the issuer.
12. The label of the instrument.
13. The treatment of the instrument for non-tax purposes.

Whether an instrument represents indebtedness or an equity investment for federal income tax purposes depends on the facts and circumstances of each case. No particular fact or criterion is conclusive.[23] Further, weight given to any factor depends on all the facts and circumstances.[24] In addition, it is important to note that Section 385(c) requires holders to report their income consistently with the issuer's treatment, unless they provide an explicit statement regarding inconsistent treatment on their tax return.

Because of the inability of CAT bonds to be bifurcated, CAT bonds look more like a financial instrument than insurance.

Unconditional Promise to Pay. A debt is generally defined as an unqualified obligation to unconditionally pay a sum certain on demand or on a specified date regardless of the debtor's income or lack thereof.[25] The criterion of the existence of an unconditional promise to pay a sum certain will generally be met by principal protected tranches of CAT bonds. Even though such criterion could be read as excluding principal at

---

[20] For the criteria of the definition of an insurance contract, see Reg. 1.831-3(a); Reg. 1.801-3(a)(1); Bowers v. Lawyers Mortgage Co., 285 U.S. 182 (1932); W.H. Luguire Burial Association Co., Inc., 102 F.2d 89 (5th Cir. 1939); Helvering v. LeGierse, 312 U.S. 531 (1941); Epmeier v. U.S., 199 F.2d 508 (7th Cir. 1952); SEC v. Variable Life Annuity Life Ins. Co., 359 U.S. 65 (1959); Allied Fidelity Corp., 66 TC 1068 (1976), *aff'd,* 572 F.2d 1190 (7th Cir. 1978), *cert. den.*, 439 U.S. 835 (1978); Steere Tank Lines, Inc. v. U.S., 577 F.2d 279 (5th Cir. 1978); Group Life & Health Ins. Co. v. Royal Drug Co., 440 U.S. 205 (1979); Union Labor Life Ins. Co. v. Pireno, 458 U.S. 119 (1982); Stearns-Roger Corp. v. U.S., 774 F.2d 414 (10th Cir. 1985); Clougherty Packing Co., 811 F.2d 1297 (9th Cir. 1987); Gulf Oil Corp., 914 F.2d 396 (3d Cir. 1990); Sears, Roebuck and Co., 972 F.2d 858 (7th Cir. 1992); Rev. Rul. 71-404, 1971-2 CB 260; Rev. Rul. 83-172, 1983-2 CB 106; Rev. Rul. 88-72, 1988-2 CB 31, *clarified by* Rev. Rul. 89-61, 1989-1 CB 75; Rev. Rul. 92-93, 1992-2 CB 45.

[21] For an enumeration and analysis of the indicia considered in distinguishing debt from equity, see generally William T. Plumb, Jr., "*The Federal Income Tax Significance of Corporate Debt: A Critical Analysis and a Proposal*", 26 Tax L. Rev. 369 (1971). See also Notice 94-47, 1994-1 CB 357; Estate of Mixon v. U.S., 464 F.2d 394 (5th Cir. 1972); Hardman v. U.S., 827 F.2d 1409 (9th Cir. 1987); Texas Farm Bureau v. U.S., 725 F.2d 307 (5th Cir. 1984); and Laidlaw Transportation, Inc., TCM 1998-232.

[22] See Section 385(b)(1) through (5); Notice 94-47, 1994-1 CB 357; Rev. Rul. 85-119, 1985-2 CB 60; Fin Hay Realty Co. v. U.S., 398 F.2d 694 (3rd Cir. 1968); Estate of Mixon v. U.S., 464 F.2d 394 (5th Cir. 1972); Texas Farm Bureau v. U.S., 725 F.2d 307 (5th Cir. 1984); Stinnett's Pontiac Service, Inc., 730 F.2d 625 (11th Cir. 1984); Roth Steel Tube Co., 800 F.2d 625 (6th Cir. 1986); Hardman v. U.S., 827 F.2d 1409 (9th Cir. 1987); Laidlaw Transportation, Inc., TCM 1998-232.

[23] John Kelley Co., 326 U.S. 521 (1946).

[24] Notice 94-47, 1994-1 CB 357.

[25] Johnson, 108 F.2d 104 (8th Cir. 1939); Gilbert, 248 F.2d 399 (2nd Cir. 1957), *cert. den.,* 359 U.S. 1002 (1959); Notice 94-47, 1994-1 CB 357.

risk tranches of CAT bonds from the definition of debt, numerous authorities have stated that contingent principal debt can be treated as a debt for tax purposes.[26] More precisely, it has been held that contingency of ultimate payment upon availability of earnings or other events outside the borrower's complete dominion is not a conclusive factor against the existence of a debt, at least if there is a reasonable expectancy that full payment will occur. Further, a meaningful criterion of the economic reality of a purported debt is whether the projected net cash flow is adequate to retire the obligation according to its terms.[27] However, the IRS tends to consider that the presence of a sum certain payable at maturity is a condition *sine qua non* of debt treatment.[28] In the case of principal at risk tranches of CAT bonds, the occurrence of the contingency is outside the SPV's complete dominion and control.[29] Even though the principal amount repayment contingency generally supports equity characterization, it should not be given excessive weight due to the likelihood of repayment (likelihood of repayment of the principal amount of principal at risk tranches of CAT bonds is generally more than 99%) and the absence of dominion and control of the SPV over this contingency.[30]

A relatively fixed or ascertainable maturity date also tends to characterize an instrument as debt.

Maturity Date. One of the most important factors in a debt-equity analysis is a provision for a fixed time when the creditor is entitled to require payment of the principal.[31] A relatively fixed or ascertainable maturity date also tends to characterize an instrument as debt.[32] Generally, the principal of CAT bonds is repaid on a specified maturity date. Certain CAT bond tranches provide for a scheduled maturity date and an extended maturity date. With respect to the few CAT bond tranches providing for the deferral of interest (generally on principal protected tranches), the ability of the SPV to defer interest payments (but not indefinitely) is a factor that could support equity characterization. However, even though the discretionary ability of the issuer to defer interest payments is a factor that could support equity characterization, courts have generally held that a deferral feature will not prevent a security from being treated as debt in cases where deferred interest is due and payable no later than a certain fixed date in the future.[33] Nevertheless, it is important to note that the presence of a maturity date does not guarantee recognition as indebtedness, while the absence of such maturity date is in most cases conclusive.

Interest Rate. Absence of interest rate or low interest rate, which is not uncommon in the case of "loans" by shareholders, tend to classify the instrument as equity.[34] CAT bonds always provide for a specified interest rate. Further, even though interest payments may depend upon the available income of the SPV, the risk to defer or can-

---

[26] Indianapolis Power & Light, 493 U.S. 203 (1990); United Gas Improvement Co., 240 F.2d 312 (3rd Cir. 1956); Ortmayer, 265 F.2d 848 (7th Cir. 1959); Gounares Bros. & Co. v. U.S., 292 F.2d 79 (5th Cir. 1961); Harlan v. U.S., 409 F.2d 904 (5th Cir. 1969); Wilson, 51 TC 723 (1969); Milenbach, 106 TC 184 (1996); Jamison v. U.S., 297 F.Supp. 221 (N.D. Cal. 1968). See also Prop. Reg. 1.263(g)-4(c) Example 5; Prop. Reg. 1.1092(d)-1; Reg. 1.1275-4(b)(4)(vi) Example 1; Reg. 1.1275-4(b)(8)(iv) Example 2; Reg. 1.1275-4(b)(9)(i)(F) Examples 1 and 2; Reg. 1.1275-6(h) Example 6.

[27] Isidor Dobkin, 15 TC 31 (1950), *aff'd,* 192 F.2d 392 (2nd Cir. 1951); Gilbert, 248 F.2d 399 (2nd Cir. 1957), *cert. den.* , 359 U.S. 1002 (1959); Arlington Park Jockey Club v. Sauber, 262 F.2d 902 (7th Cir. 1959); American-La-France-Foamite Co., 284 F.2d 723 (2nd Cir. 1960), *cert. den.*, 365 U.S. 881 (1961); Burr Oaks Co., 43 TC 635 (1965), *aff'd,* 365 F.2d 24 (7th Cir. 1966), *cert. den.,* 385 U.S. 1007 (1967); Berkowitz v. U.S., 411 F.2d 818 (5th Cir. 1969).

[28] In taking such position, the IRS heavily relies on Gilbert, 248 F.2d 399 (2nd Cir. 1957), *cert. den.* , 359 U.S. 1002 (1959), and Johnson, 108 F.2d 104 (8th Cir. 1939). See FSA 199940007 (revised by FSA 200130010), FSA 200131015, and FSA 200150012.

[29] This would be the case even when the trigger is the ceding insurance company's own losses.

[30] To date, no CAT bond purchasers have lost their principal, to the best of our knowledge.

[31] Section 385(b)(1); John Kelley Co., 326 U.S. 521 (1946); Schmoll Fils Associated, 110 F.2d 611 (2nd Cir. 1940); H.P. Hood & Sons, 141 F.2d 467 (1st Cir. 1944); Wood Preserving Co. v. U.S., 347 F.2d 117 (4th Cir. 1965).

[32] Nassau Lens Co., Inc., 308 F.2d 39 (2nd Cir. 1962); Cleveland Adolph Mayer Realty Co., 6 TC 730 (1946), *rev'd on another issue*, 160 F.2d 1012 (6th Cir. 1947); P.F. Scheidelman & Sons, Inc., TCM 1965-31.

[33] Equitable Life Assurance Society, 321 U.S. 560 (1943); John Kelley Co., 326 U.S. 521 (1946); Commissioner v. H.P Hood & Sons, 141 F.2d 467 (1st Cir. 1944); Talbot Mills, 146 F.2d 809 (1st Cir. 1944); Tomlinson v. 1661 Co., 377 F.2d 291 (5th Cir. 1967).

[34] National Carbide Co., 336 U.S. 422 (1949); Reed, 242 F.2d 334 (2nd Cir. 1957); Jewell Ridge Coal Co., 318 F.2d 695 (4th Cir. 1963); Sherwood Memorial Gardens, Inc., 350 F.2d 225 (7th Cir. 1965); Jones, 357 F.2d 644 (6th Cir. 1966); Fin Hay Realty Co. v. U.S., 398 F.2d 694 (3rd Cir. 1968); Curry v. U.S., 396 F.2d 630 (5th Cir. 1968), *cert. den.* , 393 U.S. 967 (1968); Road Materials, Inc., 407 F.2d 1121 (4th Cir. 1969).

cel interest payments is not discretionary or under the SPV's control.

Subordination. Subordination can be an important factor for the debt-equity characterization. Shareholders are usually less protected than creditors, since shareholders are subject to the creditors' prior right to complete satisfaction of their obligations in the distribution of the company's assets.[35] Nevertheless, in terms of relative standing in distribution of the corporation's assets, the holder of subordinated debt is in a position not significantly different from that of a preferred stockholder.[36] In many cases, courts have found that subordination to general creditors to share the assets in the event of liquidation was a factor strongly negating the existence of a debtor-creditor relationship.[37] On the contrary, in other cases, courts have considered that subordination was not fatal except in combination with other substantial adverse factors.[38] Accordingly, subordinated debts have been recognized as debts for tax purposes in a large number of instances.[39] Priority order varies from one issuance to another. In any case, payment of principal and interest (even from the collateral) on the CAT bonds is subordinated to the ceding insurer's rights under the reinsurance contract. Sometimes, it is also subordinated to the counterparty's rights under the swap, and eventually to any liability to third parties (who sometimes are given a senior interest over any creditor including the ceding insurer and the swap counterparty). This means that sometimes CAT bondholders are junior only to the ceding insurer, and in some other cases, they are senior only to the charitable trust. Recent issuances have provided for a class of regular CAT bond tranches senior to a class of CAT bond preferred shares representing approximately 3% of the total issue price and being senior only to the charitable trust.

Thin Capitalization. Thin capitalization is also an important factor in deciding whether an instrument constitutes debt or equity for tax purposes. The inadequacy of the equity capital of a corporation may be an element to consider in extreme situations such as a nominal stock investment or an obviously excessive debt structure.[40] Courts analyze debt-equity ratios in light of the corporation's needs for any further capital, so that the same ratio can be thin in some cases and sufficient in other cases.[41] Courts have recognized that industry practices may justify any ratio, even though an amount of equity capital that would be inadequate to launch a corporation in one industry may be quite sufficient by the standards of another, and that within one industry, the standard

Payment of principal and interest on CAT bonds is subordinate to the ceding insurer's rights under the reinsurance contract.

may vary with the type of operation planned.[42] Particularly, in the case of a finance company, the amount of equity capitalization is not very relevant so long as the issuer has adequate assets to service its debt.[43] Thus, instruments issued by thinly capitalized issuers have been upheld as debt for tax purposes.[44] Further, it is important to note that, except in certain extreme

---

35 Section 385(b)(2); Notice 94-47, 1994-1 CB 357; Meridian & Thirteenth Realty Co., 132 F.2d 182 (7th Cir. 1942); Crawford Drug Stores v. U.S., 220 F.2d 292 (10th Cir. 1955); U.S. v. Henderson, 375 F.2d 36 (5th Cir. 1967); Tomlinson v. 1661 Co., 377 F.2d 291 (5th Cir. 1967); Slappey Drive Indus. Park v. U.S., 561 F.2d 572 (5th Cir. 1977).

36 Schmoll Fils Associated, 110 F.2d 611 (2nd Cir. 1940); Foresun, Inc., 348 F.2d 1006 (6th Cir. 1965).

37 Helvering v. Richmond, 90 F.2d 971 (4th Cir. 1937); Brinker v. U.S., 221 F.2d 478 (9th Cir. 1955); Sarkes Tarzian, Inc. v. U.S., 240 F.2d 467 (7th Cir. 1957); P.M. Finance Co., 302 F.2d 786 (3rd Cir. 1962); R.C. Owen Co., 351 F.2d 410 (6th Cir. 1965), *cert. den.* , 383 U.S. 967 (1966).

38 Commissioner v. H.P. Hood & Sons, 141 F.2d 467 (1st Cir. 1944); Kraft Foods Co., 232 F.2d 118 (2nd Cir. 1956).

39 John Kelley Co., 1 TC 457 (1943), *rev'd* 146 F.2d 466 (7th Cir. 1944), *rev'd* 326 U.S. 521 (1946); O.P.P. Holding Co., 76 F.2d 11 (2nd Cir. 1935); U.S. v. Title Guarantee & Trust Co., 133 F.2d 990 (6th Cir. 1943); Bowersock Mills & Power Co., 172 F.2d 904 (10th Cir. 1949); Harlan v. U.S., 409 F.2d 904 (5th Cir. 1969).

40 John Kelley Co., 326 U.S. 521 (1946); Notice 94-47, 1994-1 CB 357.

41 Brook, TCM 1964-285, *rev'd on another issue,* 360 F.2d 1011 (2nd Cir. 1966); Berkowitz v. U.S., 411 F.2d 818 (5th Cir. 1969).

42 Tomlinson v. 1661 Co., 377 F.2d 291 (5th Cir. 1967); Fin Hay Realty Co. v. U.S., 398 F.2d 694 (3rd Cir. 1968); Truschel, 29 TC 433 (1957); Scotland Mills, Inc., TCM 1965-48.

43 In P.M. Finance Co., 302 F.2d 786 (3rd Cir. 1962), the court noted that where the taxpayer is a finance company, a business in which sizable amounts of borrowed capital are customary, the ratio of debt to equity would not appear to be significantly high; Northern Indiana Public Service Co., 105 TC 341 (1995), *aff'd,* 115 F.3d 506 (7th Cir. 1997), where the court rejected the argument that a captive finance company issuing Eurobonds was inadequately capitalized on the ground that it has assets sufficient to service its debt. See also Liflans Co. v. U.S., 390 F.2d 965 (Ct. Cl. 1968) and Mulder Bros., Inc., TCM 1967-43 for the cases of corporations engaged in real estate, with limited working capital requirements and a reasonably predictable cash flow which were held able to carry a heavy debt burden.

44 Byerlite Co. v. Williams, 286 F.2d 185 (6th Cir. 1960); Truschel, 29 TC 433 (1957); Glenmore Distilleries Co., 47 B.T.A. 213 (1942); 250 Hudson Street Co., TCM 1946-112.

situations, such factors as thin capitalization, by which the reality of the expressed intentions of shareholder-creditors is tested, have little relevance where outside parties are involved.[45] Finally, debt-equity ratios are typically relied upon as a way of assessing credit risk, when there are no other better measures of the risk of nonpayment. Therefore, it should not be given much weight if the grade rating reflects an adequate capacity to repay the debt. As indicated above, many CAT bond SPVs have only a nominal amount of equity. However,

The source of funds for repayment of the principal of the CAT bonds is the principal amount of the collateral plus any swap receipts minus any swap payments.

CAT bond SPVs are financing companies and the predictability of the cash flows of the SPV and the CAT bond transaction exceeds 99%. It should also be noted that some SPVs issue "preferred shares", generally to the extent of 3% of the amount of all CAT bond tranches, and thus appear less thinly capitalized for purposes of the debt-equity analysis of the other tranches.

Stockholder/Creditor Identity. Identity between stockholders and creditors and the fact that purported debt is held in substantially the same proportions as corporate stock are generally viewed as affirmative evidences for treatment of purported debt as equity.[46] Except in certain extreme situations, this factor, as well as thin capitalization, by which the reality of the expressed intentions of shareholder-creditors is tested, have little relevance where outside parties are involved.[47] As explained above, there is no relationship between the SPV's shareholders and the CAT bondholders.

Security. The presence of security to provide repayments, a sinking fund, and/or protective provisions is generally analyzed as factors evidencing debt characterization. The taking of security to provide repayment is powerful evidence that a debt was intended, even if this security is only a junior lien.[48] However, the evidentiary weight of the taking of security to provide repayments is clearly vitiated if enforcement is not permitted until after senior debt has been fully satisfied.[49] Rights to receive payments under the reinsurance contract, rights to receive payments from the swap counterparty, and the collateral account (i.e., proceeds from the CAT bonds) are usually used as security for the payment of principal and interest on CAT bonds. Sometimes, all the rights and assets of the SPV are used as collateral except amounts representing the SPV's share capital. However, collateral aimed at securing the principal of CAT bonds is generally, in fact, subordinated to the payment of the SPV's other obligations under the reinsurance contract. Further, sometimes, it is even subordinated to the obligations under the swap, and eventually to any unsatisfied third party liabilities. The exact order of the subordination varies from one issuance to another. However, some CAT bond tranches sometimes have an exclusive right to collateral to the extent of a portion of their principal amount.

The absence of a sinking fund or some form of reserve to provide for the ultimate retirement of purported debt is often considered to be evidence of a lack of unconditional intent that the obligation will be repaid since repayment in a lump sum might require liquidation of essential assets.[50] CAT bonds generally provide for sinking funds. The source of funds for repayment of the principal of the CAT bonds is the principal amount of the collateral plus any swap receipts minus any swap payments. The source of funds for payment of interest is the swap receipts minus the swap payments, the premium received under the reinsurance contract and investment earnings from collateral.

The genuineness of an indebtedness may also be evidenced by protective provisions limiting the giving of mortgage, the incurring of other debts, or the payment of dividends while the purported debt is outstanding.[51] Usually, the sole purpose of the SPV is the issuance of the CAT bonds, the entering into the reinsurance contract and related agreements. Typical agreements

---

[45] Piedmont Co., 388 F.2d 886 (4th Cir. 1968); Truschel, 29 TC 433 (1957); Leach Co., 30 TC 563 (1958).

[46] Section 385(b)(5); Notice 94-47, 1994-1 CB 357; Gilbert, 248 F.2d 399 (2nd Cir. 1957), *cert. den,* . 359 U.S. 1002 (1959); Wachovia Bank & Trust Co. v. U.S., 288 F.2d 750 (4th Cir. 1961); P.M. Finance Co., 302 F.2d 786 (3rd Cir. 1962); Charter Wire, Inc. v. U.S., 309 F.2d 878 (7th Cir. 1962); Tyler v. Tomlinson, 414 F.2d 844 (5th Cir. 1969).

[47] Piedmont Co., 388 F.2d 886 (4th Cir. 1968); Truschel, 29 TC 433 (1957); Leach Co., 30 TC 563 (1958).

[48] Washmont Co. v. Hendricksen, 137 F.2d 306 (9th Cir. 1943); J.I. Morgan, Inc., 30 TC 881 (1958), *rev'd on another issue,* 272 F.2d 936 (9th Cir. 1959); Estate of Howes, 30 TC 909 (1958), *aff'd sub nom.,* Johnson, 267 F.2d 382 (1st Cir. 1959); Curry, 43 TC 667 (1965).

[49] Foresun, Inc., 41 TC 706 (1964), *aff'd*, 348 F.2d 1006 (6th Cir. 1965); Reef Co., TCM 1965-72, *aff'd,* 368 F.2d 125 (5th Cir. 1966), *cert. den.,* 386 U.S. 1018 (1967).

[50] Charter Wire, Inc. v. U.S., 309 F.2d 878 (7th Cir. 1962); Moughon, 329 F.2d 399 (6th Cir. 1964); National Farmers Union Serv. Co. v. U.S., 400 F.2d 483 (10th Cir. 1968); Tyler v. Tomlinson, 414 F.2d 844 (5th Cir. 1969); R.W. Specialties, Inc., TCM 1981-697.

normally require the SPV not to engage in any other insurance or reinsurance activities, undertake any other business, incur any indebtedness, or pay any dividends while CAT bonds are outstanding.

Intent. In determining whether an instrument is appropriately treated as debt, the intent of the parties is a highly significant, although not a determinative, factor.[52] However, in other instances, declarations that the parties intended to create debt instruments were considered to evidence only an agreement about mere form and, while admissible as evidence, have generally carried little weight.[53] Prospectuses of CAT bonds generally specify whether the issuer intends to treat the tranche as debt or equity for tax purposes.

Default. The right to force payment of the sum as a debt in the event of default is a very significant factor.[54] The right to sue for the amount in default and the presence of a clause accelerating the maturity of the entire principal tend to classify the instrument as a debt for this purpose.[55] In general, in the case of an event of default, CAT bonds are generally declared immediately due and payable, subject to any prior obligations of the SPV under the reinsurance contract, and sometimes under the swap and also eventually other third party liabilities.[56] Generally, principal at risk tranches of CAT bonds provide for a limited right to enforce payments of principal in case of a default that would also affect the payments to other parties (i.e., if the catastrophe occurs). In addition, the right to enforce or otherwise go after the collateral is exercisable only after the SPV's obligations under the reinsurance contract (and sometimes the swap, and eventually all other third party liabilities) have been satisfied or terminated.

Sharing Risk. It is a common attribute of a debt that the holder is entitled to interest thereon even though there are no net earnings from an entity or investment, whereas a preferred stockholder's right to currently receive income is dependent upon the existence of corporate earnings or surplus.[57] Sharing in the risk of loss and the opportunity for profit may impair creditor status.[58] Further, if the payment of interest on purported debt is dependent upon a discretionary determination by the board of directors, the debt will ordinarily not be recognized as such.[59] Courts analyzing high interest rate debt generally treat these instruments as

The right to enforce or otherwise go after the collateral is exercisable only after the SPV's obligations under the reinsurance contract have been satisfied or terminated.

debt except in extreme cases.[60] The return on CAT bonds is not officially dependent upon any existence of earnings or a discretionary determination by a board of directors. However, due to the anticipated cash flows of the CAT bond transaction, it is unclear whether certain tranches of CAT bonds would be

51 Baker Commodities, Inc., 48 TC 374 (1967), *aff'd on another issue,* 415 F.2d 519 (9th Cir. 1969), *cert. den.,* 397 U.S. 988 (1970).

52 Meridian & Thirteenth Realty Co., 132 F.2d 182 (7th Cir. 1942); Ragland, 52 TC 867 (1969), *aff'd,* 435 F.2d 118 (6th Cir. 1970); Geftman, 154 F.3d 61 (3rd Cir. 1988); Groetzinger, 87 TC 533 (1986).

53 Schnitzer, 13 TC 43 (1949), *aff'd,* 183 F.2d 70 (9th Cir. 1950), *cert. den.,* 340 U.S. 911 (1951); Crawford Drug Stores Inc. v. U.S., 220 F.2d 292 (10th Cir. 1955); Diamond Bros. Co., 322 F.2d 725 (3rd Cir. 1963); Donisi, 405 F.2d 481 (6th Cir. 1968); Road Materials, Inc., 407 F.2d 1121 (4th Cir. 1969).

54 Notice 94-47, 1994-1 CB 357; U.S. v. South Georgia Ry., 107 F.2d 3 (5th Cir. 1939); Gardens of Faith, Inc., 345 F.2d 180 (4th Cir. 1965), *cert. den.,* 382 U.S. 927 (1965).

55 Moughon, 329 F.2d 399 (6th Cir. 1964); Coleman Good Inc. v. U.S., 359 F.2d 434 (3rd Cir. 1966); National Farmers Union Serv. Co. v. U.S., 400 F.2d 483 (10th Cir. 1968).

56 However, CAT bondholders generally keep a right to enforce payments which might be significant since failure of swap payments by the swap counterparty could trigger failure of the SPV to make full principal repayments on CAT bonds. Further, due to the high interest paid on CAT bonds, in the case of failure of the premium payments or the swap payments, the SPV would likely be unable to make full payment of interest on the CAT bonds. Thus, this right to enforce payments might be important in the case of failure by the ceding insurer or the swap counterparty. Nevertheless, the right to enforce the payments is generally not subordinated in the case of CAT bond tranches with exclusive collateral (to the extent of a portion of the principal).

57 Pacific Southwest Realty Co., 128 F.2d 815 (9th Cir. 1942), *cert. den.,* 317 U.S. 663 (1942); Crawford Drug Stores v. U.S., 220 F.2d 292 (10th Cir. 1955); Lee Telephone Co., 260 F.2d 114 (4th Cir. 1958); Milwaukee & Suburban Transport Co., 283 F.2d 279 (7th Cir. 1960), *cert. den.,* 366 U.S. 965 (1961).

58 Commissioner v. O.P.P. Holding Co., 76 F.2d 11 (2nd Cir. 1935); Commissioner v. Meridian & Thirteenth Realty Co., 132 F.2d 182 (7th Cir. 1942); U.S. v. Title Guarantee & Trust Co., 133 F.2d 990 (6th Cir. 1943); Gilbert, 248 F.2d 399 (2nd Cir. 1957); Jewell Ridge Coal Co., TCM 1962-194, *aff'd,* 318 F.2d 695 (4th Cir. 1963).

59 Green Bay & Western R.R., 147 F.2d 585 (5th Cir. 1945); Wetterau Grocer Co., 179 F.2d 158 (8th Cir. 1950); Wilbur Security Co., 31 TC 938 (1959), *aff'd,* 279 F.2d 657 (9th Cir. 1960); Gokey Properties, Inc., 34 TC 829 (1960), *aff'd,* 290 F.2d 870 (2nd Cir. 1961); Berkowitz v. U.S., 411 F.2d 818 (5th Cir. 1969).

60 Tank Truck Rentals, Inc., 356 U.S. 30 (1958); Arthur R. Jones Syndicate, 23 F.2d 833 (7th Cir. 1927); Wiggin Terminals, Inc. v. U.S., 36 F.2d 893 (1st Cir. 1929); Brown-Rogers-Dixson Co., 122 F.2d 347 (4th Cir. 1941); Dorzbach v. Collison, 195 F.2d 69 (3rd Cir. 1952); Lubin, 335 F.2d 209 (2nd Cir. 1964).

seen as participating in the success and failure of the venture.[61]

Voting Rights. Most of the judicial lists of criteria for distinguishing equity from debt list participation in management, and voting power, as factors to be considered.[62] However, the absence of voting rights is generally not given much weight in distinguishing debt from equity, even when the creditors are outside parties, since preferred stock, like debt, frequently does not carry any voting rights.[63] CAT bondholders do not have any right to participate in management or voting power of the SPV. However, such absence of participation in the management of the SPV should not be given too much weight.

Preferred Status. The label itself (particularly "preferred stock" label), while not conclusive, may be a substantive distinction, since the corporate law attaches certain consequences to preferred stock which the parties cannot control by agreement.[64] Principal at risk tranches of CAT bonds are most often labeled as notes. However, several recent issuances have provided for a class of CAT bonds labeled as (redeemable) preference shares, generally representing 3% of the total issue price of all the tranches.

Book Treatment. The book treatment of open accounts as liabilities of the corporation is relevant and entitled to consideration as evidence of intention to create a debt.[65]

Finally, a more subjective criterion could eventually be taken into account, especially by the IRS, in an attempt to characterize CAT bonds as equity or debt. Indeed, since the SPV is not engaged in a U.S. trade or business, or does not otherwise earn "effectively connected income", it does not have the motivation of increasing deductions by obtaining a debt characterization in order to reduce the amount of taxable income subject to federal income tax.

It follows from the above that because of its highly factual analysis, the classification of tranches of CAT bonds can be a very close call, and thus must be carefully scrutinized.

IF TREATED AS EQUITY

So far, the majority of principal at risk tranches of CAT bonds have been treated as equity for tax purposes. When principal at risk tranches of CAT bonds are treated as equity interests in the SPV, interest payments on the CAT bonds are treated as dividends to the extent of the SPV's current or accumulated earnings and profits. In addition, no dividends received deduction is available to corporate holders since these dividends are not U.S. source due to the absence of a U.S. trade or business.

Principal at risk tranches of CAT bonds that are treated as equity interests in the SPV for federal income tax purposes are generally treated as stock in a passive foreign investment company (PFIC) for federal income tax purposes.[66] This means that CAT bondholders are subject to the PFIC rules with respect to the receipt of amounts denominated as interest on the CAT bonds and with respect to computation of gain or loss on disposition of the CAT bonds. Under the PFIC rules, CAT bondholders would be subject to a penalty tax at the time of the sale of, or receipt of an "excess distribution" with respect to the CAT bonds, unless such holders elect to be taxed on their pro rata share of the SPV's earnings pursuant to a "qualified electing fund" ("QEF") election.[67] In general, a holder would receive an "excess distribution" with respect to the CAT bonds if the amount of the distribution exceeds 125% of the average distribution with respect to the CAT bonds during the three preceding taxable years (or shorter period during which the CAT bondholders held the CAT bonds).[68] Additionally, any gain recognized on the sale or other disposition of the CAT bonds would be characterized as ordinary income and would be treated as an excess distribution and allocated pro rata over the CAT bondholder's entire holding period.[69] Further, the amount of gain allocated

---

[61] It should be noted that even though unlikely, CAT bondholders may not have a participation in the success of the venture in certain cases since the reinsurance contract and the CAT bond trigger may not be perfectly tied. Further, even though unlikely, the SPV may have to pay under the reinsurance contract (and thus not being profitable) without the CAT bonds being triggered.

[62] Notice 94-47, 1994-1 CB 357; Tomlinson v. 1661 Co., 377 F.2d 291 (5th Cir. 1967); J.S. Biritz Construction Co., 387 F.2d 451 (8th Cir. 1967); Fin Hay Realty Co. v. U.S., 398 F.2d 694 (3rd Cir. 1968).

[63] Commissioner v. Schmoll Fils Associated, 110 F.2d 611 (2nd Cir. 1940); Commissioner v. H.P Hood & Sons, 141 F.2d 467 (1st Cir. 1944); Green Bay & Western R.R., 147 F.2d 585 (5th Cir. 1945).

[64] Notice 94-47 (1994-1 CB 357); U.S. v. South Georgia Ry., 107 F.2d 3 (5th Cir. 1939); Dayton & Michigan R.R., 112 F.2d 627 (4th Cir. 1940); Pacific Southwest Realty Co., 128 F.2d 815 (9th Cir. 1942), *cert. den.,* 317 U.S. 663 (1942); Crawford Drug Stores Inc. v. U.S., 220 F.2d 292 (10th Cir. 1955); Miele, 56 TC 556 (1971), *aff'd,* 474 F.2d 1338 (3rd Cir. 1973); Ragland Inv. Co., 52 TC 867 (1969), *aff'd,* 435 F.2d 118 (6th Cir. 1970); Zilkha & Sons, Inc., 52 TC 607 (1969).

[65] Notice 94-47, 1994-1 CB 357; Byerlite Co. v. Williams, 286 F.2d 285 (6th Cir. 1960).

[66] Section 1297(a).

[67] Section 1291(a).

[68] Section 1291(b).

[69] Section 1298(b)(1).

to prior taxable years would be subject to tax at the highest marginal taxable rate in effect for such years. Moreover, an interest charge (the "penalty tax") would be calculated on taxes that are deemed deferred during the period the holder owned the CAT bonds by virtue of their allocation to prior taxable years. The interest charge is equal to the applicable interest rate imposed on underpayments of U.S. federal income tax from such prior tax years.

Alternatively, a holder of shares in a PFIC such as the SPV may elect to make a QEF election if the PFIC provides its holders with certain information as to its earnings.[70] A CAT bondholder that makes a QEF election on or before the due date for filing its U.S. federal income tax return for the first year in which it held the CAT bonds is required to currently take into account its pro rata share of the PFIC's ordinary earnings and net capital gains for each taxable year regardless of whether any actual distribution was made or received.[71] Further, a CAT bondholder's basis in the shares is generally increased to reflect such taxed but undistributed income and is not subject to the excess distribution regime.[72] Many SPVs formed for the purpose of issuing CAT bonds provide the necessary information to their U.S. holders so that they can make a QEF election, if desired. Nevertheless, some SPVs do not disclose such information to their holders, thus preventing these holders from making a QEF election.

There is a risk that the SPV might be a CFC for federal income tax purposes if the U.S. shareholders collectively own more than 25% of the SPV. Thus, CAT bondholders owning a 10% or greater interest in the SPV may be required to include in income, on a current basis, their pro rata share of undistributed earnings and profits of the SPV. However, these U.S. shareholders would not be taxed on the actual interest paid by the SPV on the CAT bonds. Income from the reinsurance contract would probably constitute income attributable to non-same-country insurance risk. Further, if (i) the SPV is a CFC, (ii) the gross related person insurance income of the SPV exceeds 20% of its gross insurance income, and (iii) 20% of the voting power or value of the SPV's equity is owned by persons that are directly or indirectly insured or reinsured by the SPV, then the related person insurance income from direct insurance of its U.S. equity holders would be included in income by U.S. persons. This income would be determined as if distributed proportionately to such holders. Because of the diversity of its investors in the tranches of CAT bonds treated as equity and the absence of an equity stake owned by the ceding insurance company, CAT bond SPVs usually do not constitute CFCs. Additionally, the SPV does not have any related person insurance income since the ceding insurer is generally unrelated.

IF TREATED AS DEBT

It would seem logical to apply the contingent payment debt instruments ("CPDI") regulations to tranches of CAT bonds that are considered debt for tax purposes. In general, the CPDI regulations apply the noncontingent bond method based on the issuer's comparable yield as of the issue date in order to take the payments on the CPDI into account, where the CPDI is issued for money or publicly traded property. Under this method, interest on debt securities must be taken into account whether the amount of any payment is fixed or determinable during the tax year.[73]

However, the application of the CPDI rules might not be as obvious as it seems. Indeed, a payment on a CPDI is not a contingent payment merely because of a contingency that, as of the issue date, is either remote or incidental.[74] An aggregation rule provides that if each one of multiple contingencies has a remote likelihood of occurring, but considering all contingencies together there is a greater

> **Because of the diversity of its investors in the tranches of CAT bonds treated as equity and the absence of an equity stake owned by the ceding insurance company, CAT bond SPVs usually do not constitute CFCs.**

[70] Section 1293(a).

[71] It is important to note that proposed special inclusion rules for PFIC preferred shareholders exist. Under these rules, if a PFIC preferred shareholder (i.e., the holder of a mezzanine CAT bond tranche that is treated as equity) makes a special preferred QEF election, its pro rata share of the PFIC's earnings and profits is based on the payment terms of the security. A preferred QEF election is logical since preferred stocks issued by PFICs do not present the abuse potential the PFIC rules are directed at. However, this special election is more complex than the regular QEF election. Prop Reg. 1.1293-2 and 1.1295-2.

[72] Sections 1293(d) and 1291(d)(1).

[73] Reg. 1.1275-4(b)(2).

[74] Reg. 1.1275-4(a)(5). Reg. 1.1275-2(h)(2). See Reg. 1.1275-2(h)(3) with respect to the incidental character: a contingency payment is treated as incidental if the potential amount of the payment under all reasonably expected market conditions is insignificant in relation to the total expected payments on the debt security. A contingent timing of a payment is incidental if the potential difference in timing is insignificant under all reasonably expected market conditions. Reg. 1.1275-2(h)(2). The contingency of CAT bonds is generally not incidental.

[75] Reg. 1.1275-2(h)(2), (4).

than remote likelihood that one will occur, none of the contingencies is remote.[75] In general, an issuer's determination that a contingency is remote or incidental is binding on holders unless the holder properly discloses that it is taking an inconsistent position.[76]

The issue of the remoteness of the contingency of a CAT bond is somewhat problematic. Usually, the likelihood of the occurrence of the contingency that puts the principal at risk on most principal at risk tranches of CAT bonds is less than 1%. Accordingly, although it is far from clear whether a 1% contingency would be considered remote there is a risk that the IRS might consider such a contingency to be remote. This would mean that the contingency could be disregarded for purposes of applying the CPDI regulations. In contrast, the likelihood of the occurrence of the contingency that puts the interest at risk on principal protected tranches and principal at risk tranches is generally higher than the likelihood of the occurrence of the contingency that puts the principal at risk on principal at risk tranches. Therefore, depending on the likelihood of the occurrence, the contingency on certain tranches could be regarded as not remote. Determination of the remoteness of a contingency of a tranche must be carefully analyzed on a case-by-case basis.

If it is considered that the CPDI rules do not apply to a tranche of CAT bonds, the variable rate debt instruments ("VRDI") rules are likely to come into play. In general, floating rate debt securities that meet all the requirements set forth in Reg. 1.1275-5 are subject to the VRDI regime. Reg. 1.1275-5(a)(5) states that a VRDI must not provide for any principal payments that are contingent within the meaning of Reg. 1.1275-4(a). If under Reg. 1.1275-4(a)(5), the CAT bond contingency is viewed as remote, the CAT bond could be treated as a VRDI provided the other conditions necessary to apply the VRDI regime are met.

The application of the VRDI rules to CAT bonds raises an issue under Reg. 1.1275-5(a)(2) which states that the issue price of a VRDI must not exceed the total noncontingent principal payments by more than an amount equal to the lesser of (i) 0.15 multiplied by the product of the total noncontingent principal payments and the number of complete years to maturity; or (ii) 15% of the total noncontingent principal payments. The problem is that CAT bonds, in certain cases, may be viewed as having limited noncontingent principal payments so that this provision could be read as preventing the application of the VRDI regime. However, the treatment of a remote contingency as a noncontingency applies for purposes of Section 1275 as a whole.[77] Thus, CAT bonds providing for a remote contingency would not seem to be considered contingent for this purpose and the adjective "noncontingent" seems to be read meaninglessly as a redundancy of Reg. 1.1275-5(a)(5). This means that this adjective would be read as including remotely contingent principal payments in "noncontingent principal payments" for purposes of Reg. 1.1275-5(a)(2).

The other conditions necessary to apply the VRDI regime generally seem to be met by CAT bonds that provide for a remote contingency. The floating rate provided by CAT bonds is likely to be regarded either as a qualified floating rate or an objective rate.[78]

Consequently, CAT bonds providing for a remote contingency would be converted into fixed rate debt securities, applying the general OID rules to them.[79] CAT bonds would be regarded as VRDIs providing for stated interest at least annually, at a single qualified floating rate or objective rate, and unconditionally payable in cash.[80] Accordingly, all stated interest would be treated as qualified stated interest. Further, amounts of qualified stated interest and OID (if any) would be determined under the rules for fixed rate debt, with a fixed rate deemed to have a value as of the issue date.[81] Qualified stated interest allocable to an accrual period would be increased or decreased depending on the amount of interest paid.

CONCLUSION

The fact that in the U.S. insurance companies must be taxed as corporations and that certain tranches of CAT bonds may be treated as equity (thereby denying any interest deduction for these tranches) are some of the main reasons explaining why almost all CAT bond issuances to date have been issued offshore.

In conclusion, it is crucial to carefully scrutinize the factual characteristics of each tranche of a CAT bond issuance in order to properly characterize such interest for U.S. tax purposes and increase the likelihood of successfully defeating any potential IRS challenge.

---

[76] Reg. 1.1275-2(h)(5).

[77] Reg. 1.1275-2(h)(1).

[78] Reg. 1.1275-5(b)(1); Reg. 1.1275-5(b)(2).

[79] Reg. 1.1275-5(e)(1).

[80] The interest paid on CAT bond tranches treated as VRDIs would be qualified stated interest since it is interest that is unconditionally payable in cash or in property. Reg. 1.1273-1(c)(1)(i). Interest is regarded as unconditionally payable if the debt instrument provides terms and conditions that make the likelihood of nonpayment a remote contingency (within the meaning of Reg. 1.1275-2(h)). Reg. 1.1273-1(c)(1)(ii).

[81] Reg. 1.1275-5(e)(2).