

Beyond Good and Evil Debt (And Debt Hedges): A Cost Of Capital Allowance System

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I. Introduction

A. Active Liability Management. When the U. S. tax rules governing interest expense were developed, corporate indebtedness, once incurred, tended to remain unchanged until repaid. Fixed-rate liabilities did not transmute themselves in midstream into floating-rate obligations (much less flip-flop from one currency into another) any more than tigers turned themselves into pumpkins when finished with their breakfasts. Even a decade ago, what we now think of as "liability management" was sufficiently modest in its development that a typical investment bank that advised corporate issuers on such matters assigned liability management advisory work to a group described as the "sinking fund" department.

More recently, however, both large and small companies have learned how to treat their cost of borrowing like any other business cost—as an item that can actively be managed as part of an overall business strategy. L. L. Bean, for example, is a well-known purveyor of quality merchandise for the second-home lifestyles of tax professionals across America, but is a decidedly small company from the perspective of Wall

Street. Nonetheless, L. L. Bean now regularly participates in the financial marketplace for interest rate hedging contracts, by purchasing interest rate caps to protect it from increases in interest rates during its annual pre-Christmas inventory buildup.¹

L. L. Bean is but one example of the increasing breadth, as well as depth, of the marketplace for interest rate hedging tools, including such traditional instruments as options, futures and forward contracts,² as well as interest rate

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¹ Quint, "Eliminating Risks of Rising Rates," *New York Times*, July 31, 1989, at D1, Col. 3. See note 3, *infra*, for a general description of interest rate caps. A useful discussion of the principles of interest rate hedging and the mechanics of the various instruments currently used for this purpose appears in *Management of Interest Rate Risk* (Boris Antl, ed.) (Euromoney 1988).

² An option is a contract that gives the holder the right, but not the obligation, for a specified period of time, to buy (a "call") or sell (a "put") a specified amount of the underlying property at a fixed or determinable price. Options with standardized terms are traded on securities and commodities exchanges; options with a wider range of terms are sold privately in the "over-the-counter" market. While options typically re-

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swaps, caps, floors and other "notional principal amount" contracts.³ The aggregate notional principal amounts of U. S. dollar interest rate swaps outstanding at the end of 1988 by itself totalled over \$1 trillion; when currency swaps and other notional principal amount products are included, the total was probably closer to \$1.5 trillion.⁴ The purpose served by this trillion-dollar marketplace in notional principal amount contracts lies at the heart of the dilemma examined in this article.

The development of sophisticated markets, first in forwards, futures and options in financial instruments, and more recently in notional principal amount contracts, has completely changed how a corporation views its own liabilities. By deftly combining these liability management tools, a corporation effectively can transmute the cash flows on any of its liabilities into the cash flows of any other form of liability that it can imagine—and can do so at any time during the life of a particular indebtedness. A corporation, for example, might borrow floating-rate Deutschmarks, immediately swap that loan into fixed-rate dollars, then later swap again into floating-rate dollars, and finally convert the cash flows into a fixed-rate Swiss Franc borrowing, all without affecting in any fashion its contractual relationship with its floating-rate Deutschmark lenders.

While notional principal amount contracts, as well as financial forwards, futures and options, now are commonly employed by corporations to effect the financial transmutation of their liabilities, the federal income tax rules governing these liability management tools generally (and notional principal amount contracts, in particular) remain fragmentary. In the case of notional principal contracts, for example, the existing guidance consists principally of basic (and result-driven) rules, such as the recent clarification of residence-based sourcing for notional principal amount contract income and expense (which is

(Footnote 2 continued.)

quire delivery of the underlying property, in some cases (such as options on stock indices or interest rate sensitive securities) settlement may be made in cash.

A futures contract is a standardized contract to purchase (a "long position") or sell (a "short position") for a fixed price a specified amount of the underlying property at a specified future date. Futures are entered into exclusively through an exchange, which operates to match up offsetting long and short positions, and to reduce each party's credit exposure. Unlike an option, a party typically pays no consideration upon entering into a futures contract; however, since a futures contract effectively obligates each party to perform, a party's risk of loss under a futures contract is unlimited. In order to manage this risk, the exchange requires each party to a futures contract to post security, or "margin," in an amount that is adjusted periodically to reflect increases or reductions in the value of the party's open positions. If a party does not wish to take or make delivery under its futures position, it typically will close out that position by entering into an offsetting futures position that automatically is netted by the exchange against its existing position.

A forward contract is the private market equivalent of an exchange-traded futures contract, and involves functionally equivalent rights and obligations. Because a forward contract is privately arranged, it may have more flexible terms than a futures contract, but also involves substantial credit exposure of each party to the other. While parties may deposit collateral to reduce this exposure, the variation "margin" system applicable to futures contracts does not exist in the private forward market. A party that wishes to close out its forward position can do so by (i) assigning its contract to a third party (usually with the consent of the contract's counterparty), (ii) entering into an offsetting forward contract with a new counterparty, or (iii) terminating its contract with the original counterparty.

For a general summary of the tax rules governing options, futures and forward contracts, see Kramer, *Taxation of Securities, Commodities and Options* (John Wiley & Sons, Inc. 1986).

³ A "notional principal amount" contract can be described generally as a private, contractual arrangement pursuant to which the parties agree to make periodic payments determined by applying a fixed or floating interest rate to a specified notional principal amount. The notional principal amount serves only as a reference for determining payments, and (with the exception of certain currency swaps) is not actually borrowed or loaned between the parties. The most common types of notional principal amount products are (i) interest rate or currency swaps and (ii) interest rate caps, floors and collars.

Under an interest rate swap, the parties agree to exchange for a specified period of time periodic payments measured by traditional interest rate formulae and based on the same notional principal amount. Typically, one party will make payments at a fixed rate, while the other party will make payments based on the level of a specified floating-rate index (e. g., 10 percent vs. the 6-month Treasury rate). A currency swap involves similar two-way payments between the parties, except that the payments are denominated in different currencies and typically reflect prevailing fixed interest rates for the stated currencies (e. g., 10 percent U. S. dollars vs. 6 percent Swiss francs). Swaps generally are used to insulate taxpayers from the risk of interest rate or exchange rate fluctuations in respect of assets held or obligations incurred by the taxpayer, and in that sense are analogous hedging tools to futures and forwards.

The economics of an interest rate cap, floor or collar, in contrast, more closely resemble a series of interest rate options. Under a typical interest rate cap, the purchaser pays an initial premium in exchange for the seller's agreement to make a series of payments equal to the excess on each payment date of a floating-rate index over a specified fixed rate, each as applied to a notional principal amount (e. g., the excess of the 1-year Treasury rate over 8 percent). If, on a scheduled payment date, the relevant floating rate is less than the specified fixed rate, no payment is made. An interest rate floor is the converse of a cap. A floor contract provides that the seller will make payments equal to the excess of a specified fixed rate over the level of the floating-rate index. An interest rate collar, as its name suggests, combines the purchase of a cap and the sale of a floor. The implicit sales price of the floor covers the cost of the cap, so that no initial premium payment is made. A floating-rate borrower might enter into a collar, for example, to limit the fluctuations in its cost of borrowing to the range of the collar. Like options generally, interest rate caps, floors, and collars are attractive to taxpayers that want to hedge against adverse rate movements without eliminating the potential to profit from favorable rate movements.

⁴ Quint, *supra* note 1.

intended to reduce U. S. withholding risks),⁵ and the limited timing principles of Internal Revenue Service Notice 89-21 (which is intended to curb certain perceived taxpayer abuses in the timing of the recognition of income or loss attributable to the payment of lump-sum amounts in respect of multi-year notional principal amount contracts).⁶

Active liability management raises a more fundamental tax problem, however, than the current fragmentary state of guidance as to the taxation of particular financial instruments. Our federal income tax system traditionally has analyzed the tax characteristics of an integrated bundle of positions in financial instruments by looking at each of these positions separately, without regard to their relationship to other positions held by the taxpayer.⁷ This article seeks to demonstrate that this approach produces distorted tax results—distortions that cannot readily be cured without rethinking the continued viability of a system of static tax analysis in an era of active liability management.

B. Interest Expense and the Cost of Debt Capital. The Internal Revenue Code cannot properly determine a taxpayer's net income unless the Code also can identify the cost of a taxpayer's debt capital. At its most fundamental, this exercise requires that a taxpayer's overall capital be divided between debt and equity—an undertaking that has received a great deal of attention over the years, both from the perspective of the normative distinction between debt and equity and from the perspective of perceived systemic biases encouraging corporate debt rather than equity capital formation.

Quite apart from the usual concerns raised with respect to leveraged acquisitions and recapitalizations, the phenomenon of sophisticated liability management introduces its own strains into the dividing line between debt and equity (or at least nondebt) instruments. When an issuer or investment bank, for example, designs a new security that is denominated as a debt instrument, but that provides for interest and/or principal payments contingent on factors not directly related to interest rate indices, the irreducible normative features of "indebtedness" become more difficult to discern.⁸ Moreover, as discussed in Part III.B, below, the issuer of such exotic securities typically converts its cash flows (using a variety of hedging tools) back to a synthetic "plain vanilla" debt instrument, achieving, from its perspective, merely a reduction in its all-in cost of funds. The fundamentally different economics of the total transaction from the perspective of investors, as contrasted to the issuer, in turn raises the question of whose perspective is the more relevant in determining whether the instrument should be characterized as indebtedness in the first instance.

At a second level, once a taxpayer's debt capital has been isolated, the annual cost of that debt capital must be determined, in order

to calculate the taxpayer's annual interest (i. e., cost of debt capital) expense. As a final step in determining a taxpayer's federal income tax liability, that annual expense must be subjected to the application of a wide range of special rules relating to the disallowance, capitalization, sourcing or characterization of interest expense.

Since 1982, a tremendous effort has been made by both Congress and the Treasury to develop sophisticated and accurate measures of the annual cost of a taxpayer's debt capital. With the conspicuous exception of the taxation of contingent debt instruments, that effort, embodied chiefly in Sections 1271-1278 of the Internal Revenue Code and the proposed Treasury regulations promulgated thereunder, in large measure has been successful—if one accepts as a premise that the appropriate measure of the cost of a taxpayer's debt capital is the yield on its borrowings. That premise, only recently indisput-

⁵ New Treasury Reg. § 1.863-7T generally treats income in respect of interest rate swaps, caps, floors and similar notional principal amount contracts as sourced by reference to the residence of the recipient of that income. This source rule, among other things, has the favorable effect of eliminating U. S. withholding tax concerns in connection with payments made by U. S. parties to non-U. S. parties under notional principal amount contracts. Notice 87-4, 1987-1 CB 416, the precursor to Reg. § 1.863-7T, provided similar residence-based source rules for U. S. dollar-denominated interest rate swap expense. These expense rules have been superseded in part by Reg. § 1.861-9T(b)(6) (described in Part III, below), which introduces new interest allocation rules for notional principal amount contracts and other transactions that alter the interest rate characteristics of a taxpayer's liabilities. For a general discussion of these source and withholding tax issues, see Kleinbard, Duncan and Greenberg, "U. S. Reduces Tax Risks for Swaps," *International Financial Law Review* (February 1987) at 26.

⁶ I. R. B. 1989-8, 23. Notice 89-21 effectively prohibits a tax accounting method that either includes the entire amount of such lump-sum payments as immediate income or defers the entire amount until termination of the contract, on the grounds such a method does not clearly reflect income. Instead, Notice 89-21 endorses the use of a tax accounting method that "properly recognizes such payment over the life of the contract." For a discussion of Notice 89-21, see Greenberg and Kelly, "Swaps and Caps: Clarifying U. S. Tax Rules," *International Financial Law Review* (June 1989); Solway and Zagarese, "IRS Explains the Treatment of Interest Rate Caps and Zero Coupon Swaps," 6 *Journal of Taxation of Investments* 305 (1989).

⁷ Certain deferral or disallowance provisions, such as the "straddle" rules of section 1092, create limited exceptions to this strict separate transactions proposition; even these special provisions, however, do not collapse the related positions into one net position, but instead treat them as two (or more) separate positions, each of whose existence influences the tax characteristics of the other. Moreover, the straddle rules are asymmetric, in that they operate to defer loss, but not gain.

⁸ Examples of such "indexed" debt securities include Salomon Inc.'s "Standard & Poor's Index Subordinated Notes" ("SPINs") (Prospectus Supplement dated July 29, 1986), Merrill Lynch & Co., Inc.'s "Dollar BILS" (Prospectus Supplement dated August 22, 1988) and Ford Motor Credit's "Reverse PERLS" (Prospectus Supplement dated May 6, 1987).

able, is now archaic in an environment of active liability management; we can now, for example, find ourselves calculating to the nearest basis point the yield on a taxpayer's fixed-rate U. S. dollar indebtedness when, as an economic matter, the taxpayer (at least this year) is a floating-rate Swiss Franc borrower. A taxpayer therefore may find itself deducting (or capitalizing, or allocating between U. S. and foreign sources, as the context requires) an amount that, while indisputably interest, is itself a poor measure of the taxpayer's cost of debt capital.

The tax problems raised by our current tax system's mismeasurement of the cost of a taxpayer's debt capital are both serious and pervasive. A few of these issues, such as the potential in some liability hedging transactions for ordinary income/capital loss whipsaws created by the Supreme Court's decision in *Arkansas Best*, have already been extensively considered elsewhere.⁹ Most such problems, however, have received virtually no attention at all. A sense of the problem can be obtained by thinking of the many instances in which the Internal Revenue Code imposes special rules on interest expense incurred in specified circumstance.¹⁰ These rules all are based on the unstated premise that a taxpayer's interest expense payable to creditors is the measure of its cost of debt capital—a premise that is simply untrue in the current environment of active liability management.

C. A Radical Solution. The foregoing discussion illustrates that our current federal income tax system is based on a false premise: that interest expense, by itself, is a fair measure of a taxpayer's cost of debt capital. This article therefore attempts to develop a more comprehensive approach to the taxation of the cost of debt capital. The article concludes, in effect, that a comprehensive solution itself could be designed most simply, and other systemic tensions in the Internal Revenue Code addressed, if that solution were applied, not simply to debt capital, but rather to all of a taxpayer's capital, debt and equity alike.

It is a now oft-observed maxim that every financial instrument raises three fundamental federal income tax issues: the *source* (domestic or foreign) of income or loss attributable to that instrument, the *character* (capital or ordinary) of that income or loss, and the *timing* of inclusion of that income or loss in determining the taxpayer's annual tax liability.¹¹ Of these three issues, timing questions have received the most attention recently. Accordingly, Part II of this article considers some selected timing issues raised by notional principal amount contracts and other liability management tools in the context in which those tools principally are utilized—as devices to hedge or otherwise transmute a corporate taxpayer's liabilities. The article does not purport to summarize the current state of the law in the area,¹² or even to offer much advice as to how, for example, to draft the forthcoming

timing regulations for notional principal amount contracts contemplated by Notice 89-21.¹³ Instead, accepting for purposes of argument current law's approach of analyzing separately each of a taxpayer's positions in a financial instrument, the article attempts to develop the thesis that the current mainstream methodology for resolving timing issues—what the article terms deconstructionism—is much less certain to yield useful results than its practitioners usually realize.

Even under a traditional position-by-position approach, the appropriate resolution of timing issues raised by liability management tools also requires sensitivity to the context in which those tools are utilized. Part III of this article sets out to demonstrate that context becomes even more relevant when analyzing the full gamut of tax consequences—including character and source issues—that turn (or should turn) on the accurate measure of a taxpayer's cost of debt capital.

Finally, Part IV of this article concludes that the contextual considerations developed earlier in the article lead inevitably to either of two radical solutions to the problem of accurately identifying a taxpayer's cost of debt capital:

⁹ See, e.g., Kleinbard & Greenberg, "Business Hedges After *Arkansas Best*," 43 *Tax Law Review* 393 (1988); Rudnick and Schenck, "The Tax Treatment of Interest Rate Hedges After *Arkansas Best*," 6 *Journal of Taxation of Investments* 22 (1988); Brewer, "'Best' Facts Make Bad Law," *Tax Notes* (April 18, 1988) at 403; Yang, "Impact of *Arkansas Best* on Some Types of Investments Remains Uncertain," *Journal of Taxation* (February 1989) at 106; Boyles, "The Supreme Court Kills the *Corn Products* Doctrine—But Will It Rest in Peace?" 66 *TAXES—The Tax Magazine* 723 (1988).

¹⁰ A few examples relevant to corporate taxpayers include Section 246A (debt incurred to carry dividend-paying stock), Section 263(g) (debt incurred to carry a straddle position), Section 263A (special capitalization rules), Section 265 (debt incurred to carry tax-exempt bonds) and Section 514 (debt-financed income of tax-exempt institutions).

¹¹ For a more detailed discussion of these issues as applied to hedging transactions, see, e.g., Kleinbard and Greenberg, *supra* note 9; Kleinbard, "Developments Affecting Transactions in the International Financial Markets," 16 *International Business Lawyer* 213 (May 1988); Kleinbard, "International Financial Transactions," *Tax Strategies for Corporate Financings and Refinancings: The New Financial Products* (PLI Series No. 260, 1988).

¹² For useful summaries of the current tax treatment of interest rate hedging tools, see Kau, "Taxation of Transactions Entered Into to Hedge Interest Rate Risk on Liabilities," *Tax Review Paper No. 110* (unpublished) (March 14, 1989); Rachleff and Solway, "Taxation of Derivative Financial Instruments," 6 *Journal of Taxation of Investments* 198 (1989). For a discussion of the tax treatment of certain nontraditional liabilities, see Hariton, "The Taxation of Complex Financial Instruments," 43 *Tax Law Review* 731 (1988). See also Showers and Blanton, *Hedging and Financing Strategies for the Corporate Borrower* (Salomon Brothers Inc. 1989).

¹³ A detailed examination of timing issues for notional principal amount contracts appears in New York State Bar Association Tax Section Committee on Financial Instruments, *Report on Tax Accounting for Notional Principal Contracts* (September 28, 1989).

(1) a full mark-to-market system for all corporate liabilities and related hedges or (2) a system that provides a standard annual "cost of capital" deduction that is not directly linked to a taxpayer's actual borrowing or hedging activities. As its title might indicate, the article ultimately concludes in favor of the second of these alternatives. In addition, the article suggests that such an account system can be simplified in its application, and at the same time usefully inform the current debate on the appropriate role of debt and equity in the corporate tax system, if it is formulated, not as a model of timing rules for the taxation of liabilities and liability hedges, but rather as a comprehensive model for the taxation, in effect, of the entire right-hand side of a corporation's balance sheet: what this article terms a Cost of Capital Allowance System.

The cost of capital allowance proposal is not novel, at least to economists, but in the past it generally has been considered in the context of issues raised by the differing treatment of corporate debt and equity.¹⁴ It is the author's hope that, by demonstrating that the Cost of Capital Allowance System can usefully resolve the otherwise intractable problems of accurately measuring the cost of a taxpayer's debt capital in an environment of active liability management, the proposal can gain credibility, not only as part of the current debate on the role of debt in our corporate tax system, but also as a real solution to a wide range of tax policy and technical issues confronting the capital markets.

For the sake of clarity, this article focuses on issues encountered by taxpayers in managing U.S. dollar-denominated liabilities. The article does not address in any detail the special problems of hedging foreign currency liabilities, or the appropriate tax treatment of liabilities incurred by financial institutions or other specialized taxpayers, such as banks or securities dealers. Finally, the article considers only the taxation of U. S. corporations; not even the author would maintain, for example, that his home mortgage interest deduction should be replaced by a Cost of Capital Allowance.

II. Internal Timing Issues: The Limits of Deconstruction

A. Deconstructionism. The previous discussion has implied that appropriate tax accounting rules for notional principal amount contracts and other liability management tools should allow the timing of income or loss recognition from those instruments to correspond in some fashion to the timing of expense deductions in respect of the liability being managed. Nonetheless, substantial energies have been devoted to developing separate timing rules for various types of liabilities and for the interest rate hedging tools used to manage the costs of those liabilities, without regard to the relationship between

the cash flows of the two. Since the analysts in question are both within and without the government, and the energies so expended have been prodigious, it is worth examining what we can expect to accomplish by pursuing this approach.

The favorite analytical device of the moment in developing timing rules for exotic financial instruments is bifurcation—or, more accurately, deconstruction—through which financial instruments of varying degrees of complexity are deconstructed into other, smaller financial instruments, which in turn are analogized to combinations of still smaller financial instruments, and so on, no doubt until we are confronted with the tax equivalents of muons, pions and quarks.¹⁵ Once having completed the deconstruction process, however, tax analysts, like their physicist counterparts, may be dismayed to find that the resulting particles themselves raise as many new issues as they resolve old ones.

An example of the limits of deconstructionism is presented by a straightforward convertible bond.¹⁶ At its simplest, a convertible bond might be deconstructed into a bond with a higher, "market" rate of interest, and a series of option premium payments from the investor back to the issuer (representing the difference between "market" rates and the stated interest on the convertible bond). A tax deconstructionist would argue that, the true identity of a convertible bond having thus been identified, the two component parts should be taxed accordingly.¹⁷ Under this approach, the issuer of a

¹⁴ See, e.g., Hatsopoulos, Krugman and Poterba, *Overconsumption: The Challenge to U. S. Economic Policy* (a report jointly sponsored by the American Business Conference and Thermo Electron Corporation), 1989, at 16; Antony, "Recognizing the Cost of Interest on Equity," *Harvard Business Review* (January-February 1982); "The Cost of Capital Consequences of Curbing Corporate Borrowing," Testimony of James M. Poterba before the Committee on Ways and Means of the Congress of the United States, May 16, 1989.

¹⁵ A recent example of tax deconstructionism, which, to its credit, largely concludes that the results are not terribly meaningful, is Hariton, *supra* note 12.

¹⁶ This article is not intended as a homily on the taxation of convertible or contingent debt instruments, although it is interesting to note that complex contingent debt instruments are often appealing to sophisticated prospective issuers precisely because they can be swapped back into "plain vanilla" obligations at attractive yields (due to arbitrage opportunities). Nonetheless, it is worth considering briefly what practical tax policy value is added by the deconstruction of a straightforward convertible bond, before considering the more exotic cases described below.

¹⁷ Debt instruments with "contingent" principal payments would be analyzed in a similar fashion, except that, where the contingency could either increase or reduce principal payments, the embedded option of a convertible would be replaced with an embedded cash-settlement forward contract (perhaps coupled with a deep out-of-the-money option to ensure that the investor never owes the issuer money at maturity). Similarly, an instrument that pays an above-market interest rate, but provides for a contingency that can only reduce the

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convertible bond would deduct interest at the higher "market" rate, with the excess above the rate actually paid to investors treated as nontaxable option premium until "exercise" or "lapse" of the implicit stock option.

The most obvious difficulty with the tax deconstruction of a convertible bond is that it presupposes an ability to determine with precision the market yield (and hence, price) of the "straight" bond (or, alternatively, option) which makes up one component of the convertible bond. In the case of a relatively small percentage of issuers that have similar classes of publicly-traded nonconvertible debt securities, such an exercise is feasible, but in many other cases it is not.¹⁸

A more interesting problem raised by this exercise in deconstructionism is the allocation of the implicit synergies of a convertible bond. The embedded option of a convertible bond is exercised, not by the delivery of cash, but rather by surrender of the "straight" bond—which, if it in fact were a "straight" bond, would have a value that fluctuated with interest rates.¹⁹ To which instrument—the bond or the implicit stock option—should we attach the value (whether positive or negative) inherent in this right (obligation?) to exercise the option solely by delivering the bond? Unless the inclusion in income of the implicit option premium payments perfectly offsets the implicit higher coupon on the "straight" bond (a result which certainly is not true under current law), the answer will affect the issuer's after-tax cost of issuing the instrument.

The final difficulty with this simple deconstruction exercise, as noted above, is the assumption that the tax timing rules for the deconstructed elements of a convertible bond are themselves well developed. In fact, particularly in the case of options, many longstanding timing rules recently have come under increasing scrutiny. Why, for example, is the writer of a three-year option permitted to defer any recognition of income from the receipt of option premium until the end of Year 3? The usual answer—the uncertainty of ultimate gain or loss—is plainly unsatisfactory in the financial area; a casualty insurer is similarly uncertain of its ultimate gain or loss from writing a three-year insurance policy, and yet is not permitted to defer all income recognition to the end of Year 3.²⁰ Should a different result be reached if the same issuer writes a one-year option and two "forward" options, one to commence at the beginning of Year 2, and the other at the beginning of Year 3? Or, as discussed further below, should every option be viewed as involving a loan attributable to the "prepayment" of option premium? It is not clear that there exist indisputable answers to all these questions, either in economics or metaphysics. If the taxation of a product as straightforward as an option can be questioned, can we hope to accomplish anything useful from unleashing a nation of tax professionals to rush headlong into a search for

one or more ultimate subatomic tax particles, from which all financial instruments can be said to be constructed?

B. Slipping and Sliding on the Yield Curve.

In the context of notional principal amount contracts, tax deconstructionism becomes much more sophisticated, but the conclusions are not necessarily incrementally more useful. Consider, for example, the taxation of an up-front payment (swap "premium") made to compensate a party for entering into an interest rate swap at an above-market fixed rate. After Notice 89-21,²¹ it plainly is appropriate to amortize that swap premium in such a manner as to produce a constant yield on the fixed-rate leg of the swap, as though that swap leg were a premium bond paying constant fixed-rate interest. Some analysts have argued, however, that the resulting constant income/expense inclusions are themselves non-economic.²² These analysts suggest that if a swap were deconstructed into a series of independent forward contracts, the prices of each forward contract would not be equal, but rather would reflect the shape of the forward yield curve, which typically is upwards-sloping.²³ Because the deconstructed cash flows of the swap leg do not economically resemble a debt security

(Footnote 17 continued.)

principal paid at maturity (i. e., the investor at most will receive back the issue price) could be deconstructed into a market-rate bond coupled with the issuer's purchase of a cash settlement put option. For a discussion of the potential confluence of tax rules governing convertible and contingent debt securities, see *A Practical Guide to the Original Issue Discount Regulations* (David Garlock, ed.) (Prentice Hall Law & Business 1989), Ch. 8.

¹⁸ Phrased differently, if market prices were always so easy to determine, we could eliminate much anxiety by adopting a universal mark-to-market regime for all liabilities and their hedges. As described below in Part IV, such a universal mark-to-market system would be surprisingly difficult to implement in practice.

¹⁹ Thus, a convertible bond is more accurately described as an option coupled with a "usable" bond.

²⁰ The article returns to this question in section II.C, below, in the context of the taxation of caps.

²¹ See *supra* note 6.

²² See, e. g., Kau, *supra* note 12, at 17.

²³ The classic "yield curve" is the curve determined by plotting on a straightforward X-Y graph the interest rates of U. S. Treasury securities (on the vertical axis) over their maturities (on the horizontal axis). The classic yield curve plots the interest rates of par coupon bonds (or, in the case of Treasuries that are sold on a discount basis, the bond-equivalent yield thereof). A "zero" yield curve plots the yields of zero coupon bonds over a specified maturity spectrum, rather than the rates of interest-bearing securities. Since, for example, a 10-year coupon Treasury carries a different interest rate than the yield on a 10-year zero coupon bond, the two curves are not identical, but their shapes are roughly similar. A "forward" yield curve would plot the forward prices over a specified maturity spectrum for forward contracts to deliver a specified Treasury security (e. g., a 30-year bond). Since forward prices are driven by current "cash" yields, as described below, the shape of the forward curve can be deduced from the classic yield curve.

with level coupon payments, these analysts argue, the use of a premium bond as an analogy for the amortization of swap premium cannot be correct.²⁴

Every interest rate swap, of course, can be deconstructed into many forward contracts, and the prices of individual forward contracts are not constant over different maturities. By the same token, a series of independent forward contracts can be reconstructed into a single, level-payment interest rate swap. These observations, while interesting, do not assist us very much in determining the timing of income or loss from a swap.

By way of comparison, every straight bond can be deconstructed in a series of zero coupon obligations. It is a truism that, if the zero coupon yield curve were both flat and equal to the yield at which the straight bond were issued, the issuer's resulting annual interest deductions would be precisely the same as its coupon expense.²⁵ Even in the real world, however, where the zero coupon yield curve is not flat, the resulting expense inclusions attributable to these deconstructed mini-zero coupon bonds will be close to the issuer's interest expense on its actual bond, because arbitrage opportunities will prevent the sum of the parts from differing too much from the whole.²⁶ That is, in a typical upwards-sloping yield curve environment, the lower yield on the shorter maturity mini-zero coupon bonds will be roughly offset by the higher yield on the longer maturity mini-zero coupon bonds. So long as the issuer's annual deductions equal the sum of the yields on all its mini-zero coupon bonds, the result will be closely commensurate to the coupon on its actual bond.²⁷

If tax deconstructionism does not change the tax results for an issuer (even if one looks at "real" market yields) when applied to recharacterize a straight coupon bond into a series of mini-zero coupon bonds, why should deconstructionism produce different results for a swap party when a plain vanilla swap is broken into a series of forwards? Two answers are possible: either the marketplace is inefficient, in which case large arbitrage profits should be available through forward-writing/swap-buying (or vice versa) strategies, or the tax timing rules for forward contracts are flawed.

Intuitively, most of us conceive of the yields (or price) reflected in a forward contract on a financial instrument (for example, a two-year forward contract to purchase 10-Year Treasury Notes) as indicative in some fashion of market sentiment as to future interest rate levels. In fact, however, that intuition is wrong: forward and futures prices for financial instruments are driven by current "cash" prices, plus the cost to carry that position to maturity of the contract (net, of course, of any coupon income earned on the underlying property during that period).²⁸ Arbitrage requires that result; if, for example, forward prices strayed too high, arbitrageurs would purchase the physical security and sell the forward contract, locking in an arbitrage profit

(and eventually driving the forward price back down to equilibrium).

Once the pricing of forward contracts is understood as representing, not any mystery of market sentiments, but rather a straightforward exercise in the calculation of an owner's net cost to carry, the logical shortcomings of current law's open taxation system for forwards become apparent. Consider, as a simplified example, the futures market in gold, which behaves for this purpose in a similar fashion to a financial instrument. On one day in August 1989, physical gold traded for \$368. A one-year futures contract traded for \$390, and a two-year futures contract for \$414:²⁹

Spot	\$368
One-Year	390
Two-Year	414

This upwards-sloping price curve reflected not market expectations as to future gold prices, but rather the cost to carry physical gold for one year (net of storage expenses, on the one hand, and any income available from lending out gold, on the other).

Ignoring for purposes of this discussion the application of Section 1256 and other mark-to-market solutions, how would one fashion an appropriate model for taxing a taxpayer that in the above example went long two-year gold? An amortization model—unlike a mark-to-market model, but like our models for the depreciation

²⁴ Kau, *supra* note 12, at 17-18.

²⁵ See Canellos and Kleinbard, "The Miracle of Compound Interest: Interest Deferral and Discount After 1982," 38 *Tax Law Review* 565, 571-74 (1983).

²⁶ *Id.* Admittedly it is uncommon for corporate issuers directly to take advantage of such an arbitrage opportunity. In the case of the U. S. Treasuries, however, coupon bonds can efficiently be converted to a series of zero-coupon bonds through the Treasury's STRIP program. Since both the "classic" yield curve and the zero yield curve are based on Treasuries, the arbitrage function performed by STRIPs should keep the two curves in a logical relationship to one another.

²⁷ In this context, of course, "closeness" is a relative concept. A difference in yield of a few basis points might be viewed as a rounding error by an academic, and as a catastrophe by a taxpayer that (like an issuer of "builder bond" collateralized mortgage obligations) issues serial original issue discount obligations to finance the ownership of full coupon bonds.

²⁸ Johnson, *An Introduction to Options* (Salomon Brothers Inc. 1987) at 3.

²⁹ In fact, gold futures contracts on that date extended out to 22, not 24, months, and the last figure in the text therefore represents an extrapolation. There are differences, not relevant to the point being made in the text, between the pricing of forwards and futures, relating to the fact that any locked-in profit from futures contract trading is immediately realized in cash through the variation margin system, while any locked-in profit from offsetting forward contracts is realized in cash only at maturity of those contracts. Johnson, *An Introduction to Options*, *supra* note 28 at 3-4. For a general description of the differences between forward and futures contracts, see *supra* note 2.

of assets or the taxation interest expense—would look only at the information known at the outset, and construct from that information a projected schedule for the decline (or accretion) in value of the two-year contract.

We know from the above discussion that in fact we know nothing about future prices of spot gold. We also know that, at the end of Year 1, the taxpayer's two-year futures contract will be indistinguishable from a one-year futures contract written on that date. Since we have no useful information about future prices of physical gold, a rational amortization system would have no choice but to assume that the two-year contract would decline towards \$368 (the price of spot gold) over its two-year life. On that basis, we can conclude on the day the two-year contract is entered into that the purchaser of the two-year futures contract will suffer a loss (which an amortization system would declare to be deductible) in Year 1 equal to the difference in pricing on that day between the two-year and one-year futures contracts—that is, \$24 (\$414 - \$390). Similarly, the purchaser will incur an amortization expense of \$22 (\$390 - \$368) in Year 2. In fact, at maturity of the contract the purchaser might make or lose a great deal of money, but that fact is driven by the volatility of spot gold prices, not by the implicit time value of money reflected in forward/futures prices.

As this example suggests, if the tax deconstruction of a swap into a series of forwards—or, for that matter, a bond into a series of zero coupon obligations—serves any purpose, it is to demonstrate that the tax timing rules for the deconstructed instrument might be as undeveloped as the rules for the unitary instrument. The fundamental tax discontinuity is that neither party to a two-year forward is required to include any amount as income or expense at the end of Year 1, when what was originally a two-year forward has become indistinguishable from a one-year forward. By contrast, the issuer of a series of zero coupon bonds includes some amount as interest expense in respect of all of its zero coupon bonds, not simply the obligation that matures at the end of Year 1.

Just as important, by attempting to think of a swap as a series of independent forward contracts, deconstructionism severs any relationship between the instrument's cash flows and its contextual application. The paradigmatic use of a swap is to convert fixed rate borrowings into floating rate ones, or vice versa. Does it not make more sense to adopt a timing model for swaps that relates those swaps to their normal context—the hedging of interest rate costs, which in turn are determined under constant yield principles? Even if one were to conclude that the current taxation of a series of forward contracts is both different from, and as metaphysically valid as, the current constant-yield method of taxing straight bonds, what motive other than perversity could lead one to tax

swaps according to the forward contract model, rather than the model of those financial instruments to which they in fact relate?

C. Here a Loan, There a Loan: Hidden Lending Transactions in Caps and Options. Like moths to a flame, tax deconstructionists are drawn irresistably to interest rate caps and floors. Now that Notice 89-21 has imposed at least broad parameters around the resolution of many swap timing questions, caps and floors constitute the largest category of notional principal amount contracts for which no directly applicable guidance exists as to the timing rules applicable to such products. Unconstrained by the history that clouds the taxation of options, and impelled by the desire to resolve the current uncertainty in the law, tax deconstructionists are free to break down caps and floors into as many components as they can imagine.

Caps and floors economically are indistinguishable from cash settlement options; in return for an upfront payment, a cap purchaser acquires the right to share in the upside of price fluctuations in a specified type of property, but does not bear the risk of loss (beyond the cap premium) in the downside.³⁰ A floor, of course, provides the opposite benefits. For this reason, caps and floors typically are priced using classic options pricing models.³¹ Those models are very useful for informing an observer as to how a lump-sum cap premium payment should be apportioned among the periods covered by the cap, but they do not by themselves answer the question of how those apportioned amounts should be included in the income of the cap writer (or expensed by the cap purchaser).

Consider, for example, a three-year cap with a premium of \$600. An option pricing model might inform us that the \$600 is attributable to the three-year life of the cap in accordance with the following schedule:

Year 1	\$ 65
Year 2	155
Year 3	380

This apportionment reflects "time value," but in a different sense from the usual use of the term by tax lawyers as a synonym for compound interest, the apportionment of more of the \$600 premium to the third year than to the first two years is driven by the fact that, for a given amount of volatility in the price of a security covered by an option, the longer the time period under consideration, the more likely it is that the security's price will have fluctuated

³⁰ For a more detailed discussion of the similarity between caps (and floors) and options, see *Management of Interest Rate Risk*, supra note 1, at 243-251; "Putting the Cap on Options," *Euromoney Corporate Finance* (January 1987) at 20-21.

³¹ *Management of Interest Rate Risk*, supra note 1. For a further discussion of option pricing models, see Johnson, *An Introduction to Options*, supra note 28.

enough to have made the option "in the money."³² The resulting distributions of the cap premium are driven by probability theory, and not simply a straightforward compounding of interest.

Assume for the sake of simplicity that the cap remains out of the money throughout its term. If a cap is analogized to three sequentially maturing options, and one applies current option taxation principles to the cap premium, then the writer of this hypothetical cap would include \$65 in income at the end of Year 1, reflecting the expiration of the first option. Under longstanding tax rules governing options however, none of the \$155 of premium allocated to the option for Year 2 or the \$380 of premium allocated to the option for Year 3 would be recognized in Year 1, because those options remain outstanding.³³

If, by contrast, one sets out to develop an expense amortization system for caps, one presumably would compare the value of the cap at the outset to its value at the end of Year 1—when it is, in fact, a two-year cap. A two-year cap would have been written at the outset for \$65 + \$155, or \$220; accordingly, an amortization model would lead one to conclude that \$600 — \$220, or \$380, should be included in the cap writer's income in Year 1 (and \$155 in Year 2)—the exact converse of the result reached under the current tax regime for options.

Which, then, is the appropriate tax model, serial option or amortization? One answer, of course, is that the question, as so posed, is unfair, since the theoretically satisfying result might be to revise the taxation of options to conform to the amortization model—in other words, to abandon the notion that no amount is includible in an option writer's income until the option lapses. If, however, one postulates that the current tax timing rules for options are imbued with too much history to be changed now, then tax policymakers are confronted with a true Hobson's choice. Conforming the taxation of caps to the current tax rules for options would be to expand an arguably illogical system beyond its traditional scope; by contrast, creating a timing system for income inclusion (and expense deduction) for caps different than the system utilized for options would create tax arbitrage opportunities, through, for example, option writing/cap purchasing strategies.

Faced with this dilemma, some analysts appear to have responded by pursuing a red herring: the deconstructionist argument that every cap—and, by extension, every option—has buried within it a loan, which loan should be extracted and taxed as such. Returning to our earlier cap example, these analysts would conclude that the payment of a \$600 premium for a three-year cap is in fact a *prepayment*, and that the parties to the cap should be taxed as if the cap premium were paid annually in arrears. Under this approach the cap writer would be treated as if it were a bank into which the cap purchaser

deposited \$600, withdrawing at the end of each year the annual cap premium then due.

At 10 percent interest, the \$600 cap premium, if paid annually in arrears, and the income attributable to the disguised loan, would look as in Table 1.

Under the hidden loan approach, a cap writer's annual net income from writing the cap would be determined by taking the deemed cap premium payable in arrears (determined either under the option or amortization model) into income, and expensing the interest deemed paid on its hypothetical borrowing.³⁴ (For the sake of simplicity, I continue to assume that the cap always remains out of the money.) Over the life of the cap, the increase in cap premium income is always offset by the cap writer's deemed interest expense, as seen in Table 2.

Thus, the pursuit of the hidden loan element of a cap (or option) does *not* affect the aggregate income inclusions (and expense deductions) of the parties over the entire term of the contract, but *does* affect the interperiod timing of those inclusions. In addition, the loan deconstruction approach can produce different character and source results for the income and expense recognized by the parties.³⁵

Is the deconstruction of a cap into a loan and a series of payments in arrears the "correct" approach? Arguably it is, if one accepts as a premise that all contractual payments are made in arrears, rather than in advance. Interest on indebtedness, for example, ordinarily is calculated in arrears. Rent, on the other hand, typically is not: should we now conclude, for example, that rent paid monthly in advance is a series of 30-day lending transactions? I would argue that the more useful approach would be to respect commercial norms. Where, as in the case of options and rent, advance payments are the norm, there is no reason to ferret out the hidden loan in the transaction.³⁶ As illustrated by the above ex-

³² See Johnson, *An Introduction to Options*, supra note 28; *Handbook of Modern Finance* (Logue, ed.) (1984) at 11-21, et seq.

³³ Revenue Ruling 58-234, 1958-1 CB 279.

³⁴ Similarly, a purchaser's annual net expense from its \$600 cap investment would equal its deemed cap premium payable in arrears (determined either under the option or amortization model), netted against the purchaser's deemed interest income on its lending transactions.

³⁵ In cross-border cap transactions, for example, the introduction of an interest element to a foreign party's cap income raises a U. S. withholding tax issue that does not exist under current law. This result would appear directly contradictory to the policies behind the recent promulgation of Reg. § 1.863-7T, described supra in note 5.

³⁶ Prepaid rental expense, of course, is not deductible immediately, but instead must be amortized. Exactly the same analysis as that presented in the text with respect to options can be undertaken for prepaid rent. Again, the hidden loan approach would not affect the lessee's aggregate expense—although, in light of the continued application of the erroneous conclusions of *Schlude v. Commissioner*, 63-1 USTC ¶ 9284, 372 U. S. 128 (1963) (immediate inclusion in income of prepaid

(Continued on following page.)

Table 1

<i>Option Model</i>					
	(1)	(2)	(3)	(4)	(5)
	Starting Hypothetical Loan Balance	Interest on Loan Balance [10% × (1)]	Apportionment of Original Premium	Premium Payable in Arrears (at 10%)	Ending Loan Balance [(1) + (2) - (4)]
Year 1	600	60	65	71	588
Year 2	588	59	155	188	459
Year 3	459	46	380	506	—
		165	600	765	
<i>Amortization Model</i>					
Year 1	600	60	380	418	242
Year 2	242	24	155	188	79
Year 3	79	8	65	86	—
		92	600	692	

Table 2

Cap Writer Annual Income Inclusions

	No Loan Option Method	Loan + Option Method [(4) - (2)]	No Loan Amortization Method	Loan + Amortization Method [(4) - (2)]
Year 1	65	11	380	358
Year 2	155	129	155	164
Year 3	380	460	65	78
	600	600	600	600

amples, this exercise in tax deconstructionism does *not* affect the aggregate income and expense inclusions of the parties, and, if one assumes that both parties are taxpayers, does not even advantage the fisc as a timing matter. The hidden loan analysis thus imposes a norm (of payments in arrears) that simply conflicts with commercial norms, for reasons that can only relate, at best, to attenuated tax character or source concerns — *not* to timing issues.³⁷

III. Integration Issues

A. Character and Source Issues. At its best, the vogue for tax deconstructionism points out the shortcomings of our current approach to the taxation of such straightforward financial instruments as forwards and options. At its worst, tax deconstructionism substitutes complex and artificial timing models for existing rules that more accurately reflect the commercial context in which notional principal amount contracts and other liability management tools are utilized.

In the end, however, the current focus on developing timing rules for notional principal amount contracts and other liability management tools is insufficiently ambitious; even perfect timing rules for the recognition of income and expense attributable to such instruments are not by themselves sufficient to ensure an appropriate tax regime for actively managed liabilities. The contextual discontinuities that arise under current law as a result of confusing interest expense

(Footnote 36 continued.)

amounts for multiyear contracts) outside of the financial products area, the hidden loan approach would have the merit of permitting the lessor properly to amortize its rental income over the period to which the prepayment relates.

³⁷ As an example, the "hidden loan" school of tax deconstructionism would lead to the conclusion that a homeowner who purchases a two-year service contract for his refrigerator should be treated as earning interest income, offset by higher nondeductible consumption expense. Breathes there a tax professional who wishes to explain that result to his or her spouse?

with the cost of debt capital are problems of character and source as well as problems of timing.

Consider, for example, a corporation that, having issued floating-rate debt and swapped that debt into a fixed-rate obligation, now wishes to unwind its swap position and thereby reconvert its obligation into floating-rate debt. If fixed interest rates have increased, the issuer will realize a profit from terminating or assigning its swap position.³⁸ That gain is immediately taxable to the issuer, even though its original floating-rate indebtedness remains outstanding; however, this result does not differ from the treatment the issuer would have received had it initially issued fixed-rate debt, and later bought back that debt at a discount, financing the repurchase by issuing floating-rate obligations. Such an issuer *would* be treated inappropriately, however, in those instances where the tax law imposes a different characterization on the cash flows from the swap (or other liability management tool) than on the issuer's actual financing, so that the issuer's synthetic financing creates tax results that differ from an economically identical straight financing.

One important instance of such a mismatch problem recently has been resolved by the release of Reg. § 1.861-9T(b)(6), which provides that a taxpayer may source its interest expense and its gains and losses from liability management tools consistently for purposes of calculating the taxpayer's foreign tax credit limitation.³⁹ In general, Reg. § 1.861-9T(b)(6) allows a taxpayer that identifies a "financial product" as a liability hedge to treat net gains and losses from the financial product as an adjustment to the amount of allocable interest expense on the related liability.⁴⁰ A taxpayer may identify a hedge as relating to an anticipated liability for these purposes, provided that the liability in fact is incurred within 120 days of the identification. As a result, an issuer now should be indifferent, at least for foreign tax credit purposes, between, for example, borrowing on a fixed-rate basis or incurring floating-rate debt and swapping into fixed.⁴¹

Regulation § 1.861-9T(b)(6) is the first instance in which taxpayers have been authorized, at least for some purposes, to integrate the gain or loss attributable to the use of interest rate management tools with the interest expense being managed.⁴² As such, Reg. § 1.861-9T(b)(6) is a laudable development, but the regulation's very novelty suggests the staggering number of integration issues that have not yet been addressed.

The introduction to this article identified in passing a few of the timing, character and source discontinuities that result from confusing interest expense with the cost of a taxpayer's debt capital. No purpose is served in restating that list here. What is useful, however, is to observe how unrealistic it is to expect that every such problem can or will be resolved in a fashion similar to Reg. § 1.861-9T(b)(6). In most cases, Treasury probably lacks the authority to remedy

the problem without an amendment to the Code. Consider, for example, the interest expense disallowance rules of Section 265: if a taxpayer borrows at a fixed rate and swaps into a floating rate, and that liability is incurred to purchase tax-exempt bonds, Section 265 will disallow the taxpayer's interest expense—its fixed rate coupon. It would take an extraordinarily aggressive reading of Section 265 to conclude that the taxpayer's true cost of debt capital—its floating-rate

³⁸ The issuer's swap position will be valuable because it allows the issuer to receive current, higher, floating-rate payments in exchange for making fixed rate payments at historic, now below-market, rates.

³⁹ For foreign tax credit purposes, a taxpayer's domestic interest expense generally must be allocated between the taxpayer's domestic and foreign-source income in proportion to the taxpayer's domestic and foreign income-producing assets. Under general tax principles (previously, Notice 87-4, and, more recently, Reg. § 1.863-7T), by contrast, swap income or expense of a U. S. party generally is treated as entirely U. S. source, and, until recently, was thought not to be subject to the apportionment and allocation rule required for interest expense. As a result, a taxpayer that, for example, created a synthetic fixed-rate borrowing by issuing floating-rate debt and entering into an interest rate swap would have different allocable interest expense for foreign tax credit limitation purposes than the taxpayer would have had if it had simply issued fixed-rate debt. See *supra* note 5 for a general discussion of Notice 87-4 and Reg. § 1.863-7T.

⁴⁰ Regulation § 1.861-9T(b)(6) generally defines a "financial product" as any notional principal contract, forward contract, option or similar financial product that (i) is used by a taxpayer to alter its effective cost with respect to any actual liability and (ii) is denominated in the same currency as that liability.

For purposes of the identification rules of Reg. § 1.861-9T(b)(6), a "hedge" apparently means any transaction that effectively alters the interest rate characteristics of a liability, regardless of whether that transaction also serves as a traditional hedging position by reducing the taxpayer's overall exposure to interest rate fluctuations. In the case where a qualifying financial product serves as a partial "hedge" of a liability, the identification will allow integrated treatment only for the "hedged" portion of the liability.

⁴¹ More specifically, Reg. § 1.861-9T(b)(6) requires a taxpayer to treat net losses in respect of any such financial product, solely for interest allocation purposes, as additional allocable interest expense. Net gains in respect of such a financial product, in contrast, may be used to reduce the amount of allocable interest expense on a related borrowing only if the taxpayer identifies the financial product as a "hedge" of a specified liability (or group of liabilities) on the same date that the taxpayer enters into the financial product. A taxpayer also may identify a financial product as a "hedge" of interest-bearing assets; this identification creates a rebuttable presumption that loss (or gain) on the specified financial product is outside the scope of the interest allocation rules.

⁴² Regulation § 1.988-5T allows similar integration treatment for a limited class of fully hedged foreign currency debt instruments. For a general discussion of Notice 87-11 (the predecessor to Reg. § 1.988-5T) and related foreign currency issues, see Stodghill, "Taxing the Yen for Foreign Currency: The Statutory Regime," 7 *Virginia Tax Review* 57. For a critique of Notice 87-11, see Kleinbard, *Tax Strategies for Corporate Financialings and Refinancings*, *supra* note 11.

payments on its interest-rate swaps—represented the amount subject to disallowance in each year.⁴³

Even if the problem of statutory authority could be overcome, Treasury would be saddled with the task of writing dozens of “integration” regulations, and taxpayers with the obligation of making dozens of “protective” integration elections, just in case, for example, the IRS were to conclude that, contrary to the taxpayer’s belief, a hedged liability was incurred to carry tax-exempt bonds. Finally, and as suggested in the comprehensive example considered in detail in Part III.B, immediately below, Reg. § 1.861-9T (b)(6) itself raises difficult interpretative questions that no doubt will take years to resolve. What is needed instead is a more direct shift in the Internal Revenue Code’s focus away from interest expense and onto the taxpayer’s aggregate cost of debt capital.

B. The Special Problems of Contingent Debt: Your Tutti Frutti Is My Plain Vanilla. Perhaps the best example of the themes of this article—the shortcomings of viewing interest expense as synonymous with the cost of debt capital, the normative conflict between debt and equity, the difficulty of developing appropriate timing rules in light of the historical treatment of options and forwards, and the importance of integrating the tax treatment of all components of a liability—arises from the attempt to create tax rules for exotic contingent payment bonds.

One of the most interesting aspects of the new financial products marketplace is that financial product exotica typically are developed in response to investor demands, not issuer needs.⁴⁴ Indeed, the more bizarre a novel financial instrument is, the more likely it is that the issuer has swapped itself back into a “plain vanilla” corporate bond, capturing for itself an arbitrage profit in the process.

For example, imagine that a U. S. corporation can borrow today at LIBOR plus 100 basis points for a floating-rate financing, or 12 percent for a fixed-rate borrowing.⁴⁵ The issuer instead could issue a 15 percent coupon bond with a six-year maturity, the principal of which indexes *downwards* (but not below zero) in proportion to increases in the Standard & Poor’s 500 Index (“S&P 500”). Without meaning to stray too far into deconstructionism myself, the investors who buy these securities can be viewed as having *written* cash settlement call options on the S&P 500 to the issuer, which in turn pays for those options through the increased coupon.⁴⁶ (Simultaneously, the investors can be viewed as having *purchased* very deep out-of-the-money call options from the issuer, to deal with the unlikely case of the S&P 500 rising sufficiently to drive the indexing formula below zero.) This instrument would attract investors that are pessimistic about the performance of the stock market (or that wish to hedge their equity portfolios), because the instrument gives them an above-market rate

of return if the stock market stays roughly level or declines, and below-market or negative rates of return if the stock market rises.

The issuer presumably has no views as to the future performance of the stock market, and wishes simply to borrow at the best possible floating-rate terms. The issuer therefore immediately would *write* a six-year call option on the S&P 500 in return for a lump-sum option premium, and *buy* a very deep out-of-the-money six-year call option on the S&P 500 (so that the loss on the call option it has written cannot exceed its profit ceiling—the original proceeds from its debt offering—on the implicit call option it has purchased from the investors). Finally, the issuer might enter into a six-year interest rate swap, under which it pays LIBOR and receives 11 percent fixed. The lump sum received from writing the call option on the S&P 500 (net of the cost of the deep out of the money option it acquired) is sufficient to purchase an annuity equal to 4 percent of the bond proceeds for the six-year life of the bonds, thereby “defeating” in substance the 4 percent spread between the swap inflow and the bond coupon outflow.⁴⁷ On a net basis, therefore, the issuer has raised floating-rate money at LIBOR flat, rather than its usual cost of LIBOR plus 100.

One could, no doubt, fill a very large registration statement with analyses of the federal income tax consequences of the above arrangements to both investors and the issuer. For purposes of this article, however, only a few brief observations are required:

(1) There exists absolutely no relationship between how investors, on the one hand, and the issuer, on the other, view their economic positions as a result of these transactions. Investors have strong views on the future performance of the equity markets, while the issuer wants cheap floating-rate money. When wrestling with the issue of whether this instrument—which, after all, may pay out absolutely nothing at maturity—

⁴³ The taxpayer and the Internal Revenue Service might each choose to argue either side of the text’s proposition, depending on fluctuations in interest rates. If rates spike up, it would be the IRS that would be driven (at least in considering the result) to argue that the swap was within the ambit of Section 265; were rates to trend down, presumably the taxpayer would feel impelled to bring this miscarriage of economic justice to the attention of a court.

⁴⁴ See, generally, Kleinbard, *Tax Strategies for Corporate Financings and Refinancings*, *supra* note 11.

⁴⁵ U. S. dollar corporate borrowings generally are priced at a spread over U. S. Treasury securities of comparable maturity. Both the interest rates on those Treasuries and the spread over Treasuries at which issuers can borrow may fluctuate.

⁴⁶ While deconstructionism may have its limits in answering tax timing issues, it is useful in figuring out how to market and hedge the new financial instrument one has created.

⁴⁷ Phrased differently, the issuer has purchased a long-term option from retail investors at a discount to the price at which it can sell that option to an institution.

appropriately should be viewed as a debt instrument in the first place, whose perspective is more relevant?

(2) The current proposed regulations on contingent interest debt obligations treat the 15 percent coupon on the bond (assuming, of course, that it in fact is considered a debt instrument for tax purposes) as nondeductible/nontaxable returns of principal.⁴⁸ The issuer, meanwhile, will recognize (i) net income or expense each year on its swap, (ii) income at some point in respect of the option premium received on the option it wrote, (iii) a possible loss at maturity in respect of the option it wrote, (iv) discharge of indebtedness income or interest expense at maturity of the bonds (depending on the amount paid out), and (v) income on the investment of the net cash option premium it received. The issuer's all-in cost of funds economically might be LIBOR flat, but it is extremely unlikely under current tax rules that the net after-tax effect of these items will coincide with that economic result.

(3) Depending on the resolution of *Arkansas Best*, the issuer might incur capital loss in respect of some of the above items, and ordinary income in respect of others, further exacerbating the problems suggested in (2), above.

(4) The issuer's ability to fund an actual or hypothetical annuity to defease the 4 percent spread between its swap in flow and its coupon expense will depend in part on the timing rules applicable to the receipt of option premium on the call that it writes; if this premium is subject to tax as immediate income, the issuer will not have sufficient after-tax proceeds to fund the full amount of the required annuity.

(5) With the possible exception of the foreign tax credit limitation rules, the issuer's interest expense for all relevant Internal Revenue Code purposes will be both unpredictable and bunched into the year the bonds mature. Even in the case of the foreign tax credit credit rules, one can question whether the premium earned from writing a six-year option on the S&P 500—or, even more problematically, the interest earned on the investment of the option premium—properly can be treated as a liability “hedge” that offsets the issuer's stated interest expense on its contingent debt under Reg. § 1.861-9T(b)(6).

(6) Any attempt by the issuer to unwind some of these transactions prior to the bonds' maturity raises a mind-boggling array of tax issues. For example, the issuer's implicit call option on the S&P 500 embedded in the bond might be deemed to be an “offsetting position” to the call option actually written by the issuer. In that case, the tax straddle rules might apply to defer loss recognition, but not gain recognition, on a disposition of one of those positions, thereby creating a new timing mismatch concern.⁴⁹ Similarly, the treatment of an unwound liability hedge under Reg. § 1.861-9T(b)(6) remains unclear.

IV. A Cost of Capital Allowance System

A. The Shortcomings of Mark-to-Market.

It is surprisingly difficult to articulate appropriate tax timing rules for notional principal amount contracts and other liability management tools against the backdrop of the traditional taxation of options and forwards. Interest expense itself is no longer a particularly useful measure of the cost of a taxpayer's debt capital. And, finally, the dividing line between debt and equity, already subject to enormous pressures generated by the tax law's systematic bias in favor of corporate debt, will come under increasing strain from exotic financial instruments issued to capture arbitrage profits.

What can be done? Obviously, an approach that would simply expand the integration principles of Reg. § 1.988-5T (implementing Notice 87-11) beyond foreign currency obligations is, if not too late, certainly too little. Regulation § 1.988-5T, while a modest improvement over Notice 87-11 in that the regulation contemplates legging in and out of hedges, still assumes a relatively static world in which issuers create synthetic financings that perfectly convert one noncontingent financing into another noncontingent financing in a different currency. The difficult issues—imperfect or partial hedges, “umbrella” hedges (in which one hedge relates to several liabilities), and contingent payment financings—all are expressly excluded from the universe of Reg. § 1.988-5T.⁵⁰

A more radical solution, and one that has a certain appeal, is a comprehensive mark-to-market regime for liabilities and liability management tools.⁵¹ Under such a system, a corporate issu-

⁴⁸ Prop. Reg. § 1.1275-4(f). For a detailed discussion of the treatment of contingent payment debt instruments under the proposed original issue discount regulations, see *A Practical Guide to the Original Issue Discount Regulations*, supra note 17, Ch. 7. Those proposed regulations only apply however, to the extent that an instrument otherwise constitutes a debt obligation under general tax principles—a question squarely left unresolved by the regulations themselves. See, e.g., Prop. Reg. § 1.1275-4(a).

⁴⁹ To complicate matters further, the issuer might be able to elect out of the straddle rules by identifying the contingent bond and all the related transactions as “hedging transactions” under Section 1256(e). Because Section 1256(e) has as a prerequisite ordinary income treatment of all the identified components, the issuer's ability to make this election in turn depends on the future resolution of liability hedging issues after the *Arkansas Best* case. See Kleinbard and Greenberg, supra note 9.

⁵⁰ In one respect, Reg. § 1.988-5T is a disappointment, in that it, unlike Notice 87-11, excludes from its scope any contingent financing that is swapped into an entirely noncontingent financing in a different currency.

⁵¹ Mark-to-market calculations for certain positions, including certain foreign currency-denominated liabilities, already are required in some cases for financial accounting purposes. See Financial Accounting Standards Board (FASB), Statement of Financial Accounting Stand-

(Continued on following page.)

er's annual cost of debt capital expense presumably would equal its cash outlays in respect of its liabilities during the year, plus or minus any net change in the market value of its year-end net liabilities (i.e., indebtedness and all related liability management positions) when compared to the previous year-end. The resulting aggregate cost would be treated effectively as interest expense for all purposes of the Internal Revenue Code.

In the abstract, a mark-to-market system is a panacea for many of the ills described above: it solves, at least theoretically, all timing discontinuities (by converting all unrealized gains and losses to realized amounts); if combined with a favorable statutory resolution of the capital/ordinary dichotomy for liability hedges created by *Arkansas Best*, a mark-to-market system also poses no character whipsaw problems. Nonetheless, a mark-to-market system has its own shortcomings, which on balance are sufficiently serious to convince me that a better answer lies elsewhere.

The first problem raised by a mark-to-market system is the difficulty of valuing many liabilities and (in particular) liability management tools. Only a small percentage of all outstanding corporate debt is actively traded, and most is not even rated. In the case of many types of notional principal amount contracts, even dealers in such contracts are required to resort to pricing models, rather than secondary market quotes, when preparing required mark-to-market calculations of their open positions for financial accounting purposes.⁵² These models in turn are driven by variables (such as volatility) that in large measure are determined by the intuition of individual traders. Particularly when one contemplates a system that would be applied to a broad spectrum of taxpayers, many of which lack direct access to the market information (including traders) and sophisticated computer systems available to securities dealers, these concerns have considerable power. Moreover, in the case of corporate taxpayers that do not use mark-to-market principles in preparing their financial accounting records, the effort required by the Internal Revenue Service to design and monitor a mark-to-market tax accounting system adaptable to the needs of various businesses would be monumental.

The second concern raised by a mark-to-market solution is that it produces results that are both unpredictable and counterintuitive to many in business. Imagine, for example, that interest rates spike up. A corporate issuer with fixed rate indebtedness will find itself at year-end with a mark-to-market taxable gain on its fixed rate liabilities—no doubt at precisely the same time that its operating business feels the business cycle slowdown of a credit crunch.

The last, and most important, objection to a mark-to-market solution is that it does not address the fundamental normative tension in

our current tax system between debt and equity. Assuming (as seems likely) that a mark-to-market system would apply only to debt capital, the tax law would still need to distinguish the issuer's indebtedness from its equity capital. The pressures identified earlier—the systemic bias in favor of debt, and the use of exotic financial instruments to capture arbitrage profits—will remain unresolved by the adoption of a mark-to-market system.

B. The Systemic Bias in Favor of Debt and the Limits of Corporate Integration. As in the case of the miracle of the loaves and the fishes, economists and tax professionals seem capable of serving up an unlimited quantity of studies on the appropriate treatment of debt financing in the corporate tax system. This article does not purport to advance the academic debate, but since the proposal that follows, if implemented, would have an immediate impact on corporate finance decision-making, candor compels that the author at least identify his prejudices and comment briefly on the relationship between the debt-equity debate and the technical problems to which the bulk of this article is addressed.

Twenty years ago, a leading economist wrote:

Only the corporate tax makes corporate leverage a good idea. The firm therefore should borrow in preference to issuing new stock *regardless* of the interest rate involved, just so long as it remains under its debt limit.⁵³

What has changed in 20 years? Perhaps most important, the capital markets' perceptions of permissible corporate debt limits have dramatically broadened: corporations today regularly "access" (to use the investment banking vernacular) the public capital markets in debt offerings that would have been considered ludicrously nonfinanceable only a few years ago. Second, a larger proportion of corporate securities is owned by tax-exempt and other relatively tax-insensitive institutions, while the general trend toward lower tax rates has reduced the net tax burden on debt even for taxable inves-

(Footnote 51 continued.)

ards No. 52, December 31, 1981. The FASB recently approved a new accounting standard that will require financial statement disclosure concerning the market value of "financial instruments" generally, including such standard liability management tools as interest rate swaps, caps and forwards. See FASB, Proposed Statement of Financial Accounting Standards, No. 083-B, July 21, 1989.

⁵² For an interesting insight into the degree of confusion about mark-to-market principles for notional principal contracts, see the proposal by the Federal Financial Institutions Examination Council on Interest Rate Swap Reporting Standards, November 7, 1988, and the comments concerning that proposal by Roger W. Trupin of Citicorp (Letter dated January 9, 1989).

⁵³ W. Lewellen, *The Cost of Capital*, at 52 (1969).

tors.⁵⁴ Under these circumstances, the relatively recent explosion in debt financing can be understood as a predictable consequence of a long-term systemic preference on the part of corporate issuers for debt financing colliding with a dramatically increased investor appetite for debt.

The resulting skewing of corporate decision-making is unrelated to acquisitions: the same result can be obtained over time by "growing" a business, and using only debt to finance that growth.

The most intellectually satisfying solution to current law's systemic bias in favor of corporate debt financing is the adoption of a corporate integration system. The political problems raised by integration proposals, however, run from enormous to insurmountable. Those problems include, for example, complexity at the individual shareholder level (particularly with a gross-up and credit mechanism), projected revenue loss (particularly with a dividends-paid credit), and the effective loss of tax exemption by currently tax-exempt investors.

Even if corporate integration were politically feasible, an integration system would not necessarily resolve the technical issues previously considered in this article. Virtually all corporate integration systems still require that a corporation measure, and pay tax on, its net income (subject to relief if and when dividends are paid): such systems thus cannot be expected to solve the timing dilemmas described above.⁵⁵ Corporate integration, then, is a conceptually elegant (but practically infeasible) solution to current law's systemic bias in favor of debt financing, just as mark-to-market is a conceptually elegant (and equally infeasible) solution to current law's technical shortcomings in accurately measuring a taxpayer's cost of debt capital.

C. Cost of Capital Allowance System.

1. *Introduction.* In designing a tax depreciation system for an item of tangible personal property—a computer, for example—one *could* develop a mark-to-market system, in which the owner's depreciation deduction each year would be determined by comparing the actual market value of that computer at the end of the year to its value at the end of the previous year. The tax law, of course, has never adopted such an approach to asset depreciation. Even "facts and circumstances" depreciation was based not on true mark-to-market concepts, but rather on *projected* market values at the time property was placed in service, without adjustment for subsequent market fluctuations.⁵⁶ For the last decade or more, our tax system in fact has moved away from market-based systems for asset depreciation; instead, we have adopted a series of standard capital allowance schedules that, while based on economic assumptions about the way in which assets depreciate, do not attempt to measure the actual changes in value of those assets from year to year.

There is substantial merit to adapting the use of standardized capital recovery systems from the asset side of the balance sheet to the liability side. A corporation's annual interest expense, especially in light of the development of the original issue discount rules of the Code, has an appealing aura of exactitude about it, but, as we have seen, that precisely calculable number can have little relationship to an issuer's actual cost of debt capital. It is time that the tax law recognized the difficulties of precisely measuring the actual cost of a taxpayer's debt capital, in the same fashion that it long ago abandoned the seeming precision of "facts and circumstances" depreciation. Accordingly, this article proposes that current law's interest deduction (as well as gain or loss on liability management tools) should be replaced by a statutory Cost of Capital Allowance System.

Briefly stated, under the Cost of Capital Allowance (COCA) System, a corporation would be allowed to deduct each year an amount equal to the product of (i) its "Invested Capital" and (ii) a statutory Cost of Capital Allowance.⁵⁷ "Invested Capital" in effect would include an issuer's outstanding equity as well as debt, thereby eliminating distinctions between the two. A corporate issuer would *not* recognize deductions, loss, income or gain in respect of its actual interest expense or in respect of cash flows payable or receivable on any liability management tool. (Thus, for example, gain or loss on an interest rate swap that related to a taxpayer's outstanding liabilities would be excluded from net income.) The taxation of *investors* would remain essentially unchanged from current law, subject to the elimination of the intercorporate dividends-received deduction.

The remainder of Part IV considers the Cost of Capital Allowance System in more detail.

2. *Invested Capital.* One of the fundamental premises of the COCA System is that current law's systemic bias in favor of corporate debt can be eliminated by providing a corporate taxpayer with a uniform annual deduction for *all* the capital employed by that corporation in its income-producing activities, regardless of whether that capital is denominated debt or equity. Conveniently, this premise also simplifies the COCA System significantly.

⁵⁴ See *Hatsopoulos*, et al., *supra* note 14, at 14-16. According to that report, "[i]t is evident that in 1980 the tax code favored equity over debt. In 1987, however, debt is much more favored than is equity." *Id.* at 15. See also Warren, "Recent Corporate Restructuring and the Corporate Tax System," *Tax Notes* (February 6, 1989) at 715, 716.

⁵⁵ Even a pure passthrough integration model simply shifts to shareholders the timing uncertainties considered herein.

⁵⁶ Facts and circumstances depreciation was further removed from market values by various statutory restrictions on the use of accelerated depreciation methods.

⁵⁷ Compare the similar proposal for financial accounting purposes in Anthony, *supra* note 14.

Since balance sheets, by definition, balance, a corporation's outstanding capital (i.e., the right side of its balance sheet) must equal its assets (i.e., the left side). Accordingly, under the COCA System, a corporation's Invested Capital in each year would equal the adjusted tax bases of all its assets, including cash and cash-equivalent items, based on average month-end levels for that year.⁵⁸ (For purposes of calculating monthly adjusted basis numbers, cost recovery/depreciation deductions would be prorated within each year.) An affiliated group (within the meaning of Section 1504) would be treated as a single taxpayer for these purposes; stock owned by one group member in another would be disregarded, and intragroup obligations (including debt obligations, hedging arrangements and payables or receivables) would not count as assets in computing Invested Capital.⁵⁹ As one interesting ancillary benefit to a Cost of Capital Allowance System, a taxpayer that capitalized an expense would increase its Invested Capital base, and thereby obtain an annual COCA deduction in respect of that capitalized amount. The prospects of such a deduction would serve as at least a modest counterweight to current law's bias in favor of resolving all doubts in favor of current deductibility.

Perhaps the most counterintuitive aspect of the COCA System is the notion that a corporation should receive a deduction in respect of its equity capital. To an economist, of course, all capital, whether debt or equity, has a cost to the corporation seeking to raise that capital.⁶⁰ The cost of debt capital is the interest payable thereon, as adjusted by all the liability management tools described in this article; the cost of equity capital is the current and anticipated future dividend stream to which equity holders have a claim.

From a tax point of view, by contrast, the fact that equity has a "cost" is not dispositive, since it is that "cost" (i.e., the equity return) that is the very measure of the traditional income tax base. In the case of an individual conducting a business as a sole proprietorship, for example, we view the individual's income, net of the cost of external financing (i.e., borrowed funds), as the appropriate base on which to levy tax. Why should the corporate tax model now be different?

The answer (to the extent there is one other than pragmatism) probably lies in the distinction between internal and external financing. In the case of an individual sole proprietorship, we can intuitively distinguish between hired money, in respect of which the proprietor should receive a deduction (just as he does for hired premises), and the proprietor's own investment in the business, the return on which forms the measure of his taxable income. This intuitive distinction between hired money (debt) and internal funding (equity) in the case of the individual proprietor probably underlies the original impulse to permit a corporation to claim a deduction in

respect of its indebtedness, but not in respect of its equity capital.⁶¹

The difficulty with analogizing corporate capital structures to individual proprietorships, of course, is that a corporation is an entirely fictional entity that starts corporate life with no capital at all. *All* funding of a corporation is external funding, and terms like "debenture" and "common stock" serve simply as shorthand descriptions for a bundle of claims on the revenues generated by the enterprise.⁶² If a corporation's capital consists entirely of external funding, then either all of it should be entitled to some form of a cost of capital deduction or none of it should.⁶³

⁵⁸ It is true that a taxpayer's assets typically will have fair market values different from their adjusted tax basis. (For this reason, Reg. § 1.861-9T allows a U. S. corporation to use an alternative "fair market value" test in computing asset values for interest allocation purposes.) Many of the reasons that led me to reject a mark-to-market approach with respect to liabilities and liability management tools, however, apply with equal force to asset mark-to-market proposals. (Interestingly, in the foreign tax credit arena most corporations do not elect the mark-to-market alternative, largely because of the administrative complexities involved in actually determining every year the "fair market values" of all assets.) Moreover, our realization tax system is essentially cost-based, with very few exceptions. Accordingly, it is no more appropriate to insist that the COCA System use mark-to-market values than to criticize current depreciation methodologies because they are based on an asset's cost.

⁵⁹ Stock owned by a U. S. corporation in, or obligations owed to that U. S. corporation by, any other corporation that is not a member of the same affiliated group (including any foreign corporation or other non-includible corporation under Section 1504(b)) would be treated as an asset of that U. S. corporation. In cases where a U. S. corporation owned a significant interest in a nonaffiliated corporation, for example, a 10 percent voting or value interest, the owner corporation would be required to adjust its tax basis in the stock for COCA purposes to reflect its proportional share of any undistributed earnings and profits of the nonaffiliated corporation (or any lower-tier corporation owned by that nonaffiliated corporation), by analogy to the requirements of the current interest allocation rules under Reg. § 1.861-12T(c)(2). Controlled foreign corporations presumably would be required to separately compute their own COCA allowances in determining annual earnings and profits under the subpart F rules.

⁶⁰ See Anthony, *supra* note 14.

⁶¹ Another possible explanation for the traditional tax distinction between corporate debt and equity is that the original drafters of our corporate income tax system were heavily influenced by financial accounting norms, and contemporary accountants distinguished between interest expense and dividends.

⁶² I recognize that the text can be viewed as an amorphous argument in favor of a broad corporate integration system—a logical conclusion with which I have no quarrel. At one level, in fact, the COCA System can be understood as a quasi-integration result, in which the costs to tax-exempt investors, for example, are not made explicit.

⁶³ It is, of course, possible to imagine an Anti-COCA System, in which corporate taxpayers are not entitled to any interest deduction, and in which the overall cor-

3. *The Cost of Capital Allowance.* The Cost of Capital Allowance would be an annual percentage determined pursuant to a statutory formula equal to (i) a specified weighted average of that year's average short-term, medium-term and long-term federal rates multiplied by (ii) a specified percentage (presumably less than 100 percent).⁶⁴ Thus, to give an entirely arbitrary example, the annual Cost of Capital Allowance might be set by statute at (x) some specified percentage multiplied by (y) a weighted average of Treasury yields—for example, $[(2 \times \text{average short-term AFR}) + (3 \times \text{average medium-term AFR}) + (4 \times \text{average long-term AFR})] \div 9$.⁶⁵ (As discussed later, that specified percentage of the weighted average of Treasury yields probably would be set at less than 100 percent, in order to preserve revenue neutrality.) The deduction, like interest, would fully offset ordinary income, and would be subject to the current rules that allocate interest for foreign tax credit purposes.

The statutory formula would remain constant from year to year, but a corporation's annual Cost of Capital Allowance would fluctuate with changes in prevailing Treasury interest rates. Because U. S. corporations generally borrow at a spread over Treasury rates for comparable maturities, the annual Cost of Capital Allowance generally would move in tandem with changes in a taxpayer's actual borrowing costs (or the implicit interest costs of its actual equity capital).

No separate or additional deduction would be allowed for a taxpayer that incurred actual interest or equity expense in excess of the Cost of Capital Allowance. Similarly, a taxpayer whose actual cost of capital was lower than the statutory allowance nonetheless would be entitled to its full annual Cost of Capital Allowance deduction.

Since the whole purpose of the COCA System would be to substitute an arbitrary annual deduction for all the various components of a corporate taxpayer's actual annual cost of capital, under the COCA System corporations would not recognize gain or loss on *any* liability management transaction, just as corporations currently recognize no gain or loss on trading in their own stock. For example, gain or loss realized by a corporate issuer in retiring its outstanding debt obligations would be governed by rules similar to those governing corporate stock transactions under Section 1032. Similarly, gain or loss attributable to any designated liability management tool employed by a corporate issuer to manage capital costs (e.g., an interest rate swap, cap or forward contract), once identified as part of a taxpayer's cost of capital "account," simply would generate tax-free cash flows.

One difficult part of designing a COCA System would be to identify those liability management tools that are properly included in, or excluded from, the system.⁶⁶ (A taxpayer's own debt obligations and equity, of course, automati-

cally would be included in any such system.) One approach would be to require a taxpayer to identify each interest rate management instrument as within or without its capital account as of the time that the instrument first is entered into or acquired.⁶⁷ Anti-abuse rules then generally would be necessary to prevent a taxpayer from transferring items into or out of its capital account (other than by actual disposition) after the time for identification of those items has passed.⁶⁸

Alternatively, under a simpler approach—recently applied in Reg. § 1.861-9T(b)(6)—all liability management tools could be presumed to act as capital adjustment instruments, and accordingly would be presumed to come within the COCA System, unless specifically identified as associated with the taxpayer's *assets*.⁶⁹ Since the majority of interest rate management tools in fact are used to alter the characteristics of taxpayers' liabilities, this simplifying tax assumption would cause little economic distortion.

porate tax rate is adjusted to keep the system revenue neutral. My objection to such a solution is that industries vary widely in their returns on capital, and a tax system that ignores the fact that some industries are more capital intensive than others would create substantially greater unfairnesses than the COCA System approach, in which a taxpayer's cost of capital allowance would at least be directly proportional to its total capital requirements.

⁶⁴ The federal rate is a monthly computation of the average yields on selected short-, medium- and long-term Treasury securities. See Section 1274(d) and Reg. § 1.1274-6.

⁶⁵ I do not propose any specific formula because I lack the econometric training to do so intelligently. I cannot believe, however, that the development of the statutory formula is a task so difficult as to throw into doubt the viability of the COCA System.

⁶⁶ Similar identification issues presumably would arise with respect to foreign currency hedging instruments. As noted above, however, a detailed discussion of these special issues is beyond the scope of this article.

⁶⁷ This identification approach should be familiar to most taxpayers. Section 1256(e), for example, requires a same-day identification of positions as "hedging transactions" in order to obtain exemption from the mark-to-market and straddle rules. While some taxpayers may object to a strict "same day" identification rule, any possible grace period might allow for "gaming" opportunities based on interim price movements.

⁶⁸ A possible alternative might allow a taxpayer to transfer items after identification if the taxpayer recognizes the full amount of any gain or loss accrued on the transferred position subsequent to the identification date. The complexity of the associated calculations (as described in Part IV.A) suggests that this alternative may not be feasible for corporate taxpayers generally. Reg. § 1.988-5T, however, does use such a mark-to-market approach for certain foreign currency hedging transactions.

⁶⁹ One example of the use of "liability" management tools on the asset side of the balance sheet would be a taxpayer that purchases a U. K. government bond (a "Gilt") and then swaps some or all of the sterling inflows into U. S. dollars. Another example would be a taxpayer that hedges the currency or interest rate components of its receivables.

The Cost of Capital Allowance formula could be set to produce revenue neutrality with the current tax system, if desired. In such case, the Cost of Capital Allowance in 1990 would be *lower* than prevailing Treasury rates in 1990, to reflect the implicit tax deductibility of the cost of equity capital.⁷⁰ Similarly, a small business rule easily could be provided, under which invested capital up to some specified maximum amount could receive a greater Cost of Capital Allowance than amounts in excess of that specified maximum. Finally, taxpayers engaged in a "spread" banking business or in securities dealing probably would require a special regime with respect to their operations, because, as applied to them, the rough justice of the COCA System would substantially distort their earnings.⁷¹ (Like any other accounting method, any such special regime presumably would apply on a line of business basis, rather than on a corporation-by-corporation basis.)

4. *Taxation of Investors.* The taxation of investors in debt or equity securities generally would not be affected by the COCA System. Thus, the tax consequences to investors and corporate issuers of buying and issuing a security would be wholly independent of one another—a result that already is true to a large extent by virtue of, first, the role of active liability management on the part of issuers, and, second, the pervasive role of tax-exempt investors in the capital markets. One notable exception would be the repeal of the dividends-received deduction; portfolio investments in stock thereby would be treated in the same manner as direct investments in productive machinery. (Of course, the corporate investor would obtain a Cost of Capital Allowance deduction in respect of the capital invested in that portfolio stock.)

5. *Transition Rules.* Generous transition rules would be necessary to allow corporations time to adjust their capital structure to reflect the new regime. A COCA System, for example, could be phased in over 10 years as follows: in each year, a declining percentage of a corporation's actual interest expense (based on its outstanding debt levels as of the effective date of the new system) would be deductible, and a separate deduction would be allowed equal to the converse percentage of the taxpayer's total Cost of Capital Allowance for that year, as if the COCA System were fully in place. Thus, in the first year, a taxpayer might be allowed to deduct 90 percent of its actual interest expense on pre-effective date debt, plus 10 percent of the product of its Invested Capital and the statutory Cost of Capital Allowance, determined as described above. No transition period deduction would be allowed for interest expense on debt in excess of the taxpayer's pre-effective date levels; however, such amounts presumably would increase the taxpayer's Invested Capital, and therefore its deduction under the Cost of Capital Allowance System for that period.

6. *Collateral Consequences.* The COCA System would provide a built-in tax incentive for

taxpayers to choose the capital structure that, for their particular situation, produced the lowest overall costs. Under the COCA System, a corporation would have no tax reason to favor debt over equity financing (or vice versa).⁷² Similarly, corporate issuers of "junk" debt would not receive a disproportionately larger tax subsidy than issuers of "AAA" rated debt. Since the cost of capital allowance would be the same in either case, taxpayers would issue "junk" debt only if the prospective pre-tax returns from the investment of those proceeds outweighed the actual pre-tax cost of the financing.⁷³

Since the Cost of Capital Allowance System in effect ignores a corporate issuer's actual cost of capital in favor of an annual statutory allowance, a number of complicated tax rules could be eliminated from the Internal Revenue Code. In addition to the disallowance rules described in Part I. B. of this article,⁷⁴ special rules no longer would be required to deal with discharge of indebtedness income, original issue discount, bond premium, or any of the character, timing or source questions raised by notional principal amount contracts.

It could be argued that the COCA System produces an "artificial" deduction, because a particular taxpayer's actual cost of capital might be higher or lower than the statutory allowance. By the same token, current law's depreciation system for tangible assets is artificial in that the annual depreciation deduction allowed by the Code is only casually related to the economic depreciation suffered by a particular taxpayer. In fact, the current tax treatment of corporate capital creates an even more "artificial" result in economic terms, by treating the yield of any security labelled "debt" as a fully deductible

⁷⁰ Hatsopoulos, *supra* note 14, for example, suggests that a cost of capital deduction equal to 5 percent of a corporation's total capital would be revenue neutral.

⁷¹ Some of these cases, such as the taxation of dealers in notional principal amount contracts, might best be addressed through mark-to-market solutions, since the taxpayers in question would have the information and capability to develop mark-to-market accounting rules. In other cases, such as classic "spread" banking, the appropriate answer might be to net (i) liabilities against interest-bearing assets, and (ii) the interest expense associated with these liabilities and the interest income associated with these assets (at least to the extent there is positive net interest income). The COCA System then would apply only to non-netted Investment Capital.

⁷² The distinction to an issuing corporation between debt and equity, of course, would remain important for nontax purposes, such as preferences in bankruptcy, and for certain tax purposes, such as determining the existence of affiliated groups or controlled foreign corporations.

⁷³ This proposition assumes, of course, that the prospective pretax returns on investments can be determined with certainty. For a discussion of the effects of uncertainty on corporate investment decisions, see Modigliani and Miller, "The Cost of Capital, Corporation Finance and the Theory of Investment," 48 *The American Economic Review* 261 (1958).

⁷⁴ See *supra* note 10.

cost, while implicitly valuing the cost of "equity" at zero.

Finally, it is interesting to note that the COCA System produces results that are more consistent with corporate integration goals than are the results achieved under the current tax system. Specifically, the COCA System tends to assure that at least some tax burden is shouldered by corporate debt (by functioning like a partial interest expense disallowance system), and that at least some relief from double taxation is afforded corporate equity (through the cost of capital allowance on equity). At the same time, because the COCA System changes very little with respect to the taxation of investors, the COCA System should prove to be more politically feasible than would a more explicit integration agenda. Moreover, regardless of one's feelings about corporate integration, the COCA System resolves the complex timing issues to which much of this article is addressed—issues that traditional integration models leave untouched.

7. Conclusion. In April 1989, Congressman Rostenkowski, Chairman of the House Ways and Means Committee, called for hearings on the "tax policy issues with respect to mergers, acquisitions, leveraged buyouts and recent increases in corporate debt."⁷⁵ Congressman Rostenkowski invited comments on over two dozen legislative proposals; one of these proposals was a Cost of Capital Allowance concept similar to that proposed herein.

At hearings in May, 1989, the Treasury Department's Acting Assistant Secretary for Tax Policy testified on the proposals summarized in the Rostenkowski press release.⁷⁶ Despite the relatively clear (to outside observers, at least) mandate to conclude that all the proposals listed in the Rostenkowski release were unwise or infeasible (with the possible exception of amendments to the rules governing employee stock ownership plans), the best that the Assistant Secretary could do by way of criticizing the Cost of Capital Allowance concept was to conclude that the adoption of a Cost of Capital Allowance System would result in "substantial winners and losers." It is difficult to imagine any substantive legislation that would not produce winners and losers, and it is interesting that the Assistant Secretary was not able to identify any systemic bias in the Cost of Capital Allowance concept that would produce unfairness, as contrasted to winners and losers. Criticism so mild from a reviewer charged with deflating the idea suggests that a Cost of Capital Allowance System is a concept worth continued exploration. ●

⁷⁵ Congressman Rostenkowski's press release is reprinted in *Highlights and Documents*, April 13, 1989, at 441.

⁷⁶ The Assistant Secretary's prepared testimony is reprinted in *Daily Tax Report* No. 94, May 17, 1989, at L-17.