

The Taxation of Debt, Equity, and Hybrid Arrangements

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PRÉCIS

Durant plus d'un siècle, la distinction entre la dette et les capitaux propres a constitué un des éléments importants de la structure centrale des lois régissant l'imposition des entreprises. Au cours des dernières décennies, les instruments dérivés, les arrangements hybrides, l'ingénierie financière, la duplication de l'actif et la mondialisation ont de plus en plus miné cette distinction. À mesure que le poids s'alourdissait, la superstructure se lézardait. Certains croient qu'une étape critique a été atteinte et qu'il est maintenant impossible d'assurer le traitement fiscal uniforme des accords financiers. Cette situation présente des défis complexes sur le plan de la structure en matière de politique fiscale.

Cet article débute par une analyse des difficultés et des défis causés par la conjonction étrange entre l'innovation financière, l'intégration des marchés financiers et l'imposition de la dette et des capitaux propres. Cinq modèles visant à supprimer la distinction entre la dette et les capitaux propres sont brièvement examinés. Puis, en supposant que les traitements différents de la dette et des capitaux propres sont maintenus, trois méthodes de rechange pour composer avec la politique fiscale dans les cas limites entre la dette et les capitaux propres sont analysées. Les deux premières méthodes comportent une discontinuité marquée dans les cas limites. La troisième méthode élimine l'importance de la discontinuité au moyen d'une « double bifurcation ».

ABSTRACT

For more than a century, the distinction between debt and equity has formed a central structure within the architecture of business tax law. Over recent decades, that distinction has increasingly been undermined by derivatives, hybrids, financial engineering, asset replication, and

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globalization. As the weight has mounted, cracks have appeared in the superstructure. Some believe that a critical pass has been reached and that it is now impossible to establish widespread consistency in the tax treatment of financial arrangements. This state of affairs poses structurally complex challenges for taxation policy.

This article begins with a discussion of the difficulties and challenges created by the awkward conjunction between financial innovation, capital market integration, and the taxation of debt and equity. Five models that seek to excise the debt/equity distinction are briefly reviewed. Then, on an assumption that the different tax treatments of debt and equity are maintained, three alternative methods of handling tax policy at the debt/equity borderline are examined. The first two methods involve a sharp discontinuity at the borderline. The third works to remove the sharpness of that discontinuity by means of "dual bifurcation."

FINANCING AND RISK

The Setting

The traditional distinction between debt and equity was most apposite, perhaps, in the early years of the industrial revolution. Equity was generally perceived as riskier than debt. Later it became apparent that holding and issuing debt could also involve considerable risk. Banking crises like that which occurred during the 1890s in Australia, the experience on the Continent following World War I, and the interruption to normal capital flows in 1929 and its aftermath all demonstrated that the risks associated with the issuance and holding of debt could be substantial. Debt forgiveness as applied to the sovereign debt of poorer Paris Club countries, debt-related problems experienced since the early 1980s in countries like Norway, Finland, Australia, Chile, and Mexico, and, most recently, the widespread debt-laden/currency-related Asian financial crisis (which has engulfed many lending institutions) provide additional illustrations. The collective evidence suggests that debt securities may be either more or less risky than equity securities depending on economic forces, the volatility of financial markets and currencies, the credit standing of the issuer and the holder, and the parameters of the instruments concerned.¹ It is also arguable that some modern derivative instruments and emerging hedge funds may be at least as risky as either straight debt or equity, as illustrated by Procter and Gamble, Orange County, Gibson Greetings, German

¹Corporate debt is not risk-free: the greater the debt gearing (that is, the higher the debt/equity ratio), the greater is the risk of financial default. This greater risk is, in part at least, borne by lenders. While debt issued by a single corporate entity may be less risky than ordinary equity issued by the same entity (because holders of debt have priority in settlement), this is a weak foundation on which to base an entire tax policy design. Not only do issuers have credit ratings of various qualities, but these can vary widely irrespective of whether the securities issued are debt or equity. Most particularly, in the not uncommon case of total default, the distinction becomes meaningless.

Metallgesellschaft, the US saving and loan debacles, and, most recently, Long Term Capital Management.

Not only do debt, equity, and derivatives not occupy clearly separable segments on the risk spectrum, but debt, equity, derivatives, and hybrid instruments perform functionally similar financing and risk-management roles. In these contexts, financial instruments are increasingly interchangeable and serve varied functions, including market making, price setting, and market completion; financial intermediation and insurance; financial arbitrage; hedging and risk reduction; and risk diversification and transference. Financial innovation provides the potential for both issuers and investors—who may be variously risk averse, risk neutral, or risk takers—to shop along the entire length of the risk-return spectrum and to select among alternative financial instruments not on the basis of their legal form but according to net cost/values relative to the many and varied financial services and risk profiles they provide. The time value of money, uncertainty, and risk—as represented by interest rates and price volatilities, and as reflected in margin relativities—are the essential forces that determine the nature and distribution of portfolios and financial flows to and from the household and business sectors, including those via domestic intermediaries and the foreign sector. Generally, taxation policy, as it is applied to financial arrangements, should not seek to distort these financial flows and their evolution.

Hybrid instruments and synthetic replication² not only have been used to achieve financing and risk management objectives, but also can be deployed to outflank³ and confound the traditional debt/equity tax law distinctions. For example, depending on the taxpayer's status and circumstances, there are advantages to be gained by using hybrid instruments to selectively characterize returns as dividends or as interest, including structuring a debt-like instrument to yield frankable returns⁴ or an equity-like

² Under "put-call parity," the cash flows attaching to an equity instrument can be converted (with the aid of derivatives) into cash flows that are identical to those associated with classical debt.

³ Olivier asserts that "[d]erivative-related deals now account for between 60% and 70% of all tax-driven deals being done in the US." See Charles Olivier, "Catching the Capital Markets" (June 1995), 6 *International Tax Review* 15-19, at 18.

⁴ Equity returns are generally not deductible to the issuer, but in countries (such as Australia) with imputation systems of company tax, they are frankable. Returns on debt are generally assessable to the holder and deductible to the issuer. "Franked debt," which does not exist in Australia, would refer to debt that received franking treatment of the type that applies to returns on equity. Such returns would not be deductible. Under the Australian system of dividend imputation, distributions of assessable dividend income from a company to its shareholders are generally frankable. Dividends paid from income that has borne company tax are franked. This means that, while shareholders are assessable on their (before company tax) dividend income, their tax liability is reduced by an amount equal to the company tax that has been paid in relation to the income represented by the franked dividends. Australian resident corporate shareholders are generally entitled to a rebate that has the effect of making dividends received from Australian companies tax-free in the hands of recipient shareholders.

instrument to yield interest returns. As well, the uncertainty inherent in a “risky” (equity) instrument can be broken up using derivatives and reconstituted to form a “safe” (debt) instrument; yet the tax treatments of the individual parts of such transactions do not add up to the tax treatment of the reconstituted whole. These developments have created additional potential for tax arbitrage and avoidance, inequity, administrative and policy complexity, and taxpayer uncertainty.

In the face of increasing capital integration and mobility, emerging hedge fund forces, and other cross-border financing vehicles⁵—and destabilizing phenomena such as herding, speculative capital deluge, the bursting of asset price bubbles, debt blowouts, currency-induced debt default and bailouts, stock market crashes, flawed financial institutions, derivative debacles, panic, currency flight, and flight to quality—there is an increasing possibility that distorted and uneven tax structures could contribute to excessive exposure to debt, equity, foreign currency, or derivative instruments. Such excessive exposure could, in turn, contribute to uncertainty and instability by affecting risk management, the structure of national savings and investment, the competitiveness and stability of financial markets, external balance, and international capital movements.

Consequently, in order that savings and investment may be marshalled most effectively and financial markets adequately serviced, it is desirable that non-distortionary taxation arrangements be applied consistently to all financing,⁶ investment, trading, and hedging vehicles. Economically equivalent financial transactions should receive functionally equivalent tax treatments: the timing of buy and sell decisions, the ordering of relatively fine profit margins, and the pre-tax rankings of finance, investment, and speculative activities should generally not be distorted by taxation.

⁵ Olivier, *supra* footnote 3, at 16, reports that “some large multinationals regularly cut 2% or 3% off their end of year tax bill by carefully structuring inter-company loans.” He also states that “equity dividends (not always tax deductible) can be made to look like bond coupon payments (which are tax deductible), or an offshore subsidiary is transformed into a tax exempt investor by labelling it an investment trust. With slightly more difficulty, debt principal repayments (not deductible) can be given the appearance of debt interest payments (deductible). . . . Securities issued are accountable as equity without losing their ability to qualify for the tax deductions available on debt.” *Ibid.* Olivier goes on to specify various hybrids structured to specifically avoid taxation: perpetual preferred securities, monthly income preference shares, the Jaguar structure, and so on. *Ibid.*, at 17. Where the same (or similar) hybrid instruments are taxed differently (in respect of debt and equity treatments) in different countries, there is clear scope for tax arbitrage to arise such that certain taxpayers who transact across national borders are able to access excessive deductions or otherwise lower taxable income overall.

⁶ That taxation may impact on financing choice is illustrated in a recent study: Reint E. Gropp, “The Effect of Expected Effective Corporate Tax Rates on Incremental Financing Decisions” (December 1997), 44 *International Monetary Fund Staff Papers* 485-509. Gropp concludes from quantitative analyses that “the distortionary effect of corporate taxation on firms’ financing is very likely substantial both in Germany and in the United States”: *ibid.*, at 504.

For all these reasons, the case for taxing debt, equity, hybrids, derivatives, and foreign currency gains and losses on a consistent basis has strengthened considerably over the past decade.

Debt, Equity, Hybrids, and Synthetics

Because of the functional interrelationships linking all financial instruments—including key pricing parities and financial arbitrage—it is critical that the taxation arrangements to be applied to hybrid instruments be considered in the broadest context. Thus, in the simple framework presented in figure 1, debt securities lie along the left-side vertical axis while equity securities fall along the right-side vertical axis. Debt/equity hybrid instruments are assumed to be created when debt and equity instruments are stapled, bolted, or welded together; they fall along the lower horizontal axis. Derivatives are located on the top horizontal axis.

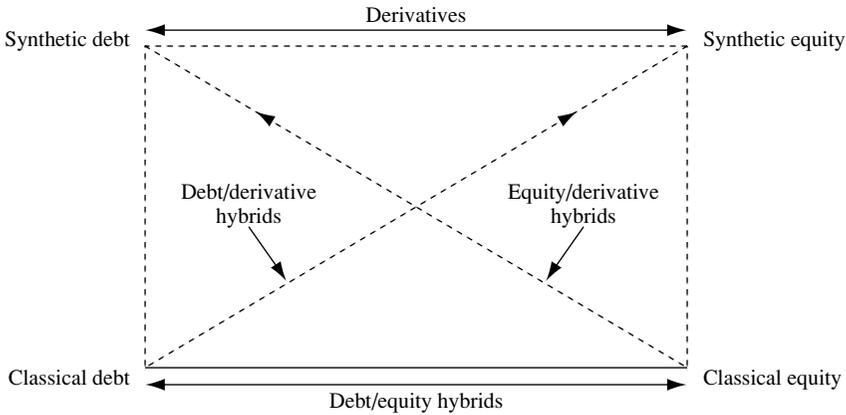
Within this stylistic framework, hedged arrangements and structured derivative-based hybrid instruments can be represented by the cross-diagonals. Debt/derivative hybrids fall along the left-to-right upward sloping diagonal interval; along this interval, “debt” (on the left-hand vertical axis) is combined with “derivatives” (on the top horizontal axis). Equity/derivative hybrids fall along the right-to-left upward sloping diagonal.

The holding (synthesis) of an equity security and a very particular derivative transaction (or a particular combination of derivatives) can yield the same cash flows as those that exist for a classical debt instrument. Thus, synthetic debt is approached by moving toward the upper reaches of the diagonal interval joining classical equity and synthetic debt. At a unique point (at the extremity of that interval), an otherwise equity/derivative hybrid instrument is transformed into purest synthetic debt. Synthetic equity instruments⁷ can be similarly characterized.

Figure 1 will be used as a reference point throughout this article. We will assume that the general policy objective is to secure the greatest possible consistency in tax treatments among the instruments falling within the bounds of figure 1. However, the central focus of the analysis is limited to debt/equity hybrid transactions—that is, those transactions lying along the lower horizontal axis.⁸ That is not to imply, however, that the basic classificatory methodology discussed later in this article could not be applied to a wider range of hybrid instruments—that is, including

⁷For instance, the issuance of a low exercise price option in conjunction with receiving a loan.

⁸The debt/equity hybrid instruments discussed in this article appear similar to those that Edgar refers to as “mixed-right hybrid securities”: see Tim Edgar, “The Classification of Corporate Securities for Income Tax Purposes” (1990), vol. 38, no. 5 *Canadian Tax Journal* 1141-88. To apply the scheme discussed in this article to hybrid instruments consisting partly of derivatives (including those that Edgar refers to as “option hybrid securities”), it would be necessary that derivatives be taxed on an anticipated/accruals-cum-unanticipated/realization basis (see the discussion below).

Figure 1 Debt, Equity, Hybrids, and Synthetics

those hybrids that involve derivatives such as option rights over debt or equity and lie along the cross-diagonal intervals. The accruals/realization approach discussed later could, as well, be applied to foreign currency gains and losses and to foreign currency-linked and commodity-linked derivatives and, indeed, to all financial arrangements and rights over assets more generally. The focus of the analysis in this article is narrowly cast in order that the underlying issues and principles can be presented as clearly as possible.

REMOVAL OF THE DEBT/EQUITY DISTINCTION

The Taxation of Debt and Equity

The impact that taxation has on the sources of business finance (debt, equity, and hybrids) and risk taking is not well understood. The OECD has commented that tax systems of OECD countries tend to favour debt finance, because corporate interest payments are deductible from the corporate tax base, and because effective tax rates on interest are often low.⁹

Not only can the periodic returns from debt and equity be taxed differently—debt returns being deductible and (where imputation systems exist) returns from equity being frankable—but so can the tax treatment of the disposal of debt (often the full nominal value being taxed on revenue account) differ from the tax treatment of the disposal of equity (sometimes, as in Australia, real gains only being taxed on capital account). Furthermore, when an equity/derivative hybrid instrument is transformed into purest synthetic debt (at the upper extremity of the right-to-left sloping diagonal interval in figure 1), one might arguably find yet another discontinuity in tax treatments.

⁹ See Organisation for Economic Co-operation and Development, *Taxing Profits in a Global Economy: Domestic and International Issues* (Paris: OECD, 1991), 25.

The complications created by these debt/equity discontinuities have generated a number of proposals over the past decade aimed at removing the debt/equity distinction from business tax systems. The main proposals may be characterized in the following general manner:

1) *Tax debt like equity*. Under this model, interest would not be deductible but would be taxed as equity. Unless there were compensating mechanisms, this approach could disturb the cost of debt financing and, through a number of channels, could affect cross-border capital flows. Accordingly, such an approach may provide potential complications for small liberalized economies, like Australia's, that are highly dependent on capital inflows, should they attempt to act unilaterally. If debt is franked but remains deductible to the issuer, there could be adverse implications for the revenue base and national savings. As well under this model (depending on its precise specification), additional streaming possibilities would be opened up and new discontinuities could be created—for instance, at the point where debt for individuals is taxed differently from corporate debt, at the borderline between trade debt and non-trade debt, and at the point where debt and certain derivatives (those containing embedded debt) interface.

In the Australian context, it has recently been proposed that a “franked debt” approach¹⁰ be the vehicle to implement this general model. Under this approach, deductions for corporate interest payments would be repealed and replaced with a lender credit that would exactly parallel the shareholder credit under imputation. Franking credits would be stapled to interest payments on orthodox debt. Corporations seeking to issue “eligible franked debt” would require a credit balance in their franking account (representing tax already paid) and would be subject to the usual constraints against over- and underfranking. The franked debt proposal refers to possible complications for the revenue base where there is fungibility of interest and dividend franking accounts.

2) *Tax equity like debt*. Under this model, dividends paid would be deductible to the issuer. This model (in its crudest form) potentially results in the diminution of the company tax base and could therefore have wider implications for other sources of tax revenue and/or for public expenditures. Two variants of this approach have been proposed:

a) *The allowance for corporate equity (ACE) proposal*.¹¹ Under this approach, the tax treatment of interest is unchanged (that is, interest remains deductible to the issuer), but a company would be allowed a

¹⁰ See A.J. Rumble, “Franked Debt: A Capital Markets Savings Cure,” paper presented at *Business Tax Forum*, Australian Taxation Studies Program, University of New South Wales, September 15, 1998.

¹¹ See Institute for Fiscal Studies, *Equity for Companies: A Corporate Tax for the 1990s*, a report of the IFS Capital Taxes Group, commentary no. 26 (London: Institute for Fiscal Studies, 1991).

deduction (representing the cost of equity capital) calculated as a proportion of shareholders' funds. This allowance may be calculated in line with the medium-term bond rate. The company tax rate would be applied to profits in excess of the normal rate of return (but after the deduction). The ACE proposal has powerful neutrality properties and has been applied in Croatia and in Italy. The ACE design probably makes it most suitable for application within a "classical" business tax system, although the relevance of such tax system distinctions for ACE's prospective operationality remains somewhat unclear.

b) *The Kleinbard¹² method (cost of capital allowance [COCA]).* Under COCA, interest and dividend payments are rolled together and treated as an omnibus allowance, ensuring precisely identical treatments of debt and equity. Under the COCA proposal, specific and separate valuations for tax purposes of each and every business asset and liability (and relevant derivatives) are not required. Existing commercial accounting systems are harnessed to value the net balance between hundreds of individual assets and liabilities. To the extent that individual assets and liabilities may be misvalued by commercial accountants, the fact that both sides of the balance sheet are involved (and netted) ensures that measurement problems, overall, are minimized. Kleinbard asserts that the COCA deduction is therefore likely to be based on a reasonable approximation of the true cost of funds. The COCA approach appears to possess some potential for compliance cost savings.

3) *The comprehensive business income tax (CBIT) proposal.*¹³ Under this proposal, all company earnings are taxed at the company level; integration is achieved by not allowing deductions for interest at the entity level and not taxing interest and dividends at the debt holder and the shareholder levels. The distinctions between interest and dividends and between retained and distributed earnings are removed. However, the tax burden on debt-financed investment is increased, and the method requires the alignment of the company tax rate with the top personal tax rate.

There are as well other approaches that have the effect of removing the distinction between debt and equity—for instance, the dual rate approach adopted in some Nordic countries.

Some of the above-mentioned proposals may be worthy of further consideration and evaluation, although it needs to be recognized that removal of the debt/equity distinction is unlikely to be the sole policy objective in any business tax reform. In the Australian case, it seems possible, at least conceptually, to work within the existing business income tax framework

¹² See Edward D. Kleinbard, "Beyond Good and Evil Debt (and Debt Hedges): A Cost of Capital Allowance System" (December 1989), 67 *Taxes: The Tax Magazine* 943-61.

¹³ See United States, Department of the Treasury, *Report on Integration of the Individual and Corporate Tax Systems: Taxing Business Income Once* (Washington, DC: US Government Printing Office, January 1992).

and still address, to some significant degree, the same underlying problems as those addressed by the more radical proposals mentioned above. One such approach, which operates in tandem with the existing tax treatments of debt and equity, is explored in some detail later in this article. However, whatever approach is adopted in any individual country, there can be no doubt that—given the cross-border tax mismatches and avoidance possibilities that now exist owing to different national tax treatments—greater international harmonization of the tax treatments of debt, equity, and other financial instruments is already a pressing issue, and one whose resolution will become increasingly desirable. For widespread momentum to develop in that direction, however, there will need to be a stronger national and international resolve to establish a common view on how best to proceed.

In what follows it is assumed that an international consensus on this issue will not emerge in the near future and that the tax treatments of debt and equity are broadly fixed, particularly for smaller capital-importing countries. With that constraint in mind, consideration is given to whether the current tax treatment of debt/equity hybrids in Australia might be improved. The issues canvassed in the remainder of this article may be relevant to tax policy design in other countries and to commercial accounting treatments of hybrid transactions.

HYBRID INSTRUMENTS

The Taxation of Hybrids

Hybrid instruments have been in existence for a number of centuries¹⁴ and take many forms. Some of the better-known hybrid instruments include certain classes of preference shares,¹⁵ convertible notes,¹⁶ capital-protected equity loans, profit participating loans, perpetual debt, endowment warrants, equity swaps, and so on. Exotic hybrid products include strypes and tiger notes. Hybrid instruments¹⁷ continue to be developed because

¹⁴ The first English companies issued multiple classes of stock with certain preferences as early as the middle of the 16th century. Convertible securities were probably first issued in the 17th and 18th centuries. See A.S. Dewing, *A Study of Corporation Securities: Their Nature and Uses in Finance* (New York: Ronald Press, 1934).

¹⁵ Preference shares may be redeemable or non-redeemable, converting or convertible, participating or non-participating; dividends on the shares may be cumulative or non-cumulative, and may be fixed or may vary with profits. Depending on the particular conditions specified in the prospectus, the instrument can have the appearance and substance of either debt or equity. Non-redeemable preference shares approximate perpetual debt in that the return of principal is not foreshadowed. When converting preference shares are combined with share buybacks, they have substantially a debt character.

¹⁶ Convertible notes incorporate a fixed interest security and an embedded call option (over shares), and typically their coupon rate is discounted on that account.

¹⁷ The growth of structured equity hybrid products in Australia has been explicable in part by the desire for the right to future share ownership; the desire to customize and to tailor risk transfer and investment opportunities; the convertibility dimension; the incidence
(The footnote is continued on the next page.)

both issuers and holders have perceptions (albeit based on different expectations) that these instruments embody certain advantages over traditional instruments with respect to pricing/yield/cost, risk, insurance, hedging, control, gearing, cash flow conservation and flexibility, convertibility, diversification, optionality, and taxation. Information asymmetry¹⁸ between managers within corporate structures on the one hand and outside investors on the other, the perceived scope for “convertible arbitrage,”¹⁹ and domestic/foreign tax asymmetries may also be influential.

The discussion that follows considers three different approaches to the tax treatment of hybrids in the context of the constraints imposed by the current tax treatments of debt and equity.

Method 1: The Debt and Equity Characteristics Approach

The literature generally approaches the tax treatment of both hybrid and synthetic transactions from the perspective of the traditional legal-form tax treatments of debt and equity. This “debt and equity characteristics approach” (or “reasoning by analogy approach,” as it is sometimes called) has major limitations, but it is, nonetheless, widely regarded as a concomitant feature of a differentiated tax system. This approach usually involves an attempt to categorize instruments according to whether they have more “debt” features or more “equity” features relative to some benchmark principles.²⁰ Usually an attempt is made to locate the debt/equity borderline toward the centre of the debt/equity spectrum (on the

¹⁷ Continued . . .

of new floats; capital protection and the desire to lower transaction costs and the costs of capital; and taxation. Tax arbitrage has also been influential. The issuers of these products may be seeking equity characterization for security and balance sheet reasons. Certain hybrids may represent a relatively cheap way to raise additional funds at points where, say, because of the financial conditions and the stage of the financial cycle, new equity raisings are relatively expensive or additional debt financing is not feasible (given existing leverage levels, fear of financial stress, bankruptcy costs, and concerns over credit rating downgrades). Taxation provisions have also been influential: for example, section 46D of Australia’s Income Tax Assessment Act 1936, as amended, which denies deductibility, franking credits, and a tax rebate for dividends that are equivalent to interest on a loan, such as dividends paid on certain redeemable preference shares.

¹⁸ See Stewart C. Myers, “The Capital Structure Puzzle” (July 1984), 39 *The Journal of Finance* 575-92.

¹⁹ Convertible arbitrage captures the gain arising from the mispricing of, say, the equity component of a convertible bond relative to the future market price of the equity. The strategy involves hedging a portion of the embedded equity risk by selling short the underlying equity security.

²⁰ Such benchmark principles may be relatively arbitrary or more formally structured. For instance, a tax authority conceivably could simply decide that if an instrument looks like debt, it should receive debt treatment. Such a crude form of the reasoning by analogy approach would imply major uncertainty for the taxpayer. Alternatively, in order to reduce taxpayer uncertainty, the benchmark principle could be more precisely formulated. For instance, the regulations proposed in the United States in 1980 classified a hybrid instrument as debt if its debt features accounted for more than half of its value. See Adam O. (The footnote is continued on the next page.)

lower horizontal axis in figure 1). “Blanket” tax treatment is then applied: if the judgment is that the “debt” features dominate, the whole instrument is accorded debt treatment, and vice versa for the assignment of equity treatment. Most often a “facts and circumstances test” is adopted based on listings or definitions of either debt²¹ or equity²² characteristics. Under the debt and equity characteristics approach, the aim of the tax authority is to classify hybrids by the “debt/equity-cubbyhole” system already embedded in business tax systems. In the United States²³ and Canada,²⁴ experimentation with the debt and equity characteristics approach has not been encouraging.

The blanket application of traditional, cubbyhole treatments is clearly antiquated and generally inadequate in the face of modern financial innovation.²⁵ Quite apart from other considerations, that approach is not sufficiently specific, robust, or flexible to properly account for the different

²⁰ Continued . . .

Emmerich, “Hybrid Instruments and the Debt-Equity Distinction in Corporate Taxation” (Winter 1985), 52 *The University of Chicago Law Review* 118-48, at 129. The principal weakness of the reasoning by analogy approach is that it cannot deal with modern financial innovations. See Edward D. Kleinbard, “Equity Derivative Products: Financial Innovation’s Newest Challenge to the Tax System” (May 1991), 69 *Texas Law Review* 1319-68, at 1355.

²¹ For example, see Australian Taxation Office, *Taxation of Financial Arrangements* (Canberra: Australian Government Publishing Service, 1996), chapter 6.

²² For example, see A.J. Rumble, “Tax Linearity and the ‘Too Hard Basket’: A Separate Tax Regime for Innovative Financial Products,” in *Derivative Tax Reform* (St. Leonard’s, NSW: Prospect Media Pty Ltd, 1997). Rumble, *ibid.*, at 77-79, reports a study that lists 38 separate indicia of equity and debt.

²³ In 1969, Congress authorized the Treasury to prescribe regulations to determine whether an interest in a corporation is to be treated as debt or equity. The proposed regulations allowed certain equity hybrids to be treated as debt. That scheme was never legislated. The current “facts and circumstances” system involves a mixture of case law interpretations and IRS policy statements (as in section 385 of the Internal Revenue Code and in notices and rulings). While regulations were issued in 1980, they were so controversial that they were subsequently withdrawn, in 1983. As applied to hybrids, those rules required, *inter alia*, the estimation of the fair market value (FMV) of the debt-like and equity-like components. The treatment applied depended on which FMV was largest. In 1989, the rules were reformed to allow bifurcation: a single instrument could be treated as part debt and part equity. Confusion developed when four sets of regulations were subsequently released (the latest in 1996). As it has been applied in the United States, bifurcation has been criticized as an approach that “seems less workable the more complex and variable rights and obligations become”: David P. Hariton, “Distinguishing Between Equity and Debt in the New Financial Environment” (Spring 1994), 49 *Tax Law Review* 499-524, at 504, footnote 12. In a later article, Hariton reviews four alternative approaches to debt and equity characterization: David P. Hariton, “The Accrual of Interest on Derivative Instruments: Where Do We Go from Here?” (December 1996), 74 *Taxes: The Tax Magazine* 1011-22.

²⁴ In Canada, the rules introduced in 1987 by the preferred share and income bond legislation have been criticized as *ad hoc*, inconsistent, and uncertain: Edgar, *supra* footnote 8, at 1158-60.

²⁵ Hariton, *supra* footnote 23, at 522, argues that “it is not possible to characterize an instrument as equity or debt by reference to a checklist of abstract attributes.”

investment, financing, and risk management functions that can be performed by identical financial arrangements.

As the separate “facts” and the individual “circumstances” relating to a particular hybrid instrument may be interrelated and interdependent in terms of their application and weighting, no automatic or simple ordinal weighting procedure seems practicable. As the number, and variants, of hybrid instruments increase, a labyrinth of rulings, guidelines, and rules-of-thumb ultimately becomes necessary to determine debt or equity, and even then some subjectivity remains. Partly for such reasons, a facts and circumstances test generally results in considerable uncertainty in relation to the classification of hybrid instruments that are closest to the debt/equity border (as defined by the tax authority). Issuers and holders of hybrid instruments may hold different views as to whether the instrument is predominantly debt or equity. The tax authority may need to make case-by-case rulings for such instruments, and in some cases, court decisions, which may themselves be controversial, become necessary. As the underlying hybrid instruments become more complicated, the application of the facts and circumstances approach can become increasingly difficult. Nevertheless, tax authorities have been drawn to that approach because it provides a mechanism to deal effectively with tax arbitrage.

As it is, however, in the case of hybrids, the attempt to apply known debt and equity treatments to contingent and non-contingent cash flows/returns is not self-executing;²⁶ it creates taxpayer and investor uncertainty; and, of course, it involves a substantial discontinuity at the debt/equity borderline. That debt/equity discontinuity ensures that for a very minor change in the terms/conditions/characteristics attaching to some hybrid financial arrangements, there can be, relatively speaking, a very large change in the tax treatment of the whole instrument. The change in the tax treatment is far out of proportion to the change in the financial character of the instrument. Furthermore, the administrative cost of policing and shoring up the debt/equity borderline is very substantial. The non-self-executing nature of the approach can itself create potential for anomalies in tax treatments. In the absence of international harmonization of “debt” and “equity” definitions, cross-border tax arbitrage opportunities are opened up and are difficult to address.

²⁶ Most hybrid instruments entail a capital amount (principal or issue value/price) and periodic payments. Both the capital amount and periodic payments could be either contingent or non-contingent. Thus, there are four combinations of returns, only one of which (non-contingent capital amount and non-contingent periodic payment) is clearly and unambiguously debt. However, at least two cases (contingent capital amount/non-contingent periodic return and non-contingent capital amount/contingent periodic return) are not unambiguously either debt or equity. For the contingent/non-contingent taxonomy to be workable, other rules or conditions become necessary, such as a facts and circumstances approach. In the case of the United States, Strnad has implied that the current differential treatment of stocks and bonds precludes consistent treatment of all financial contracts: Jeff Strnad, “Taxing New Financial Products: A Conceptual Framework” (February 1994), 46 *Stanford Law Review* 569-605, at 590-91.

Sharper definitions of debt and interest, and possibly equity and dividends too, could perhaps facilitate the effectiveness of the facts and circumstances approach. Such definitions may, perhaps, best be centred on the single proposition that in respect of hybrid instruments, the existence of a debtor-creditor relationship is determinative of debt. Under that approach, the existence of “creditor” rights in contracts or prospectuses would be a prime indicator of whether debt treatment is to apply to particular hybrid instruments. Alternatively, or additionally perhaps, a debtor-creditor relationship may be defined, at least in part, in terms of financial parameters.

Method 2: Tax Hybrids as Equity²⁷ or Tax Hybrids as Debt

One way to remove some of the uncertainties inherent in the above-described debt and equity characteristics approach is to move the debt/equity borderline as close as possible to the debt end of the debt/equity spectrum (that is, to the left-hand end of the lower horizontal axis in figure 1) and to construct a very clear and precise definition of debt. Again, debt may be defined as any arrangement joined by an unconditional debtor-creditor relationship. Under the simplest form of this approach, such debt instruments would receive deductibility for the issuer but all hybrid arrangements would receive equity tax treatment (that is, frankability and rebatability in the case of the imputation system in Australia). Alternatively, one could move the borderline to the equity end of the debt/equity spectrum (that is, to the right-hand end of the lower horizontal axis in figure 1) and proceed to concisely define equity.

Method 2 represents an advance over method 1 in that uncertainty is somewhat lowered and complexity reduced. In addition, where a hybrid is taxed as equity, there would arguably be less scope for the taxpayer’s being rewarded by the tax system for simply, but skilfully, fine-tuning and disguising the terms and conditions of an instrument in order, say, to obtain debt treatment (that is, deductibility) in respect of instruments that include equity elements (and which may even be recorded as equity in the commercial accounts and by rating agencies). However, method 2 has the disadvantage of retaining a sharp discontinuity, either at the point that separates debt from hybrids (and equity) or at the point that separates equity from hybrids (and debt). Because of this discontinuity and the blanket application of either “debt” or “equity” tax treatment, method 2 cannot deliver tax outcomes for hybrid instruments that are fully consistent with their underlying financial economics.

²⁷ An approach along these lines was proposed for the United States in 1985 by Emmerich, *supra* footnote 20. Under the Emmerich proposals (*ibid.*, at 120), “all hybrid instruments would be treated as equity unless they were sold as packages of separately saleable debt and equity instruments.” This separate sales method would facilitate the achievement of effective hybrid outcomes by issuers. A similar general approach has also been recommended for Canada by Edgar, *supra* footnote 8. Edgar argues, *ibid.*, at 1167, that “the boundary line between debt and equity should be effectively drawn at either end of the investment spectrum by restricting a particular tax treatment to one type of classical security.”

Furthermore, some taxpayers may view one of the possible treatments under method 2—where hybrids are taxed as equity—as somewhat rough-and-ready and unduly favourable to the revenue authorities. As well, from a tax policy perspective, taxing hybrids as equity may not sit well with the trend in tax law (at least in Australia) to confine the allocation of equity benefits to economic owners of shares.

The alternative approach under method 2—taxing hybrids as debt—could have substantial revenue implications.

Method 3: The Dual Bifurcation Approach

Another possible methodology to deal with the debt/equity interface could involve the bifurcation²⁸ of the cash flows/returns attaching to hybrid instruments. The term “bifurcation” could be defined in a number of ways when used in connection with financial arrangements. The *Concise Oxford Dictionary* (7th ed.) emphasizes the “division into two branches.” In the relevant literature, the following formulation is generally used: “under bifurcation the tax treatment of a position is equal to the sum of the tax treatments for the underlying units.”²⁹

As discussed in the literature, and applied in practice, it is seemingly assumed that a single bifurcation can be used to determine the tax treatment of hybrid instruments. This assumption may be questionable given the potential range of different cash flows and tax attributes that attach to any financial instrument. The weight placed on that single policy determinant (that is, the *single* bifurcation) accordingly seems excessive. In contrast, the approach in this article involves the application of *two* separate bifurcations. Thus, hybrid instruments are decomposed into *four* dimensions:

- *Bifurcation A: the anticipatable/accruals-cum-unanticipatable/realization bifurcation.* This bifurcation involves splitting the cash flows/returns according to whether they are “anticipatable” or “unanticipatable.”³⁰

²⁸ In a 1995 article, Weisbach suggests that bifurcation is an appropriate method for taxing hybrid instruments and that integration is an appropriate method for taxing synthetic financial instruments: David A. Weisbach, “Tax Responses to Financial Contract Innovation” (Summer 1995), 50 *Tax Law Review* 491-544. In a response to the Weisbach article, Strnad challenges some of Weisbach’s assertions: Jeff Strnad, “Taxing New Financial Products in a Second-Best World: Bifurcation and Integration” (Summer 1995), 50 *Tax Law Review* 545-69. However, on the whole, it is not self-evident that Strnad’s concerns have any substantial adverse bearing on the dual bifurcation approach discussed in this article.

²⁹ Strnad, *supra* footnote 28, at 546.

³⁰ In a differentiated tax system, a synthetic outcome—the replication of the risk profile of another instrument—generally requires the synthesis of two or more separate transactions, each with a different risk profile/different degree of cash flow certainty/different incidence of anticipatable and unanticipatable cash flows. The risk profile of the individual components of a synthetic instrument taken on their own provides no clues about the net combined risk profile of the composite synthetic outcome. Consequently, the tax treatments of the individual components of a synthetic transaction do not necessarily
(The footnote is continued on the next page.)

Anticipatable cash flows/returns are *accrued* while unanticipatable cash flows/returns are taxed on *realization*.

- *Bifurcation B: the interest/deductibility-cum-dividend/frankability bifurcation.* This bifurcation involves splitting the periodic costs on the basis of whether they are “interest” (debt-related) or “dividends” (equity-related). Interest costs are *deductible* while dividends are *frankable*.

The dual bifurcation approach provides the potential to remove the sharp discontinuity (which disrupts the horizontal debt/equity axis in figure 1) inherent in methods 1 and 2.

Figure 2 illustrates the basic differences in the three alternative hybrid tax methods viewed from an issuer’s cost/tax attributes perspective. In figure 2, d is assumed to be less than e .

The objective below is to explore method 3 more searchingly than the other methods canvassed in this article, not because it is necessarily preferred, but because it is novel and because it requires careful presentation and explanation. Throughout the analysis below, the focus is on the identification and classification of separable cash flows/returns according to their economic/financial substance rather than their legal form.

Two Separate Bifurcations

Bifurcation A in Greater Detail

Bifurcation A provides a mechanism to resolve *tax-timing treatments*. Under bifurcation A, anticipatable cash flows/returns would be taxed on an *accruals* basis³¹ and unanticipatable cash flows/returns would be taxed on a *realization* basis. The separation achieved under bifurcation A cannot be avoided in a mixed accruals/realization-based tax system (the border between “accruals” and “realization” must be defined). Furthermore, the approach to accruals in bifurcation A appears to be generally consistent with the “expected value taxation system” that has been proposed by Reed Shuldiner³² as a general basis for taxing financial arrangements.

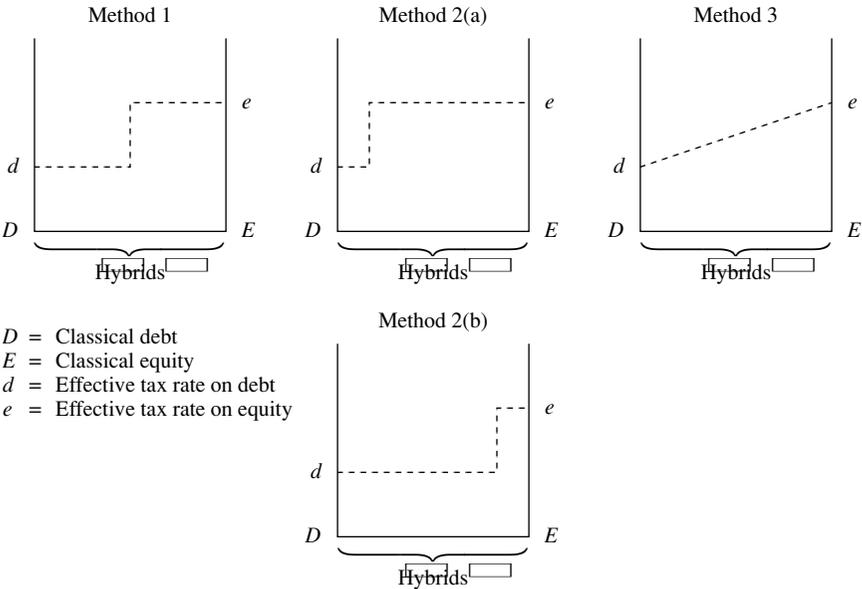
³⁰ Continued . . .

bear any direct or predictable relationship to the desirable tax treatment of the composite outcome. The case of synthetic instruments therefore appears to be relatively special, involving as it does a substantial tax discontinuity. In the special case of synthetic instruments, therefore, “integration” rather than “bifurcation” appears the more appropriate methodology. Integration provides the mechanism to tax on the basis of the overall effect of the separate transactions.

³¹ On the basis of this rule, anticipatable gains and losses in the value of financial instruments would be accrued in the same manner as, under the current tax system, anticipatable losses in the value of plant and equipment and buildings are accrued (in the form of depreciation) for tax purposes.

³² See Reed Shuldiner, “A General Approach to the Taxation of Financial Instruments” (December 1992), 71 *Texas Law Review* 243-350. Shuldiner illustrates how his expected value taxation system would apply to hybrid debt instruments, which he defines as “a combination of a conventional debt instrument and one or more other derivative products, (The footnote is continued on the next page.)

Figure 2 Hybrids: Three Alternative Tax Methods (Issuer)



The precise specification of what constitutes an “anticipatable” and what constitutes an “unanticipatable” cash flow/return would necessarily involve policy decisions³³ and the development of relevant definitions and, possibly, rules for particular instruments. However, for the vast majority of instruments (debt, equity, hybrids, options, futures, and swaps), the definitions/rules would be relatively straightforward. The objective of these rules would be to split out the separable anticipatable and unanticipatable cash flows/returns.

“Anticipatable” cash flows/returns would certainly include those cash flows/returns that are *fully* and *unconditionally* anticipatable (that is, future cash flows/returns that are known with complete certainty). “Anticipatable”

³² Continued . . .

such as forwards or options” (ibid., at 327). For further proposals and commentary on the expected value taxation approach, see Noel Cunningham and Deborah H. Schenk, “Taxation Without Realization: A ‘Revolutionary’ Approach to Ownership” (Summer 1992), *47 Tax Law Review* 725-814; Alvin C. Warren Jr., “Financial Contract Innovation and Income Tax Policy” (December 1993), *107 Harvard Law Review* 460-92; and Robert H. Scarborough, “Different Rules for Different Players and Products: The Patchwork Taxation of Derivatives” (December 1994), *72 Taxes: The Tax Magazine* 1031-49.

³³ Cunningham and Schenk, *supra* footnote 32, at 735, suggest a conservative approach. They “propose to include in income annually the expected increase in the value of property to the extent it reflects the passage of time.” For this purpose, they recommend the use of “the risk-free rate of return, that is, the rate on Treasury securities” on the basis that “the expected yield from an asset is at least equal to the rate of return on a risk-free asset.”

cash flows/returns might possibly also include those that are classified as “fixed” or can be estimated/projected with a high degree of certainty (that is, a high probability that the payment will occur at a future time as specified when the contract is entered into). However, a cash flow/return would not be classified as an “anticipatable” cash flow/return merely because a taxpayer believed he or she could speculate as to the instrument’s likely future value.

An example of an anticipatable cash flow/return arising in relation to a debt instrument would be a fixed rate periodic return.³⁴ Most plain vanilla swap payments may be anticipatable and accrued. Depending on the policy rules settled on, certain special “fixed” or “preference” dividends³⁵ may provide an example of an equity-related periodic cash flow/return that would, when viewed at the time of inception, usually have a relatively high probability³⁶ of taking place. Such a return could therefore be “anticipatable” and “accrued.”

³⁴ In the case of a periodic cash flow/return on a variable rate debt instrument, a policy decision would be required of tax authorities in order to determine whether such cash flow/return is anticipatable or unanticipatable for tax purposes. The simplest response could be to treat all variable rate cash flows/returns as anticipatable on the basis that they are certain to take place. The precise value of the payment is, however, dependent on the general volatility of financial markets. One approach would be to apply a known interest rate or, alternatively, to accrue any systematic (anticipated) element of the variable return based on the use of forward rates. Another approach could involve an assumption that the market interest rate would not change for each tax period from the level prevailing at the beginning of each tax period and impose annual rebalancing and resetting. Scarborough, supra footnote 32, at 1041, reports that certain variable rate debt instruments are already subject to an expected value tax regime in the United States.

³⁵ Taken to its extreme point, the underlying logic would suggest that allowance would also need to be made for the credit rating of the issuing entity. This refinement, which would logically apply to issuers of both debt and equity, is not recommended in this article.

³⁶ Standard and Poor’s has released a payment default study entitled *Special Report: see Standard and Poor’s, Ratings Performance 1997: Stability and Transition* (New York: Standard and Poor’s, January 1998). That study shows clearly that the higher the credit rating, the lower the probability of default. The study estimates that the average cumulative 15-year default rate is 2.3 percent for corporations with credit ratings of “A,” “AA,” and “AAA.” On that basis, the “threshold probability” could, for instance, be struck at the “A and above A” rating determined at the date of issue of the security. Where corporations meet that test, the “fixed” dividend and other dividend payments could be determined as being “anticipated” from a tax policy viewpoint. Such payments would be accrued in the hands of the holder. Arguably, where banks, other financial institutions, or corporations issue debt but their credit rating is below the “rating threshold,” relevant payments should be regarded as unanticipated. The data base used by Standard and Poor’s in the payment default study covers 6,710 holders of long-term ratings from January 1981 to December 1997. The ratings reflect Standard and Poor’s opinion of a company’s overall capacity to pay its obligations (that is, its fundamental creditworthiness) and to meet its financial commitments on a timely basis. According to Standard and Poor’s, this measure indicates the likelihood of default regarding all financial obligations of the firm. Standard and Poor’s rates private as well as public companies. As indicated previously, it is not suggested that credit ratings would need to be deployed in practice to determine payment probabilities.

Examples of unanticipatable cash flows/returns would include payments that may not be known in advance or the change in the capital value of debt instruments resulting from the general movement in interest rates. This gain or loss would be accounted for under the base price adjustment.³⁷ The relevant “principal” cash flow attaching to a “contingent principal” debt instrument would be unanticipatable. Normal dividends would be treated as an unanticipatable cash flow/return. The capital gain or loss on the disposal of an equity would be unanticipatable and taxed at realization. The settlement payments on forwards and options are unanticipatable, as are foreign currency gains and losses.

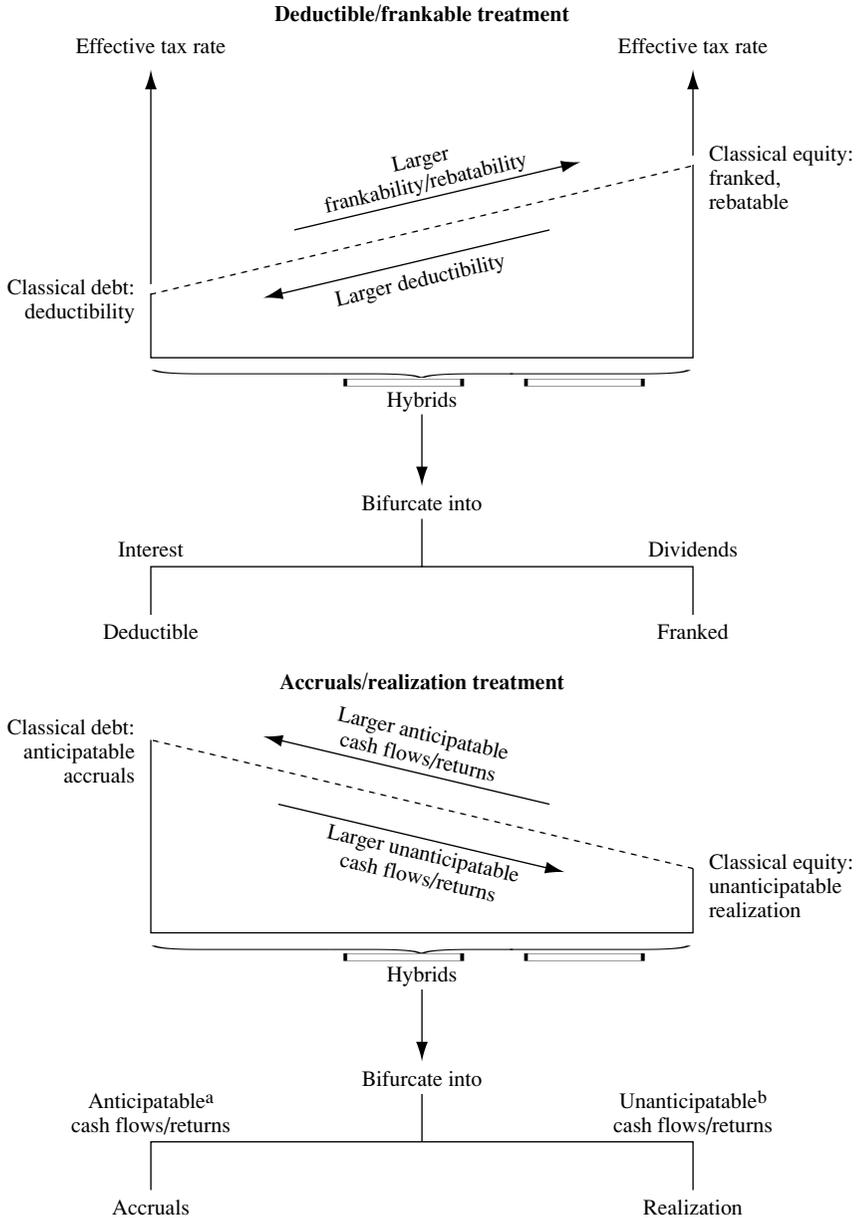
The application of the anticipatable/accruals-cum-unanticipatable/realization treatment provides one part of a (two-part) methodology aimed at removing the sharp debt/equity discontinuity that exists under method 1 or the debt/hybrid or equity/hybrid discontinuity that would exist under method 2.

Under the anticipatable/accruals-cum-unanticipatable/realization approach, one part of the tax treatment (that is, the tax-timing treatment) of any financial hybrid is a function, in the first instance, not of a “blanket” tax treatment based on whether traditional, legal-form debt or equity characteristics are judged to dominate the hybrid arrangement, but of the expected degree of certainty of payment of the cash flows/returns associated with the instrument. Consequently, under this approach, the blend of tax-timing treatments relevant for a given hybrid instrument never changes sharply as the character of the instrument changes; rather, the tax treatment changes gradually, in line with (proportionately to) gradual changes in the nature/character of hybrid instruments. Thus, as the second module of figure 3 illustrates, when moving from the classical equity end of the debt/equity spectrum toward the classical debt end, as the cash flows/returns tend to become more predictable/certain overall, the effective tax treatment of hybrid instruments becomes more “accruals-oriented.” When moving in the opposite direction (toward the equity end), as the cash flows/returns tend to become less predictable/less certain,³⁸ the effective tax treatment

³⁷ The base price adjustment essentially measures the gain or loss at realization as the difference between the proceeds of disposition and the adjusted cost base of a financial instrument (including all amounts recognized previously on an accruals basis). For a technical explanation, see *Taxation of Financial Arrangements*, supra footnote 21, at 225.

³⁸ The distinction drawn here between “more predictable/more certain” and “less predictable/less certain” cash flows/returns might be interpreted as implying that the taxation of equity should be different from that of debt because equity cash flows/returns may be perceived to be more unpredictable, and the more unpredictable the cash flow/return, the greater the risk attaching to it. It is not intended that logic of that sort would be sufficient to provide a basis to defend the retention of the debt/equity distinction, although as an interpretation it may give comfort to those who judge that the taxation of equity should differ from that of debt. Such commentators might, on that basis, possibly support the anticipatable/accruals-cum-unanticipatable/realization approach as it, in turn, may be perceived as a basis to support the retention of the debt/equity distinction and to make (The footnote is continued on page 68.)

Figure 3 Dual Bifurcation Applied to Debt/Equity Hybrids



^a Includes normal interest and “fixed” dividends. ^b Includes normal dividends and base price adjustments.

of hybrid instruments becomes more “realization-oriented.”³⁹ Taking the extreme points along the base horizontal axis in figure 1, at one end all classical equity cash flows/returns are unanticipatable while at the other end all classical debt flows (assuming no market fluctuations) are anticipatable. Conveniently, the proposed anticipatable/unanticipatable dichotomy fits well with the current basic tax treatments of classical debt and classical equity.

Bifurcation B in Greater Detail

A second bifurcation is used to determine the nature of the *tax attributes* (*deductibility or frankability*) to be applied to the periodic costs (that is, interest or dividend payments) of issuing the instrument. Bifurcations of the periodic payments attaching to debt and equity instruments must necessarily be based on rules that could specify those types of payments that would constitute “interest” (debt-type) and those that would constitute “dividends” (equity-type). Such rules/definitions would need to be consistent with, and linkable to, the operation of the dividend imputation system so that “dividends” could be franked by *the issuer* and provide the basis of determining the application of “rebatability” to relevant cash flows/returns flowing to *holders* of equity instruments. Rules of this type are a necessary feature of any approach that attempts to resolve the conundrums posed by the perpetuation of the debt/equity distinction. It is conceivable that a definition of “dividends” only would be necessary (so that all other periodic payments would be treated as interest).

³⁸ Continued . . .

some sense of it. What is nearer to the right interpretation is the fact that an anticipatable/unanticipatable dichotomy takes one “halfway” toward a pure market-value-based tax treatment. That is, it recognizes the uncertainty and difficulty of valuing accruing cash flows/returns on an ex ante market-value basis where such valuations (of unsystematic elements) would be uncertain and heavily subjective. If tax were levied on the basis of the anticipatable/unanticipatable dichotomy, a taxpayer would not be forced to accrue an unpredictable cash flow/return and hence would not generally be required to pay tax on unrealized gains that have a significant likelihood of never being realized. At the same time, however, where the predictability attaching to an accruing cash flow/return is high (that is, where there is a high probability that a pre-specified rate of payment or a dollar amount will be paid), there is a powerful case for the application of an accruals tax treatment.

³⁹ Whether this differential treatment of the cash flows is desirable or not essentially involves a policy decision. On the face of it, even if at the margin (and in comparison to an ideal mark-to-market tax system) greater incentives are generated (by its application) for taxpayers to hold riskier instruments, this imperfection (to the extent that it might be criticized) is most likely to be of second-order importance given the other influences within the business tax system that determine asset choice (for example, the lack of loss carryback rules, which biases investment choice in the opposite direction—that is, toward less risk taking). The vast majority of derivatives are deployed either to make markets or to reduce risk, and it seems most unlikely that the differential tax treatment of anticipatable and unanticipatable cash flows would significantly alter the basic disposition to reduce risk. In any event, the reality is that the current tax system is skewed more toward a “realization”-based system than that proposed in this article. Consequently, a move toward greater reliance on an “accruals” approach based on anticipatable cash flows/returns (as proposed) could only be considered desirable in this regard.

As with the first bifurcation, the tax treatment applying to hybrid instruments under the second bifurcation—bifurcation B—changes gradually. As the top module of figure 3 illustrates, as the hybrid instrument incorporates more “debt” relative to “equity” (that is, moving from right to left), the greater is the incidence of deductibility. If the hybrid instrument has a relatively greater equity element, the incidence of frankability is proportionately greater. In this characterization, it is assumed that the issuers of such instruments can evaluate separate cash flows/returns in terms of whether they are “interest” or “dividends,” based on clear definitions that would be provided in legislation. If there are some hybrid instruments in respect of which this distinction is not possible, additional rules may be necessary. It is also possible that in cases where unique bifurcations are not feasible (for bifurcation B), additional bifurcation rules would be needed to determine relevant valuation methods to be used for tax purposes.

The Synthesis of Two Bifurcations

The intersection between the tax treatments of hybrids and other financial arrangements with the rest of the business tax system is a critical junction. The separation of the “accruals/realization” tax-timing treatment determination from the “deductibility/frankability” attribute determination represents the essential analytical advance inherent in the dual bifurcation approach. In Australia’s case, such a separation could potentially allow a relatively straightforward linkage of any hybrid’s tax treatment to

1) *the taxation system applying to “other” financial instruments* (assuming that the anticipatable/unanticipatable dichotomy could be adopted as the basis for taxing other financial arrangements) and

2) *the dividend imputation system.*

Thus, where a dividend imputation system is in place, the application of the dual bifurcation principle to hybrids could possibly translate into the general working principles illustrated in figure 3 and table 1.

It is arguable that dual bifurcation (that is, the combination of the anticipatable/accruals–cum–unanticipatable/realization approach and the interest/deductibility–cum–dividend/frankability approach) provides a more meaningful and consistent application of the basic differences between the existing tax treatments of debt and equity along the spectrum of hybrid instruments that runs between purest (classical) debt⁴⁰ and fully contingent equity. Compared to current tax treatments, hybrid instruments could be taxed with greater consistency under this approach and greater uniqueness would be achievable. Importantly, the tax treatments applied to hybrid

⁴⁰ For the purposes of this exposition, purest (classical) debt could be thought of as a fixed rate debt instrument where market interest rates are assumed to remain unaltered over the life of the instrument. In this (limiting) case, all cash flows are anticipatable and accruable.

Table 1 The Taxation Treatments of Hybrids Under Dual Bifurcation**For periodic payments:**

Anticipatable (interest) cash flows/returns

holder = accrual

issuer = deductibility, accrual

Unanticipatable (interest) cash flows/returns

holder = realization

issuer = deductibility, realization

Anticipatable (dividend) cash flows/returns

holder = accrual, rebatable

issuer = franked, accrual

Unanticipatable (dividend) cash flows/returns

holder = realization, rebatable

issuer = franked, realization

For non-periodic payments (i.e., capital amounts):

The unsystematic (unanticipatable) gain or loss attaching to the capital amount (either the principal for debt or the issue price for equity) would be taxed by the base price adjustment at the point of realization.

instruments under this approach would be inclusive only of the tax treatments already applying to classical debt and classical equity. Furthermore, depending on the approach ultimately adopted by the accounting profession in respect of “measurement” and “disclosure” standards for financial assets and liabilities, there may be scope for greater commonality in tax and commercial accounting treatments⁴¹ of hybrid instruments.

Arguably, in comparison to methods 1 and 2, the “dual sliding scales” (synchromesh-type) tax treatment (method 3) provides a more meaningful and less distorted reflection of the financial economics of the instruments concerned (within the constraints imposed by the existing tax treatments of classical debt and classical equity). The sharp discontinuity (a feature of method 1 and method 2) is removed, and the hybrid instrument is not subjected to a blanket tax treatment based on an assessment of its dominant legal form. Rather, the components are taxed separately, and the tax-timing treatment and tax attributes are separately assigned in order to better reflect economic substance. In this way, the dual bifurcation

⁴¹ Under Australian Accounting Standards Board, “Presentation and Disclosure of Financial Instruments,” AASB 1033, December 1996, since the end of December 1997, hybrid instruments have been split into debt and equity parts. Companies are required to evaluate the instrument to determine the debt and equity parts at initial recognition, based on substance. AASB 1033 also requires that the classification of interest and dividend be consistent with the balance sheet classification of related financial instruments. That is, the classification of a payment to an instrument holder is either debt or interest derived from the source of the payment and is not subject to any additional decision making. Thus, for instance, dividends paid on preference shares are characterized as interest where the instrument is redeemable at the option of the holder since such preference shares are recognized as liabilities. The financial accounting treatment for Canada is in Canadian Institute of Chartered Accountants, *CICA Handbook* (Toronto: CICA) (looseleaf), section 3860.

approach delivers a greater degree of tax “continuity.”⁴² Assuming that the rules defining an “anticipated” cash flow/return and a “deductible” return are sufficiently clear and succinct, the uncertainty traditionally surrounding the taxation of hybrid instruments should be substantially reduced. As well, barriers to the mature development of dynamically complete markets along the debt/equity spectrum—including certain tax barriers in Australia’s case—should be lowered, resulting in reduced financing costs and improved risk management.

It is also likely that the adoption of the dual bifurcation approach would reduce uncertainty in respect of the taxation of the more complex hybrid instruments. The dual bifurcation approach overcomes one of the main deficiencies of approaches based on a single bifurcation. With a single bifurcation, it is not possible to automatically deal with all combinations of contingent and non-contingent returns (see cases 2, 3, and 4 in table 2); and, by applying one policy instrument in order to address two objectives, it alone cannot simultaneously resolve both the tax-timing treatment (accruals or realization) and the determination of tax attributes (deductibility or franking). In contrast, the dual bifurcation approach separates the two objectives and involves the separate assignment of two policy instruments (that is, two different bifurcations), one to each objective. Assuming that clear definitions and rules can be developed, dual bifurcation holds out the prospect of being largely self-executing and thereby breaks through a critical constraint, as illustrated in table 2.

If a scheme of this type (method 3) were to be adopted, it appears that the scope for undesirable tax arbitrage across the debt/equity borderline would be substantially constrained. This is so because the dual bifurcation rules discussed here have the advantage of substantially widening the border separating debt from equity: the advantage of this corridor is to ensure that the transaction cost and additional risks involved in jumping from all-debt to all-equity treatment, or vice versa, would tend to outweigh any beneficial tax effect of doing so. In this way, the adoption of a dual bifurcation approach for hybrids makes the otherwise existing debt/equity discontinuity less sharp and less subject to tax-based manipulation.⁴³ Thus, undesirable tax arbitrage would tend to become less attractive while the opportunity would still exist for issuers to fine-tune the financial/economic attributes of particular hybrid arrangements to suit their non-tax purposes. Holders could select among a wider range of arrangements incorporating greater potential diversity of financial/risk characteristics and effective taxation treatments. The tax system therefore would be better focused and would be working to provide greater certainty and enhanced market completion, thereby facilitating efficient and non-distorted capital markets.

⁴² See Strnad, *supra* footnote 26. According to Strnad, *ibid.*, at 576, “[c]ontinuity exists when portfolios that are nearly identical have nearly identical tax outcomes.”

⁴³ To the extent that the dual bifurcation approach is applied in other countries, the scope for cross-border tax arbitrage would be reduced.

Table 2 Single and Dual Bifurcations Compared

Instrument characteristics	Single bifurcation	Dual bifurcation	
	Debt or equity	Capital amount	Periodic return ^a
1) Non-contingent capital amount/non-contingent periodic return	Debt	Anticipatable	Anticipatable
2) Non-contingent capital amount/contingent periodic return	Debt (?)	Anticipatable	Unanticipatable ^b
3) Contingent capital amount/non-contingent periodic return	Unclear	Unanticipatable	Anticipatable
4) Contingent capital amount/contingent periodic return	Equity (?)	Unanticipatable	Unanticipatable

^a If consistent with definition of "dividend," receives frankability; if consistent with definition of "interest," receives deductibility. ^b In the case of variable rate debt instruments, the actual dollar value of the return is contingent, but there is no contingency attaching to the fact that there will be a return based on the going market interest rate. Hence, for such instruments, part (at least) of the periodic return may be anticipatable.

It is the case, of course, that some taxpayers may seek to play across the anticipated/unanticipated border in order to gain from adverse selection. This could mean that certain taxpayers may seek to achieve realization treatment for certain cash flows instead of accruals treatment, and vice versa. The ability of taxpayers to do this would depend in part on the accruals methods adopted in the tax law. For example, annual rebalancing and resetting may provide less scope for adverse selection than some other accruals methods. That said, there are two natural safeguards against adverse selection in this area. First, unanticipatable cash flows have greater uncertainty attaching to their future evolution, and they are therefore relatively risky. Second, such manipulation as might occur between anticipated and unanticipated cash flows would not bear on whether the cash flows concerned were classified as debt or equity, or deductible or frankable. Thus, any manipulation across the anticipated/unanticipated border under the dual bifurcation approach is likely to be much less substantial in its impact than manipulation across the debt/equity border under the blanket facts and circumstances approach. Nonetheless, there may be a case for a special anti-avoidance rule.

A related concern with the application of the anticipatable/unanticipatable taxonomy to hybrid instruments might be that it would induce a bias toward the holding of instruments with proportionately larger unanticipatable cash flows/returns, the gains on which would be taxed only on a "wait-and-see" realization basis (that is, on a delayed basis). The extent to which such a behavioural response would amount to a significant additional risk to the revenue base, and the extent to which it would adversely affect the structure and pricing of financing and investment, is difficult to ascertain with precision. However, given the existence of other (arguably

more powerful) influences on risk taking (including the passage of time and unforeseeable events) and the fact that issuers are generally risk averse, the danger to the revenue base from this source may not be overwhelming. This is particularly so because we currently live with a (largely) realization-based system.

Arguably, if a debt and an equity instrument are combined, it seems unlikely that the value of the net anticipatable or the net unanticipatable cash flows/returns deriving from the two individual components could systematically be diminished simply on account of their being stapled together. Because the tax treatments of the bifurcated parts of the debt/equity hybrid instrument would generally be the same as (would add up to) the tax treatment of the whole hybrid instrument, it appears that a system for taxing debt/equity hybrids of the type described in this article would possess a greater weighting of desirable linearity⁴⁴ properties⁴⁵ than some other approaches.

Because both bifurcations operate within the boundaries of the existing tax treatments of debt and equity, no malignant asymmetries in tax treatments (say, as between issuer and holder) are involved.

Some hybrids have financial parameters that remain fixed over their full term. However, some hybrid transactions (convertible notes and shares) have dynamic parameters embedded in their structure that change over the term of the instrument. For instance, owing to an embedded option, the risk profile of a converting preference share may change over time (toward that of equity if the ordinary share price rises) as the instrument moves toward maturity. This “converting” class of hybrids may (depending on parameters, such as whether or not conversion is mandatory) require the development of additional taxation rules (including, perhaps, rules based on changes in “delta”—that is, the correlation between security and derivative price movements) to reflect the dynamic change over time in the financial economics of the instrument. Where a converting instrument is so “deep-in-the-money” that it is certain to be converted, it could possibly be taxed from the outset assuming that conversion had taken place (this

⁴⁴ Strnad, *supra* footnote 26, at 576, defines “linearity” in the following way: “A tax system is linear when the tax on any transaction equals the sum of the taxes on any collection of subtransactions that comprise the transaction.”

⁴⁵ Where debt/derivative and equity/derivative hybrids are concerned, it seems that the effect of the combined arrangements (whether or not they are undertaken for hedging purposes) is to change the proportional incidence of unanticipatable cash flows that attach to the underlying debt or equity instruments. For instance, where a derivative hedges an equity security, it is likely that the unanticipatable cash flows/returns that would otherwise attach to the equity (considered on its own) would be reduced. In such cases, the degree of “linearity” achieved in taxation arrangements is perhaps not so critical since the objective of combining the two instruments is to alter the composition of the cash flows otherwise attaching to the hedged instrument. In such cases, however, it is desirable that matching tax treatment of the hedging instrument and the hedged item be facilitated.

would require a clear definition of what constitutes very “deep-in-the-money”). Alternatively, a special bifurcation rule (which splits the converting instrument into embedded “debt” and “option” components) may need to be developed.⁴⁶ The tax treatment of debt and options could then be applied to the parts. Another possible approach could involve the restricted application of blanket debt or equity treatment to convertible instruments. This is an area for further investigation.

Finally, an additional virtue of method 3 is that the first (tax-timing) bifurcation (based on anticipatable and unanticipatable cash flows/returns) can be applied to derivatives (which fall along the upper horizontal axis in figure 1). As a consequence, method 3 also provides a means of achieving consistent tax treatments between debt/equity hybrid instruments (which fall along the lower horizontal axis in figure 1) and that wider class of hybrids that combine securities with derivatives (and fall along the diagonal intervals in figure 1). Arguably, therefore, the dual bifurcation approach could provide for much greater overall uniformity and consistency in tax treatments for all financial arrangements than that which currently exists.

Summary and Questions Outstanding

Where market makers issue financial instruments and quote both bid and offer prices (and possibly for some other taxpayers who may be hedging), the mark-to-market system offers frictionless efficiency in terms of the integrity of pre/post-tax matching of offsetting hedging transactions.⁴⁷ Market makers generally turn over financial instruments rapidly and set prices continuously. In this price-setting domain, the mark-to-market system ensures that taxation does not create tax cash-flow volatility (owing to tax mismatches on long and short positions) or disturb key pre-tax pricing relationships and parities (for example, between spot and forward prices, between options and futures prices, between interest rates and exchange rates, etc.). To reap maximum efficiency from the operation of global capital markets, there is a powerful case for all countries to provide a facility for market makers (traders and other price setters) to select mark-to-market tax treatment for traded financial arrangements.

For other (non-market-making) financial arrangements in a differentiated business tax system, the anticipatable/accruals-cum-unanticipatable/realization bifurcation—if applied widely to debt, equity, hybrids, and derivatives (and to financial and property rights considered more generally)—may well be judged as representing a form of taxation that achieves

⁴⁶ For a commercial accounting proposal along these lines, see W. Lonergan, “Own It, or Owe It?” (Spring 1998), *JASSA* (the journal of the Securities Institute of Australia, incorporating the Australian Society of Security Analysts), 2-7.

⁴⁷ For a more complete analysis of these issues, see Edward D. Kleinbard and Thomas L. Evans, “The Role of Mark-to-Market Accounting in a Realization-Based Tax System” (December 1997), *75 Taxes: The Tax Magazine* 788-823.

a relatively high degree of consistency in tax-timing treatments among financial arrangements and assets generally, notwithstanding the ongoing debt/equity distinction. As well, the interest/deductibility-cum-dividend/frankability bifurcation provides a basis for allocating traditional tax attributes (deductibility and frankability) to any given hybrid with greater precision. Both bifurcations are set within the constraint of the existing predetermined treatments of debt and equity. In combination, these bifurcations create a practical framework within which “time” and “uncertainty” may be reasonably accounted for amid the various existing constraints. The net result of both bifurcations is to provide equivalent tax treatments to the economically equivalent components of hybrid instruments.

Consequently, the dual bifurcation method reviewed above provides the analytical potential for a complicated dual docking operation. The first bifurcation (based on the anticipatable/unanticipatable dichotomy) would permit the coupling of tax-timing treatments applying to hybrid financial instruments with the same tax-timing treatments that could conceivably be applied to other financial arrangements (debt, equity, derivatives, foreign currency) and to assets generally. On this basis, all anticipatable cash flows/returns would be *accrued* irrespective of the legal form of the financial arrangement. This first bifurcation works in a manner that is non-distorting to the key pricing parities and equivalences⁴⁸ that are established primarily in the mark-to-market regime. The second bifurcation provides a potential mechanism to achieve a robust connection between the tax attributes treatment applying to equity-related hybrid financial instruments and the dividend imputation system, while at the same time facilitating, but leaving undisturbed, the tax attributes treatment applying to debt instruments.

The above discussion has suggested that the dual bifurcation approach may, at least at a conceptual level, form a methodology for taxing hybrid instruments. However, because of the constraints and complexity of the subject matter, this commentary has also raised a number of questions that bear on the plausibility and practicability of method 3:

⁴⁸ For instance, assume that A = accrual; R = realization; s = spot price; f = futures price; i = interest rate; p = put; c = call. Then, by inserting the bracketed tax-timing treatments, (A) and (R), into the standard equivalences, it can be observed that applying tax according to the anticipatable/accruals-cum-unanticipatable/realization rule (in the non-market value regime) does not distort or work to undermine pre-tax forward parity or the pre-tax relationship between forward prices and spot prices (as set in the market value regime):

$$f(R) = p(R) + c(R)$$

$$f(R) = \{s(1 + i)\}(R).$$

Assuming that there would be an accruals option for taxing foreign currency gains and losses (in the non-market value regime), covered interest rate parity would not be disturbed by financial arbitrage transactions that may occur outside the domain of marking to market. Assume that E = exchange rate; a = foreign; d = domestic. Then:

$$E_f/E_s(A) = (1 + i_a)/(1 + i_d)(A).$$

1) Would the dual bifurcation methodology be judged as being simpler, more certain, and more commercially meaningful than method 1 (the current debt/equity dichotomy) or method 2 (treating hybrids as either equity or debt), or other possible methods?

2) Would the anticipatable/accruals-cum-unanticipatable/realization bifurcation together with the interest/deductibility-cum-dividend/frankability bifurcation be technically feasible in the real world? Could possible valuation problems be overcome, and could the required bifurcation rules be developed with sufficient clarity and generality?

3) Could delta values be used to identify the point of conversion between debt and equity (in the case of converting securities),⁴⁹ and could the separate debt, equity, and option components of the various hybrid instruments be valued with adequate integrity for tax purposes?

4) Could the relevant commercial and tax accounting treatments be made consistent so that there might be a reduction in overall business compliance costs?

5) Would method 3 provide a tax framework that might better facilitate desirable innovation while reducing distortions and the incentives to engage in “gaming” and to create unproductive tax-driven hybrid structures?

Answers to those questions may well also have at least some bearing on a sixth, and larger, question—namely, what is the most desirable taxation framework for taxing derivatives within a “second-best”⁵⁰ differentiated tax system?

This article does not attempt to answer these questions directly. The appendix table does, however, suggest tax treatment outcomes for a range of hybrids based on the dual bifurcation approach (method 3). As well, among the different options reviewed earlier in this article, other tools and policy instruments have been identified which conceivably could be drawn upon and applied to solve outstanding technical complications. The discontinuity arising from the different tax treatments applying to the disposal of debt and equity is not directly addressed in this article. Such an analysis would require additional structural considerations, including the implications for the capital gains tax.

⁴⁹ In an ideal frictionless world, as the converting instrument passed through a conversion threshold (measured by delta), it could be reclassified for tax purposes (say, from debt to equity). Whether such a refinement would significantly add to or subtract from uncertainty in the market place is unclear. If it added to uncertainty, the pricing of such products may be adversely affected.

⁵⁰ In an ideal “first-best” world, all financial transactions would be marked to market for tax purposes. The virtues of a market-value-based tax system design include uniformity, consistency, linearity, uniqueness, and the removal of timing and character mismatches, adverse selection, and tax arbitrage possibilities.

CONCLUSION

It is clear from the opening discussion that policy makers bear a high degree of responsibility to establish greater coherency in the tax treatment of financial arrangements. This involves greater competitive neutrality and greater consistency in tax treatments not only among all domestically exchanged financial arrangements, but in respect of instruments transacted across international borders as well. However, the collective experience has demonstrated that so long as debt and equity are taxed differently, such goals can be approached only imperfectly and that the costs—measured in terms of distorted risk management and lost efficiency, tax arbitrage, and tax administration—can be considerable.

Policy makers are faced with a number of alternative approaches to address the debt/equity problem, none of which are without potential difficulty in respect of their practical implementation. Two strategies present themselves.

First, an attempt could be made to excise the debt/equity distinction by one of the methods described in the second section of this article (see “Removal of the Debt/Equity Distinction”). If undertaken successfully by a sufficiently large group of countries, such action could achieve greater domestic and global tax neutrality as between debt and equity and may enhance the possibility of achieving a relatively high degree of universality⁵¹ and consistency⁵² within a common architecture used for determining the tax treatment of all financial arrangements. However, the changes that would be required to achieve these objectives are ambitious in terms of international coordination and very large in their scope and structural complexity. For a start, a consensus would need to emerge as to which method should be adopted. For some countries, that would require even more fundamental changes in business tax system design (alignment toward “classical” or “integration” systems). Furthermore, the likely impacts of changing the fundamental bases of current business taxation arrangements are uncertain, and that itself is a reason for proceeding cautiously. Particularly for small, liberalized, capital-importing countries that may attempt to act unilaterally, changes of the magnitude that would be involved under the first strategy may not be manageable without creating new distortions and triggering complications for cross-border capital movements, the revenue base, and interrelationships with other parts of the tax system.

Alternatively, the current treatments of debt and equity could be retained and one of the methods described in the third section of this article could be deployed. At the same time, interested countries could ensure that

⁵¹ Strnad, *supra* footnote 26, at 572, defines “universality” as requiring that the tax system specify a tax treatment for every possible transaction.

⁵² Strnad, *ibid.*, at 573, defines “consistency” as a state where every cash flow pattern has a unique tax treatment. Strnad refers to “linearity” and “continuity” as representing two refinements of the “consistency” principle.

there exist mark-to-market regimes to facilitate the operational efficiency of both domestic and cross-border market-making activities. In this “second-best” domain, some inconsistencies, discontinuities, and compliance burdens would be inevitable. Under this second strategy, while achievable policy objectives would necessarily be less ambitious, they may have a greater likelihood of attainment. As well, reform could proceed in individual countries without the requirement for international consensus, and without the need for progressive countries to await reforms in those countries less able, or prepared, to move forward. Under the second strategy, those countries that did not facilitate a mark-to-market system for cross-border traded financial arrangements may well find themselves at a competitive disadvantage.

APPENDIX
Illustrations of Possible Hybrid Tax Treatments Under the Dual Bifurcation Approach (Australia)

Instrument	Description of cash flow	Anticipatable/accruals	Unanticipatable/realization	Deductibility	Rebatatability (intercorporate dividend)	Frankability	Additional notes
Redeemable preference share	Periodic	Accrued	—	Deductible	Non-rebatatable	Non-frankable	See footnote ^a
Convertible note . . .	Periodic and non-periodic	Accrued (interest)	Realization (on disposal)	Deductible	Non-rebatatable	Non-frankable	Real option to convert
Converting preference share							
Before conversion	Periodic Non-periodic ^c	Accrued Not accrued	— Realization	Deductible Non-deductible	Non-rebatatable Rebatatable	Non-frankable Frankable	See footnote ^b
After conversion	Non-periodic	Not accrued	Realization	Non-deductible	Rebatatable	Frankable	
Strype	Periodic and non-periodic	Accrued (interest)	Realization (on disposal)	Deductible	Non-rebatatable	Non-frankable	Exchangeable for shares, not necessarily of the issuer; can be cash settled
Equity-linked bond	Periodic and non-periodic	Accrued (base interest)	Realization (bonus interest)	Deductible	Non-rebatatable	Non-frankable	Fixed rate interest plus points over basis set according to a general share index; redeems at maturity for face value

(The table is concluded on the next page.)

Table (Concluded)

Instrument	Description of cash flow	Anticipatable/accruals	Unanticipatable/realization	Deductibility	Rebatable (intercorporate dividend)	Frankability	Additional notes
Capital-protected equity loan	Non-periodic Periodic (interest paid)	Not accrued Accrued	Realization	Non-deductible Deductible in part	Rebatable Non-rebatable	Frankable Non-frankable	Exposure to equity upside; no exposure to downside risk (limited recourse loan); interest is deductible (but may be only in part) to the holder; dividends are assessable

^a This treatment reflects the fact that there is an effective debtor-creditor relationship between the company and the shareholder. In this regard, it may be necessary to distinguish between shares redeemable at the option of the holder and shares redeemable at the option of the issuer. ^b This possible treatment reflects the nature of a converting preference share as a debt instrument with an embedded option (neither of which, by itself, provides rebatable or frankable returns). An alternative approach might be to allow rebatability and frankability if the delta of the converting preference share, as against ordinary shares of the company, is sufficiently high (say, 0.3 or greater); or to bifurcate the dividend on the basis of the proportion of equity value to debt value. ^c Refers to supplementary dividend at a fixed rate if the rate of dividend on ordinary shares reaches a certain level. Otherwise, preference shares carry a right to dividends expressed at a fixed rate. See H.A.J. Ford, R.P. Austin, and I.M. Ramsay, *Ford's Principles of Corporations Law*, 8th ed. (Sydney: Butterworths, 1997), 738.