

SOME EXPLICIT THINKING ABOUT IMPLICIT TAXES

Charlotte Crane*

IN many respects, the rules used to define the federal income tax base have increasingly reflected an appreciation of the time value of money and of the various techniques of financial analysis based upon it. The Internal Revenue Code (Code) now contains many sections that are premised on the fact that proper timing is as important as any other aspect of income measurement. Some of these provisions, including sections 1274 and 7872, actually require financial calculations to arrive at inclusions and deductions that are thought to be more consistent with an income tax that includes interest in the tax base. Other sections, such as 404 and 461(h), do not actually require any calculations, but their purpose cannot be comprehended without a firm understanding of what is at stake in the timing of income. The tax law, nevertheless, has been remarkably resistant to fully incorporating these methods of financial analysis. The lessons that might have been learned as these provisions were enacted and made a part of the fabric of the tax law have not been fully internalized.¹

* Professor of Law, Northwestern University. Professor Crane thanks Michael Cohen and Mark Hamill for their assistance.

1. Courts tend to be reluctant to take into account financial discounting except when required by statute. See *City of New York v. Commissioner*, 103 T.C. 481, 487 (1994), *aff'd*, 70 F.3d 142 (D.C. Cir. 1995) (holding that I.R.C. section 141, in setting forth statutory distinctions based on the amount of bond proceeds forwarded to private parties, referred to these amounts in absolute terms not as adjusted to present value; concluding that "time value of money concepts can be applied only in the presence of a legislative directive to do so."); *Follender v. Commissioner*, 89 T.C. 943, 952 (1987) (refusing to apply time value concepts to the application of section 465 at-risk rules to limit the amount considered at risk at the inception of the transaction, noting that "Congress has been explicit in the areas it has chosen to require present value calculations."); *Estate of Thomas v. Commissioner*, 84 T.C. 412, 440 n.52 (1985) (rejecting the applicability of discounting in making for-profit determinations without statutory authority). Even in cases where courts appear to have been persuaded by positions best supported by more sophisticated financial analysis, they have been reluctant to "show their work." *Albertson's, Inc. v. Commissioner*, 42 F.3d 537 (9th Cir. 1994), *cert. denied*, 516 U.S. 807 (1995) (reaching a result that comports with more sophisticated notions of the time value of money, but refusing to explicitly endorse such analysis); *cf.* 95 T.C. 415, 431 (1990) (Halpern, J., concurring). Many classic cases reveal more willingness to apply sophisticated financial analysis than is typical of more recent cases that do not involve statutory interpretation of sections clearly directing that such techniques be employed. See, e.g., *Commissioner v. P.G. Lake, Inc.*, 356 U.S. 260 (1958) (holding capital gains not available because amount received was nothing more than present value of income stream anticipated); *Hort v. Commissioner*, 313 U.S. 28 (1941) (disallowing deduction where landlord received less than present value of anticipated rentals not because valuation method was inappropriate, but because taxpayer had not taken such

One of the lessons we should have learned as a result of internalizing thinking about the time value of money is that in some circumstances there may be no such thing as the "fair market value" of an item that can be abstracted from the tax treatment associated with its purchase and use. This is curious since the tax law has consciously tried to encourage certain behaviors by introducing tax incentives (including incentives based on the timing of terms of income and deduction) for engaging in them. Incentives are supposed to encourage people to take certain actions by making them relatively more valuable. But if assets and activities are relatively more valuable, people should be willing to pay more to participate in them. Tax incentives, therefore, should have some impact on prices, even if that impact is temporary. Despite the obviousness of these market mechanisms, one can find a certain amount of schizophrenia in the tax literature about the possibility that varying tax treatments can affect prices, and the impact that this possibility might have on tax doctrine. This essay will explore several manifestations of this malady in current doctrine. Like its psychiatric namesake, this malady is difficult to diagnose, and even more difficult to treat, but nevertheless demands further scrutiny. The reader is cautioned in advance that the author is not attempting to resolve either the debate about whether the supply of tax-preferred assets is so elastic that very little tax capitalization ever actually occurs over the long run (although it is likely that physical assets differ from financial assets in this respect) or whether most of the problems inherent in openly allowing purchases of tax benefits could be avoided if debt could be better policed. Instead, the argument is a much less ambitious point that the tax law should stop refusing to consider the possibility of tax capitalization in the development of its doctrine.²

I. THE RANGE OF POSSIBLE PRICES

It is easy to demonstrate that a taxpayer who expects to be able to enjoy a favorable tax treatment (resulting from the timing of deductions) will be willing to pay more for an investment than a taxpayer who expects to put the investment to exactly the same use, but who expects an unfavorable tax treatment. Suppose Jack, Jill, and Fred all face a 35% income

amount into income and therefore had no basis in it); *Helvering v. Bruun*, 309 U.S. 461 (1940) (attempting to accurately take into account the economic effect of leasehold improvements). Another obvious exception are those cases in which valuation can only be sensibly accomplished by discounting cash flows, especially for purposes of ascertaining the amount of charitable deduction or the value of an asset in an estate. See, e.g., *Goldstein v. Commissioner*, 89 T.C. 535, 547 n.15 (1987) (determining value of charitable contribution by discounting notes given to purchase the property despite the fact that the notes bore interest adequate to avoid recharacterization under I.R.C. section 483); *Schoenfeld v. Commissioner*, 103 F.2d 964 (9th Cir. 1939); *Estate of Maresi v. Commissioner*, 6 T.C. 582 (1946), *aff'd*, 156 F.2d 929 (2nd Cir. 1946); Rev. Rul. 71-67, 1971-1 C.B. 271. But see *Estate of Taylor v. Commissioner*, 39 T.C. 371 (1962), *aff'd*, 320 F.2d 874 (1st Cir. 1963).

2. Compare Calvin H. Johnson, *Inefficiency Does Not Drive out Inequity: Market Equilibrium & Tax Shelters*, 96 TAX NOTES 28-78 (1996) with Theodore S. Sims, *Debt, Accelerated Depreciation, and the Tale of a Teakettle: Tax Shelter Abuse Reconsidered*, 42 UCLA L. REV. 263 (1994).

tax bracket, and all perceive themselves to be facing an 8% after-tax (12.3% before-tax) interest rate.³ All three are contemplating purchasing equipment for their business that they expect will increase their taxable revenue (before taking into account any cost recovery) by \$100 per year over the next three years. Jack's accountant tells him that he should be able to deduct the purchase. Jill's accountant tells her that she will only be able to deduct the cost of the item at the end of the third year when it is abandoned. Fred's accountant gloomily reports that the item will never be allowed as an offset to income. What, if any, effect might the advice received by these potential purchasers have on the terms of their purchases?

The amount that Fred will be willing to pay is relatively easy to compute.⁴ He will be willing to pay up to the present value of the amount by which he can predict the equipment will improve his after-tax wealth. Since he is subject to income tax, but his holding will produce no deductions, he can simply compute the present value of the cash flow expected using the after-tax discount rate. That amount can be computed as follows:

Table 1

		end of year 1	end of year 2	end of year 3	total
income		100	100	100	
cost recovery		0	0	0	
tax incurred		-35	-35	-35	
net value		65	65	65	
present value as of time zero net of tax		60.19	55.73	51.60	167.51
future value as of end of third year net of tax		75.82	70.20	65	211.02

Thus Fred would be willing to pay a price for the equipment that approached \$167.50. Above that price, Fred's after-tax performance will be the same if he buys the equipment as if he does not, so we would not expect him to buy it at all.

Consider the effect on Jack (who expects an immediate write-off) if he were able to buy the item for \$167.50. (Assume that Jack is confident that his accountant's advice was correct, and knew that he could use all

3. Assume for simplicity's sake that these taxpayers can borrow and lend at the same rate, a counter-factual assumption for most individual taxpayers, but a useful simplification.

4. Note that Fred is not a taxpayer who expects to pay no income taxes; instead, he faces the normal tax rate, but does not anticipate a deduction for his expenditure. If he faced no income tax at all, he would be able to accumulate at better than the 8% after-tax rate anticipated by taxable shareholders. He is, however, very similar to taxpayers who currently face a very low tax rate, but expect to face a higher rate only too late to receive benefit from the tax treatments for which others are willing to pay.

the tax deductions his accountant wants him to claim.) Jack would improve his after-tax wealth by a substantial positive amount as a result of the purchase, as shown in the table below.

Table 2

		end of year 1	end of year 2	end of year 3	total
income		100	100	100	
cost recovery		(167.50)	0	0	
tax incurred		(23.63)	35	35	
net value		123.63	65	65	
present value as of time zero net of tax		114.47	55.73	51.60	221.80
future value as of end of third year net of tax		144.20	70.20	65	279.40

Jack would have \$68 more than Fred in after-tax wealth in year 3 as a result of his purchase, solely because of the benefit of the deduction.⁵

Given the profit Jack expects to make from the purchase of the equipment, we can expect him to be willing to pay more than \$167.50, or the maximum Fred will be willing to pay. The exact amount more can be determined by thinking of the price paid as buying two things: (1) an after-tax cash flow of \$65 per year, the present value of which will not vary with the price actually paid, and (2) a tax deduction the value of which will vary with the price actually paid. Note that when the first component of value is defined as the after-tax cash flow anticipated, the second component can be valued independent of whether it is expected to shelter only the income from the investment itself, or whether it is expected to shelter other income as well. The value of the first item was established above, when we determined what Fred (who claims no deduction) would be willing to pay. The value of the second item will be a function of the tax rate, the time at which the tax benefit will be received, and the after-tax discount rate.⁶ For taxpayers facing a 35% tax rate and

5. This result may seem inconsistent with the common proposition that allowing improper upfront deductions amounts to exempting the income from the project. Since Jack has invested \$167.50 for three years and accumulated an additional \$112 more than Fred, he appears to have enjoyed an apparent return far greater than the \$20.60 per year return plus compounding that a tax-free 12.3% return would provide. The proposition about the exemption of the return on an investment always begins with a taxless market price, and one analysis of the benefit of various accounting treatments given this price. Jack, by contrast, enjoys an extraordinary rate of return because he can buy at the price that Fred (who faces a 35% tax rate but expects no deductions) would be willing to pay and enjoy a more favorable accounting treatment than Fred. Jack's advantage over Jill, explained in note 8 *infra*, is closer to the advantage of an exemption of the return as a result of immediate cost recovery compared to economic depreciation.

6. Generalized, the formula for the entire price would be as follows: $x = pv(x * \text{tax rate}) + pv(\text{cash flows})$. For the example given in the text, the price will be: $x = pv_1(x * .35) + pv_1(65) + pv_2(65) + pv_3(65)$ or $x - pv_1(x * .35) = pv_1(65) + pv_2(65) + pv_3(65)$.

an 8% after-tax interest rate, and who can use a deduction to produce a benefit one year after the purchase, the price they would otherwise pay for the income stream will be increased by a factor equal to that price times the tax rate, adjusted to reflect the passage of time between the expenditure and the tax benefit. This tax benefit means Jack will be willing to pay up to \$248 for the equipment, as demonstrated below:⁷

Table 3

		end of year 1	end of year 2	end of year 3	total
income		100	100	100	
cost recovery		(248)			
tax incurred		(51)	35	35	
net value		151.8	35	65	
present value as of time zero net of tax		140.56	55.73	51.60	247.89
future value as of end of third year net of tax		177.06	70.20	65	312.26

Jill, who expects to be able to deduct the amount she pays over the three years, will be willing to pay more than Fred but less than Jack. The "gross up" factor she uses (*i.e.*, the amount by which she would be willing to "gross up" her price to reflect the tax benefit) will be less than that employed by Jack because the benefit of her deductions will be delayed.⁸ She will only be willing to pay up to \$239 for the same asset:

Table 4

		end of year 1	end of year 2	end of year 3	total
income		100	100	100	
cost recovery		79.87	79.87	79.87	
tax incurred		7.05	7.05	7.05	
net value		92.95	92.95	92.95	
present value as of time zero net of tax		86.07	79.69	73.79	239.55
future value as of end of third year net of tax		108.42	100.39	92.94	301.76

7. Note that Jack will not be willing to pay an infinite amount simply because he is able to deduct his entire cost upfront. He will be willing to "gross up" his price for the cash flow by a factor of his discount rate and his tax rate. Every dollar Jack pays up to \$248 will reduce his total wealth left as a result of the investment, yet will still leave the investment with a positive net present value. If he has to spend more than \$248, however, Jack would be better off simply investing in something (*i.e.*, exempt municipal bonds) that will yield 8% after tax.

8. The price she will be willing to pay is as follows: $x = pv_1(x/3 \cdot .35) + pv_2(x/3 \cdot .35) + pv_3(x/3 \cdot .35) + pv_1(65) + pv_2(65) + pv_3(65)$.

If Jack and Jill have each paid the maximum amount they should be willing to pay for the cash flows involved given the tax treatment they expect, there will be no enhancement in the yield that either of them receive as a result of their disparate tax treatments. Although all three taxpayers end up with different amounts at the end of three years, this is only because their investments were of different amounts. All of them will have earned only the expected 8% on the "grossed up" amount they were willing to invest.

You may protest that in the real world, the above examples could not happen very often, because rarely do taxpayers actually face such different tax treatments for the same asset. It may be true that the situation outlined above—three different taxpayers purchasing the same simple asset but anticipating different tax treatments—is rare, but it is certainly not impossible. The more generalized situation, in which taxpayers bid for on-going businesses, relying on less uniform understandings of the price allocations and the tax treatments they will in fact be allowed, is probably far less rare.⁹ Disparities in anticipated tax benefits resulting from the tax characteristics of the prospective buyers, including but not limited to other sources of income and differences in possible bids are the same, regardless of whether they are common. The resulting differences in possible bids, are the same, regardless of whether the disparities result from uncertainty about the appropriate tax treatment of the asset, or the anticipated tax characteristics of the purchasers.

Note that from the perspective of these taxpayers, the tax treatment anticipated was an inherent part of determining the value of the asset to them. These taxpayers, unlike tax policy analysts, had no reason to speculate about what the price would be in a no-tax world as they made their business decisions. Nor did they have any reason to consider whether the cost recovery they would be allowed was faster or slower than economic depreciation, and therefore, took no note of whether the deductions allowed would shelter income only from this particular investment or from other investments as well. (Given the terms of the hypothesized income streams in this example, Jack, Fred, and Jill could have made these determinations, but in a more uncertain venture, such a determination would be far more difficult.) Taxpayers might make reference to prices in a "no-tax" world in their lobbying efforts. Such calculations, for instance,

9. Such a situation undoubtedly existed during the era immediately prior to the decision of the Supreme Court in *Newark Morning Ledger v. United States*, 507 U.S. 546 (1993), and the enactment of section 197 of the Code allowing the amortization of intangibles when assets of an on-going business are purchased. Under the old law, sophisticated taxpayers involved in transactions of sufficient frequency or scale to justify the costs of establishing proof of amortizable intangibles distinguishable from goodwill were likely to assign a relatively high value to the tax benefits anticipated. See *infra* note 50. Less sophisticated taxpayers, and those engaging in smaller and isolated transactions, probably assigned far less value to such benefits because their costs of establishing such value (whether at the time of the purchase or later) were higher in proportion to the benefit anticipated. The effect of this situation on the prices actually paid and on the former taxpayers' ability to outbid the latter is an empirical question not easily susceptible to proof.

would allow them to make arguments about the meaninglessness of stated tax rates in predicting the burden of the overall tax structure and the burdens borne by their competitors. But such calculations would be of little use in planning since they would not be particularly helpful in determining the value of the asset to them—unless, of course, a determination of the availability of the apparent tax benefits depended upon an analysis of how much greater than the no-tax price the price actually paid was. Furthermore, such calculations can only be made with respect to assets for which reliable projections of cash flows can be made.

If the taxpayers had nevertheless bothered with this calculation, it would have produced the following result:

Table 5

revenue	100	100	100	
pv revenue	(\$89.05)	(\$79.29)	(\$70.61)	(\$238.95)
wealth at yr 3	(\$126.11)	(\$112.30)	(-100)	(\$338.41)

Moreover, if they had attempted to make a policy argument regarding the effect of the tax on their overall accumulation and yield, they likely would have demonstrated that economic depreciation reduced the after-tax yield by the stated tax rate:

Table 6

revenue	100	100	100	
dep	(\$70.61)	(\$79.29)	(\$89.05)	
income	\$29.39	\$20.71	\$10.95	
tax	\$10.29	\$7.25	\$3.83	
after-tax cash	\$89.71	\$92.75	\$96.17	\$278.63
pv after-tax	(\$83.07)	(\$79.52)	(\$76.34)	(\$238.93)
wealth at yr 3	(\$104.64)	(\$100.17)	(\$96.17)	(\$300.98)

An investment of \$239 producing an accumulation of about \$337 yields just over 12%; an investment of \$239 producing an accumulation of about \$301 yields about 8%. The yield has been reduced by the stated tax rate—35%.

II. WHOSE PRICE WILL PREVAIL?

In those situations in which such disparate tax treatments do exist, the prevailing price would depend upon the elasticity of the supply of the asset, that is, whether the supply of assets available for purchase responds quickly to the relatively high price that those enjoying the more favorable tax treatment are willing to pay. If few additional assets can be made available, Jack's price will prevail. Only those able to enjoy Jack's tax treatment are likely to purchase the asset because they will be able to outbid most other buyers. The expected tax benefit will be "capitalized" into the price of the asset. The suppliers of the asset, not Jack, will enjoy the economic benefit of the special tax treatment even though the evidence of the benefit shows up on Jack's return. Those paying Jack's price

will be no better off than they would have been without the special tax treatment, since they have paid the entire tax benefit as an "implicit tax" to their suppliers. If, on the other hand, additional sources of supply are readily available in response to the higher prices Jack is willing to pay, Jack should be able to pay far less than the maximum amount he would be willing to pay. When additional supplies are readily available, any of Jack's old suppliers who try to extract the tax benefit from him will be underbid and the value of the tax benefit will remain with Jack.

The tax law is naively ambivalent about whether capitalization of tax benefits is a good, or even a tolerable, thing. What would be the response of the tax law if it discovered that Jack had in fact carefully calculated that the enhancement to his business would be \$172 if he bought the asset without an immediate deduction, but that he had actually paid \$210 because of the deduction? What would we consider to be the amount that Jack paid "for the asset"? If we were sure that he paid only \$172 "for the asset," how would we require him to account for the other \$38? What about Jack's supplier, in the cases in which the supplier cannot respond quickly? Has he simply sold an asset, or an asset and a tax benefit?

There is much in current tax law that hints that taxpayers should not be allowed simply to "sell" a tax benefit they cannot use. But clearly, Jack's supplier must be doing this whenever he sells at Jack's price rather than Fred's. Should we be willing to let Jack pay this premium for the tax benefit, and allow both Jack and his seller to account for the transaction as if the price of the equipment was "really" \$210? Is there something inherently inappropriate about such deals? If so, should the tax law try to identify when this is likely to happen? Is it only because we cannot know either what "proper" tax treatment is and therefore exactly what Jack has paid for it, or because we do not care? What if it turns out that the price for any given item has been set by the Jacks of the world?¹⁰ When the Jacks of the world prevail, they do not enjoy a return any higher than they would if they had a different tax treatment. However, the Treasury will not have received the taxes implicit in the price Jack pays. Should each buyer of the asset be allowed only the tax benefits available to Fred, to ensure that the Treasury, not Jack's seller, receives this revenue? If all taxpayers could get no better treatment than Fred, undoubtedly Jack would not attempt to make a bid higher than Fred's, and no price distortions could occur. But it is also true that Fred's treatment is worse than economic depreciation, and if it is the best available, it will result in reducing the rate of return by more than the tax rate. Only if we attempt to ascertain economic depreciation *on each investment* will we avoid price distortions from income taxes.

10. Some have taken the position that there is simply too large a surplus of tax-favored investments to ever result in a price anywhere near as high as Jack's. See, e.g., Calvin Johnson, *Inefficiency Does Not Drive Out Inequity: Market Equilibrium & Tax Shelters* 96 TAX NOTES 28-78 (1996). While that may be true with respect to the supply of some financial products that are sufficiently derivative of real goods to be able to respond very quickly, it is not clear that this is true of physical goods.

Finally, we must be concerned about the effect of taxes not just on Jack and Fred's willingness to buy but on their sellers' willingness to sell. The phenomenon of tax capitalization may prevent even Jack from being able to offer some holders of assets sufficient amounts to make a sale attractive. In many cases, in order for a sale to occur, the buyer must be able to make sufficiently better use of the asset than the seller to make up for the amount by which the tax burden faced by the seller as a result of the transaction exceeds the tax benefits to be enjoyed by the buyer.¹¹ Thus, in many situations, sellers (who experience no realization on appreciation) are essentially in Jack's position while most buyers are in Fred's (who must, if a sale takes place, pay for their seller's tax).

This sort of "lock-in" effect—which is usually explored as a problem involving the disincentives of the asset holder to diversify—can just as easily be understood as a problem of a tax treatment that favors some "bidders" for assets (current holders of those assets) over others. We ordinarily think of the capital gains tax as the seller/owner's burden, but he will obviously insist that the price that he receives, net of tax, provides him with assets of the same present value he held before. In situations in which no non-recognition provision is available, the potential bidders for an asset will always have to adjust their bid for the "real asset" (based on the present value of the predicted cash flows resulting from owning the asset) by the tax cost that will result from the fact that the property has been sold and income tax incurred. Buyers will have to bid enough so that the seller can not only replace the after-tax cash flows from the asset, but also pay the income tax triggered by the transaction. The current owner of the asset need not adjust his "bid" for the asset by such a tax burden, however, since he will not incur this tax cost if he wins the auction. Only a bidder who can make sufficiently better use of this asset to pay for this tax cost will be able to outbid the current owner.

Thus, the income tax gives an advantage to the current owner by allowing him to add to his "bid" for the asset the value of the taxes that will be incurred in a transaction with any other bidder. Only those bidders who can match his bid—whether because they can offer similar or better tax treatment or because they can enhance the yield from the asset by the same amount—will be successful. (Either non-recognition for the seller¹²

11. This "bidding" advantage of the current holder is an often overlooked consequence of relying on realization before accounting for accrued income, an advantage which is not fully mitigated by preferential treatment for capital gains. See generally Charlotte Crane, *More on Accounting for Assumptions of Contingent Liabilities on the Sale of a Business*, 3 FLA. TAX REV. 615 (1996); Charlotte Crane, *More Theory About Debt Discharge Income*, 8 AM. J. TAX POL. 107 (1989).

12. Certain types of "pinpointed" non-recognition, such as the FCC-administered program that allowed non-recognition on sales of FCC licenses to minorities, in effect give a select group of eligible bidders the ability to bid against the owner. Between 1978 and 1995, section 1071 anticipated that the FCC would award certificates that allowed a seller a rollover of gain upon a sale to a minority. See generally *FCC Minority Tax Certificates: Hearing Before the Subcommittee on Oversight of the House Committee on Ways and Means*, 104th Cong. (1995) (testimony of Kenneth Keis, Chief of Staff of the Joint Committee on Taxation). This provision made minority purchasers (and their backers) the only

or immediate deduction of the gain for the buyer will eliminate this tax barrier to sale.¹³) No sale occurs when the current holder can outbid his competitors because of this tax effect. When a sale does occur, no convenient method exists to distinguish the amount the seller received to make up for the lost return on his investment from the amount the seller received to make up for the loss of deferred gain recognition. Without a sale, the tax law does not need to account for the transaction, and therefore does not need to determine what part of the owner's bid reflects the value of the continued tax deferral.

As a practical matter, we must be willing to let buyers pay sellers amounts that take into account the expected tax consequences of owning the assets, if for no other reason than we can never be sure what the price without tax consequences would have been. We simply cannot expect to be able to tell when, for any given transaction or tax benefit, the market has been dominated by Jacks (in which case the tax benefit will be completely transferred to the supplier of the asset) or Freds (in which case an extraordinary after-tax return will be available to those lucky few Jacks who can buy at the Freds' price.)¹⁴ We cannot hope to isolate the "good transactions" in which the buyer has purchased on terms similar to those that would prevail in the no-tax world, from the "bad transactions" (if they are bad) in which the price reflects the anticipated tax benefits. More importantly, we could not introduce rules that so profoundly interfere with the normal workings of a market that is ultimately interested only in after-tax cash flows and expect such rules to be fully effective.

These observations about the effect of taxes on prices, or "tax capitalization," are hardly new; they were articulated (albeit with fancier mathematics) long ago.¹⁵ These ideas, furthermore, have found much more sophisticated application than that necessary here.¹⁶

ones who could effectively bid against the existing owner. Note that this provision was designed to facilitate the sale to the minority. The provision was likely always understood as a way to allow the minority bidder to, in effect, pay more for the asset, rather than as a mechanism by which minority purchasers would end up with more cash. The fact that the tax benefit was in fact a grant to the seller was never made explicit.

13. On the other hand, sometimes tax treatments that are only available as the result of a sale allow a less efficient buyer to "outbid" a seller enjoying the tax benefits of the realization requirement. The availability of section 338 between 1982 and 1986, and the mirror transaction as allowed before the enactment of section 10223(d) of P.L. 100-203, 101 Stat. 1330-32 had this effect for corporate holdings when shareholders had relatively high basis in their stock.

14. See Mark P. Gergen and Paula Schmitz, *The Influence of Tax Law on Securities Innovation in the United States*, 52 TAX L. REV. 119 (1997).

15. See Paul A. Samuelson, *Tax Deductibility of Economic Depreciation to Insure Invariant Valuations*, 72 J. POL. ECON. 604 (1964) (noting that tax deductibility will affect price unless deductions always reflect the asset's economic value).

16. See RICHARD A. BREALY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 122-25 (1996) (discussing the simple effect of accelerated depreciation; analyzing leasing decisions). See, e.g., MYRON S. SCHOLES & MARK A. WOLFSON, *TAXES AND BUSINESS STRATEGY: A PLANNING APPROACH* 104-27 (1992). The underlying principles are present in any discussion of the after-tax return necessary to justify an investment.

III. THE FAMILIAR ACKNOWLEDGMENT OF IMPLICIT TAXES IN POLICY ANALYSIS

This idea of an implicit tax capitalized into the price of an asset is a relatively common consideration in several tax policy arena debates.¹⁷ The possibility of tax benefits capitalization has played a significant role in policy debates about measuring the equity of the current income tax. For instance, it is well understood that many forms of tax benefits are more valuable to higher-bracket taxpayers than lower-bracket taxpayers. If, however, higher-bracket taxpayers must pay virtually all of the benefit in the form of implicit taxes, the apparent inequity may be no inequity at all. If Jack must pay his highest price, he will earn only the same return he would have in some other investment. So despite the fact that he seems to be enjoying more tax benefits, he is not subsidized.¹⁸

Similarly, any attempt to predict the efficacy of a proposed new tax incentive or attempt to assess the income tax's distortive effects must include an examination of the possibility of tax capitalization.¹⁹ Those who cannot use the benefit—or do not believe the benefit exists—may not buy at all. They will only buy if the benefit they believe they can receive will justify the price others, who anticipate a tax benefit, are paying. In the example above, Fred will pay the price Jack is willing to pay only if he thinks that the equipment will improve his revenues during the three years by more than the \$100 per year assumed above. As a result, Jack will win the bid for the equipment far more often than Fred will, even if Fred's use of the equipment, without taking taxes into account, would be of greater value.

17. See, e.g., Reed Shuldiner, *A General Approach to the Taxation of Financial Instruments*, 71 TEX. L. REV. 243, 262 n.70 (1992):

The degree to which the market will actually adjust is a complex question turning on a variety of factors, including the relative importance of taxable and non-taxable players in the market. To the extent that all market participants were taxable at the same rate, it would be surprising if the market did not quickly adjust. To the extent that there are significant market participants, both on the demand and supply side, who have lower or zero tax rates, the degree of adjustment becomes much more uncertain.

See also M. CHIRELSTEIN, *FEDERAL INCOME TAXATION* 345-49 (5th ed. 1988); WILLIAM A. KLEIN, J. BANKMAN, BORIS I. BITTKER & LAWRENCE M. STONE, *FEDERAL INCOME TAXATION* 29 (8th ed. 1990); Thomas L. Evans, *The Taxation of Multi-Period Projects: An Analysis of Competing Models*, 69 TEX. L. REV. 1109, 1114 (1991).

18. See Boris I. Bittker, *Equity, Efficiency and Income Tax Theory: Do Misallocations Drive Out Inequities?*, 16 SAN DIEGO L. REV. 735 (1979).

19. Many economic incentive proposals introduced through the income tax are justified, however, simply on the grounds that they will provide economic stimulus through raising the rate of return, without specifying whether the enhanced rate of return is to be enjoyed by the taxpayer through whose return the incentive will be claimed. See Robert E. Rosacker & Richard W. Metcalf, *United States Federal Tax Policy Surrounding the Investment Tax Credit: A Review of Legislative Intent and Empirical Research Findings Over Thirty Years, (1962-1991)*, 9 AKRON TAX J. 59, 61 (1992).

A better intuitive understanding of the mechanisms through which taxes can be reflected in prices is also necessary for evaluating even mundane changes in tax accounting rules. See William A. Klein & Daniel I. Halperin, *Tax Accounting For Future Obligations: Basic Principles Revised*, 38 TAX NOTES 831 (1988); Daniel I. Halperin, *Interest in Disguise: Taxing the "Time Value of Money,"* 95 YALE L.J. 506, 529 (1986).

Furthermore, the possibility of tax capitalization and the reality of incomplete tax capitalization must be considered when attempting to create devices to counteract whatever inequitable or inefficient results are produced by faulty substantive rules.²⁰ Finally, the possibility that implicit taxes have been incurred is a significant concern in any attempt to substantially revise the income tax. If Jack paid a price anticipating a sizable tax benefit that he has not yet fully enjoyed, when is it appropriate to simply remove the benefit without compensating him?²¹

Despite the acknowledgment of the importance of the possibility of tax capitalization in tax policy debates, there is very little, in terms of empirical study, establishing the extent of its existence.²² Rarely do assets or transactions that receive favorable tax treatment co-exist with economically similar assets or transactions that do not in a way that allows for

20. See, e.g., George Cooper, *The Taming of the Shrewd: Identifying and Controlling Income Tax Avoidance*, 85 COLUM. L. REV. 657, 698-99 (1985) (describing the mechanism with respect to tax exempt bonds); *Id.* at 708-14 (observing the likelihood of the effect on actual shelters of the era; concluding that tax benefits are fully capitalized in the cost of yachts and real estate without internal finance, although they are not always in the cost of real estate, and not in movie shelters; suggesting that more tax capitalization would occur, and thus less inequity would result from tax incentives, if shelter opportunities impervious to market pricing mechanisms were eliminated); Edward Yorio, *Equity, Efficiency, and The Tax Reform Act of 1986*, 55 FORDHAM L. REV. 395 (1987) (concluding that more must be done than Cooper suggests; calling for a lowering of all rates and an elimination of all preferences, not just those preferences immune to market discipline, so that demand for remaining preferred assets is as high as possible, because no investments will be competing); Edward A. Zelinsky, *The Tax Reform Act of 1986: A Response to Professor Yorio and His Vision of the Future of the Internal Revenue Code of 1986*, 55 FORDHAM L. REV. 885 (1987); Deborah M. Weiss, *Tax Incentives Without Inequity*, 41 UCLA L. REV. 1949 (1994).

21. See, e.g., Alan J. Auerbach & James R. Hines, *Anticipated Tax Changes and the Timing of Investment*, in THE EFFECTS OF TAXATION ON CAPITAL ACCUMULATION 192 (Martin Feldstein ed., 1987); Martin Feldstein, *Compensation in Tax Reform*, 29 NAT'L TAX J. 123 (1976); Daniel S. Goldberg, *Tax Subsidies: One-time vs. Periodic: An Economic Analysis of the Tax Policy Alternatives*, 49 TAX L. REV. 305 (1994); Michael J. Graetz, *Retroactivity Revisited*, 98 HARV. L. REV. 1820 (1985); Michael J. Graetz, *Legal Transitions: The Case of Retroactivity in Income Tax Revision*, 126 U. PA. L. REV. 47 (1977); Saul Levmore, *The Case for Retroactive Taxation*, 22 J. LEGAL STUD. 265 (1993); Kyle D. Logue, *Tax Transitions, Opportunistic Retroactivity, and the Benefits of Government Precommitment*, 94 MICH. L. REV. 1129 (1996); J. Mark Ramseyer & Minoru Nakazato, *Tax Transitions and the Protection Racket: A Reply to Professors Graetz and Kaplow*, 75 VA. L. REV. 1155 (1989); Kirk J. Stark, *The Elusive Transition to a Tax Transition Policy*, 13 AM. J. TAX POL. 145 (1996).

The issue is present not only in considering revisions of narrowly-tailored special benefits, but in the overall choice of a tax base. See David F. Bradford, *Consumption Taxes: Some Fundamental Transition Issues*, in MICHAEL BOSKIN, FRONTIERS OF TAX REFORM 135 (1996); Louis Kaplow, *Recovery of Pre-Enactment Basis Under a Consumption Tax: The USA Tax System*, 95 TAX NOTES 171-47 (1995).

22. See, e.g., Dennis R. Capozza, Richard K. Green & Patric H. Hendershott et al., *Taxes, Mortgage Borrowings and Residential Land Prices*, in HENRY J. AARON & WILLIAM G. GALE, ECONOMIC EFFECTS OF FUNDAMENTAL TAX REFORM 171-98 (1996) (concluding that residential home prices should reflect the benefit of deduction for home mortgage interest—or, more precisely, the exclusion of rental consumed in owner-occupied housing—so long as supply of desirable locations is limited, even if supply of new construction is not, and predicting that removal of deduction for home mortgage interest would result in substantial downward price shifts); David F. Bradford & Kyle D. Logue, *The Effects of Tax-Law Changes on Prices in the Property-Casualty Insurance Industry*, in THE ECONOMICS OF PROPERTY-CASUALTY INSURANCE (David F. Bradford ed., 1998).

meaningful comparisons in the terms of the transactions. Tax-exempt bonds that municipalities issue may provide the best test data there is, but even with respect to such bonds, there is no agreement about the reasons for the incompleteness of the capitalization.²³ Indeed, even though more is known about implicit taxes in connection with tax exempt bonds than with any other tax preferences, so little can be concluded with any certainty that at least one scholar has concluded that it would be foolhardy to try to incorporate such implicit taxes into analysis of the distributional effects of the income tax.²⁴

IV. THE CONFUSION ABOUT IMPLICIT TAXES IN ANALYSIS OF TAX DOCTRINE

Perhaps the uncertainty surrounding the existence of implicit taxes provides a good excuse for why tax doctrine has all but ignored the possibility of tax capitalization.²⁵ Despite the many investment decisions that are made in a manner such that tax treatments contribute to a determination of the price and the acknowledgment of such price effects in policy debates, the tax law itself continues to take a very dubious view of the idea that taxes do, or even should, affect prices.²⁶ Doctrine all too frequently

23. Some analysts looking within the tax law to find reasons for incomplete capitalization suggest that the restrictions on the deductibility of interest used to finance tax-exempt bonds holdings prevent the demand for such bonds from absorbing all possible supply. See Frederic Hickman, *Interest, Depreciation and Indexing*, 5 VA. TAX REV. 773, 774, 789 (1986) (concluding that failure to allow interest deduction on debt-financed investment in municipal bonds is deliberate sabotage of the municipal bond program). Others looking internally posit that the tax benefits are fully capitalized, but that they are capitalized at a tax rate far below the highest explicit tax rate because tax exempt investors have so many alternative opportunities for tax preference. Non-tax explanations include various features of bondholders' legal remedies, constitutional limitations on issuers budgeting and borrowing options, and various other factors affecting the investment's risk. The literature reveals no consensus. See James Poterba & Kim S. Rueben, *State Fiscal Institutions and The U.S. Municipal Bond Market* (National Bureau of Economic Research Working Paper No. 6237 (1997)); John M.R. Chalmers, *Default Risk Cannot Explain the Muni Puzzle: Evidence from Municipal Bonds that are Secured by U.S. Treasury Obligations*, 11 REV. OF FINANCIAL STUDIES 281 (1998); Levis A. Kochin & Richard W. Parks, *Was the Ex-exempt Bond Market Inefficient or Were Future Expected Tax Rates Negative?* 43 J. FINANCE 913 (1988); James Poterba, *The Yield Spread Between Taxable and Tax-exempt Bonds*, in Harvey S. Rosen, *Studies in State and Local Public Finance* 5-49 (Chicago 1986); Eric Toder & Thomas S. Neubig, *Revenue Cost Estimates of Tax Expenditures: The Case of Tax-exempt Bonds*, 38 NAT'L TAX J. 395 (1985); M. Arak & K. Guentner, *The Market for Tax-Exempt Issues: Why are the Yields so High?* 36 NAT. TAX. J. 145 (1983).

24. See Michael J. Graetz, *Paint-by-Numbers Tax Lawmaking*, 95 COLUM. L. REV. 609, 647-51 (1995) (exploring the inherent difficulties of incorporating implicit taxes in distributional analysis of the income tax).

25. See Boris I. Bittker, *Tax Shelters and Tax Capitalization or Does the Early Bird Get a Free Lunch?*, 28 NAT'L TAX J. 416, 417 (1975) reprinted in COLLECTED LEGAL ESSAYS 547-52 (1989) (explaining, in the context of a law student learning about tax shelters, the process of tax capitalization, but implying profound doubt about ever proving its occurrence).

26. One exception is David J. Shakow, *Confronting the Problem of Tax Arbitrage*, 43 TAX L. REV. 1, 11 (1987), in which, although generally considering the problem of tax arbitrage in relatively abstract terms, he attempts to outline the mechanisms that could adjust an interest limitation when implicit taxes are assumed to be present, but at rates less than the apparent explicit tax rate.

ignores the reality that in many circumstances, taxpayers "buy" (in the sense that they will be willing to pay, and sometimes must pay an additional amount for) the anticipated tax benefit when they buy an asset.

Granted, for the bulk of the transactions that must be recorded for tax purposes, the presence or absence of special tax benefits will not appear to be significant in the terms of transactions. The potential investor simply takes the market price. If tax treatments have distorted prices, they have done so completely throughout the market, and the "one price" promised by economic theory for each good prevails. Such distortions might be of interest as a policy matter, but challenging the price any given taxpayer paid as an inappropriate purchase of a tax benefit would serve little point. If she happens to enjoy a windfall because of a special tax treatment uniquely available to her, no need exists to question whether the price she paid was at "fair market value." In this sense, there is no more reason to account for the surplus enjoyed when productive goods are purchased at less than the buyer would be willing to pay than there is to account for consumer surplus.²⁷

Another factor contributing to the failure to incorporate the possibility of implicit taxes into tax doctrine is uncertainty about the mechanisms Congress intended to let loose when it initiated or perpetuated clearly preferential treatment. Only relatively recently in the history of the income tax did Congress acknowledge that it intended for a particular tax treatment to interfere with market behavior. Even then, Congress has never specified the mechanisms through which it expects these new tax treatments to operate as incentives, and therefore whether it expected that they would consciously be valued and sold in the market.²⁸

V. A CLOSER LOOK AT THE MECHANISMS INVOLVED IN IMPLICIT TAXES

This stubbornness about acknowledging the effect of taxes on prices is present even in the one situation in which tax commentary has embraced the idea that tax benefits *should* be capitalized, that is, the tax exemption granted municipal bonds. Indeed, observers frequently express dissatisfaction with the idea that more of the tax benefits have not been bid away

27. Indeed, there is less reason to account for the surplus enjoyed with respect to productive assets, since this surplus will produce additional income that will be included in the tax base. Consumer surplus will not. Although, as the subject of this paper demonstrates, timing differences can approximate the effect of exemptions, this approximation is not likely in these situations.

28. The normalization of tax benefits inherent in the investments public utilities make is one example in which arguments have been expressed about the mechanism Congress intended to invoke and who should be benefited by it. Proponents of normalization assert that those with an equity interest in the utility are the ones that risked their capital, and should be allowed the benefit of the incentive, while opponents assert that the return to equity enjoyed by such shareholders should only be on the return to their equity, not the equity provided by the taxpayers. See 26 U.S.C. §§ 167(1), 168(i)(9) (1994). On the normalization debate, see generally J. Andrew Hoerner, *Service to Hold Hearing on Normalization Regs Facing Utilities*, 91 TAX NOTES 29 (1991).

by purchasers who can make fullest use of these benefits.²⁹ Even in this area, our unwillingness to think through the possibility of capitalization of tax benefits has left our analysis of the phenomenon sadly incomplete. Although the exemption for municipal bonds is universally accepted as a mechanism for subsidizing projects by local governments, there is no general understanding about exactly how this mechanism is supposed to (or does in fact) work. And without understanding how the mechanism is supposed to work, we can rarely make sense out of the way we account for transactions in which the mechanism might occur.

Take, for example, the relatively simple question of whether a deduction should be allowed for the amount of exempt interest never received because the issuer defaults. Most would simply answer that there should be no deduction. Since the taxpayer has no basis in the amount never received, he should have no deduction.³⁰ The doctrine confirms this result. An old Ninth Circuit case, *District Bond Co. v. Commissioner*,³¹ held that no deduction could ever be allowed for such interest.

This conclusion is undoubtedly correct given our understanding of the exemption mechanism, but the reason most commonly given is incomplete. Most discussions of this and similar issues simply assume that the disallowance of the deduction will leave the taxpayer where he should be, that is, in the same place that he would have been had he accrued the interest and then deducted it when it was not paid. A more complete analysis would have to take more carefully into account exactly what he paid for, and whether, when the deal falls apart, he should nevertheless enjoy a tax accounting rule that could let him have at least a part of what he paid for. The answer to that question, in turn, depends upon what the justification for the exemption for municipal bonds actually is, and whether we can tell exactly who was supposed to get the benefit of the exemption.

What does the buyer of municipal bonds pay for? An income stream that is tax-favored because it is permanently excluded from income. Why is the income excluded? The original answer probably lies in history and political inertia.³² From a modern vantage point, apparently no good rea-

29. See *supra* note 22.

30. For more discussion of the traditional approach see Alan Gunn, *Basis and the Bad-Debt Deduction*, 97 TAX NOTES 202 (1997) and Charlotte Crane, *Matching and the Income Tax Base: The Special Case of Tax Exempt Income*, 5 AM. J. TAX POL. 191 (1986) [hereinafter Crane, *Matching*].

31. 113 F.2d 346 (9th Cir. 1940). The specific question posed in *District Bond* was whether an amount of tax-exempt interest, which the court viewed as never having been "charged on" for income tax purposes, could be "charged off" within the meaning of the Revenue Act of 1934 provision that allowed a deduction for bad debts.

32. Under *Pollock v. Farmer's Loan & Trust Co.*, 157 U.S. 429 (1895), any income tax on the income of a private party under a contract with a state was thought to violate the sovereignty of the state. Most other exemptions derived from this logic were abandoned by the Court by the early 1940's in litigation in which the federal government attempted to collect such taxes. But Congress has chosen to preserve, although with some limitation, the exemption for interest on state government debt. See *South Carolina v. Baker*, 485 U.S. 505, 521-24 (1987) (reviewing the demise of the intergovernmental tax immunity doc-

son explains why tax exempt interest is excluded from income, except as a means of providing a subsidy to the issuer of the bonds. The modern explanation for the mechanism according to which this subsidy supposedly works is straightforward: because the interest on municipal bonds is not taxed, the municipal bond buyers should be willing to pay more for the promised interest payments than they would pay for the same series of taxable interest payments. The tax benefit should therefore be reflected in a higher price the bond buyer pays so that the total after-tax yield is the same as for a cash flow receiving no special tax treatment. This capitalization of the exemption presumably makes it less expensive for the municipal issuer to borrow, hence the subsidy. The tax that the federal government foregoes is transferred to the municipal issuer, just as surely as if the federal government had collected the taxes, and shared the revenue with the local government.

Suppose the taxpayer had faced a 40% tax at the time that taxable debt of average risk offered a 10% rate of return. In theory, this taxpayer should have been willing to accept only 6% interest for the tax exempt return.³³ If this taxpayer purchased a \$1000 three-year bond bearing 6% interest, the taxpayer would have enjoyed an after-tax income stream of \$60, \$60, \$60 and \$1000, which is exactly the same as the income stream he would have enjoyed if he had purchased a taxable instrument with equivalent risk.

Note that there would be a difference in the economics of the transaction *to the other parties involved*. That is, with taxable interest, the federal government also receives 40% per year, but with tax exemption, the bond issuer avoids 40% of debt cost per year. This avoidance of issuer cost appears to be precisely the benefit the provision intends, at least as the exemption is justified in modern terms.

Why might such a subsidy be appropriate? Why might it be a good idea to lower the cost of municipal borrowing? Many tax exempt issues,

trine, and noting the anomalous state of the law, before that case, regarding interest on government bonds).

33. The tax literature was surprisingly slow to see this equalizing of after-tax returns as at least the theoretically expected result of the exemption. See, e.g., Bittker, *supra* note 18, at 739-40 (expressing doubt about reliance upon this mechanism to achieve equity in taxation, in a presentation which suggests that the writer did not expect readers to be familiar with it); Philip D. Oliver, *Section 265(2): A Counterproductive Solution to a Nonexistent Problem*, 40 TAX L. REV. 351, 397-408 (1985); George Craven, *Disallowance of Interest Deduction to Owner of Tax-exempt Bonds*, 24 TAX LAW. 287 (1971) (pointing out that the lack of availability of the interest deduction on borrowing to finance municipal bonds reduces demand for such bonds and thus lowers the price that holders must pay to buy them, ultimately lowering the amount of lost revenues passed on as subsidy to the issuer). As recently as 1985, a Joint Committee pamphlet analyzing possible changes in the circumstances under which the exemption would be available for bonds that funded activities more likely to be viewed as private than public, simply noted that, under recent practice, both the issuer and the bond buyer received a subsidy, and, with very little emphasis, pointed out that the subsidy to the bond buyer might be a measure of the inefficiency of the subsidy to the issuer. STAFF OF THE JOINT COMMITTEE ON TAXATION, 99TH TAX REFORM PROPOSALS: TAX TREATMENT OF STATE AND LOCAL GOVERNMENT BONDS 23 (Joint Comm. Print 1985).

at least historically, funded goods that were public both in the general and in the economist's meaning of the term. Water systems and roads added value to the economy, even though such value would never be directly taken into account in an income tax. Such projects are ultimately paid for by the taxpaying public, usually an adequate proxy for those benefiting from the project. When such projects are funded through bond issues, a certain amount of the value added to the economy by the project must be monetized through the collection of local taxes and fees, and the payment of these amounts to bondholders as interest and principal. If the project adds more value to the economy than the sum of these principal and interest payments, some portion of the benefit created by the project need not be monetized. Much of the higher quality drinking water will be enjoyed by consumers, and the traffic benefited by the new roads may be in large part on personal business. Because they are never monetized, these values are never included in the income tax base, since new values that are never monetized will, as a normative matter, never be subject to realization. The federal government, as a result of exempting the interest paid on the funds borrowed to finance the project, essentially has allowed some of the value created by the project to be left out of the income tax base.

By lowering the interest rates which the issuer may be required to pay in order to attract capital, the exemption allows an issuer to undertake projects that will produce less monetizable value. In our 40% tax rate example above, suppose the project to be funded by the issuance of bonds was likely to yield benefits over time at least as great as the market rate of interest, 10% per year, plus an amount necessary to repay principal, making it a sensible investment for the community as a whole. Suppose further that because of the nature of the project (for instance, new drainage to prevent contamination of a water supply in a municipality for which retrofitting to allow metering of water is economically senseless), only a limited portion of the project's benefit can be recouped from those benefiting or can otherwise be monetized. The availability of exemption for interest on municipal borrowing nevertheless allows the issuer to undertake the project if it can monetize only 60% of the benefit. The issuer must pay only that amount in cash to the bondholders; the rest of the benefit may be inherent in the project, but need not be monetized. Even though the funding mechanism has required monetization in order to pay some interest, part of the increase in the value of the project remains outside the tax base. Under this justification for the exemption, the federal government has merely foregone collection of tax on a portion of the new value the project created.³⁴

Under this view of the mechanism anticipated by the exemption, no need exists for an additional adjustment should the project fail to gener-

34. The cynical reader is asked to forgive the apparent naivety of the author. In the eyes of some, the exemption may only allow issuers to undertake projects that yield a benefit equal only to the after-tax interest rate, even if no additional benefit is created.

ate enough value to sustain the payment of interest. The exemption's marginal effect—allowing the municipality to undertake a project with a lower predicted monetizable value—is accomplished when the bonds are issued. The bondholders deserve no additional special treatment when the bonds cannot pay interest even at the lower rate.

A numerical example demonstrates that the holder of a defaulted exempt bond is no worse off than the holder of a defaulted taxable bond. Returning to our original three-year, 6% exempt bond, suppose the issuer unexpectedly defaults on the interest payment in the second year. However, it is not clear that there will be no further recovery until the third year. Under the *District Bond*³⁵ rule, the taxpayer holding the tax-exempt bond will have no write-off for the unpaid interest for the second and third years, and at the end of the third year, will only be able to write off the \$1000 principal amount.³⁶ This write-off will produce a tax benefit of \$400 in the third year. The taxpayer will have received \$60 of interest, with a \$56.50 present value as of the time of the investment, and a bad debt write-off with a present value of \$335.85. Overall, this taxpayer's losing investment turned out to have had, when viewed from the first year, a negative present value of \$607.65.

Suppose instead that the taxpayer had purchased taxable bonds. If the taxable investment failed to pay interest in the second year and was totally written off at the end of the third year, the taxpayer would have

Table 7

	Year 1		Year 2		Year 3		total pv as of year 0
	nominal	pv	nominal	pv	nominal	pv	
Principal							(1000)
interest accrued	60		60		60		
tax on interest accrued							
cash received	60	56.50					56.50
interest written off							
tax benefit from interest written off							
principal written off					1000		
tax benefit from principal written off					400	335.85	335.85
							(607.65)

35. See *supra* note 30.

36. Despite the possible (but incorrect) argument that the municipal bond cost is expense leading to tax exempt income, case law appears to have allowed the deduction of the cost of defaulted bonds. See *Newberry v. Commissioner*, 4 T.C.M. (CCH) 589 (1945) (determining the year of principal's deductibility, not questioning the deductibility of principal or collection costs on municipal bonds, with no mention of the exempt nature of bonds); *Ellis v. Commissioner*, 6 T.C.M. (CCH) 662 (1947); *First Nat'l Bank of Farmingdale v. Commissioner*, 2 T.C.M. (CCH) 734 (1943).

accrued \$60 in interest in years 2 and 3, only to write-off both amounts and the principal at the end of year 3. His cash and tax benefits from the transaction will be very close to the same amount.³⁷

Table 8

	Year 1		Year 2		Year 3		total pv as of year 0
	nominal	pv	nominal	pv	nominal	pv	
Principal							(1000)
interest accrued	100		100		100		
tax on interest accrued	40	(37.74)	40	(35.60)	40	(33.58)	(106.92)
cash received	100	94.33					94.33
interest written off					200		
tax benefit from interest written off					80	67.17	67.17
principal written off					1000		
tax benefit from principal written off					400	335.85	335.85
							(609.57)

The purchaser of the taxable bond is slightly worse off, because he is required to postpone the deduction for the unpaid but accrued interest due in year 2 until that time in year 3 when it is clear that no payment will ever be made. This rough equivalence confirms that if the entire benefit of the tax exemption for municipal bonds was supposed to end up with the municipal issuer through a reduction in the cost to the issuer, the *District Bond* rule denying the deduction is appropriate. Congress could provide municipal bonds with an even greater subsidy by providing for more favorable treatment when things go astray, but it need not do so in order to keep municipal bonds competitive with taxable bonds.

But what if the benefit from the exemption was not supposed to be capitalized in the price?³⁸ Suppose that the purpose of the exemption is not to allow the issuer to pay lower rates and thereby facilitate the under-

37. Note that tax accounting will not treat the non-collection of exempt interest the same as the collection and loss of interest. When interest is not collected, there will be no deduction under the *District Bond* rule. When interest has been collected, but is then lost, a deduction will ordinarily be allowed for the loss. (Taxpayers are ordinarily granted a basis in amounts even when they were received as tax-exempt amounts. See Crane, *Matching*, *supra* note 30). This apparent asymmetry can be resolved by observing that if the issuer of the bond had been subject to tax, the non-paying issuer would have had no deduction for interest paid; the paying issuer would have had such a deduction.

38. This analysis is offered primarily to illustrate the extent to which the tax accounting for unpaid exempt income depends upon whether or not capitalization was the intended result of the exemption, not as a historically indicated justification for the exemption. My apologies to those readers who find this exercise implausible. My ultimate point is that it is incoherent to view tax capitalization as the intended and appropriate result with respect to the municipal bond exemption but not with respect to other tax benefits.

taking of projects the value of which was likely to take a form that would not readily generate a cash flow adequate to pay market interest. Suppose instead that the purpose is to reward those stalwart citizens who purchased municipal bonds with a "bounty" for having performed their civic duty. Those who purchase municipal bonds are, as a result of the exemption from income tax for the interest they receive, supposed to be in a better position than they would have been had they purchased taxable bonds. Under this view, the unpaid income taxes are a reward for having entered into the transaction, and should be available to the taxpayer regardless of the outcome.

Table 9

	Year 1		Year 2		Year 3		total pv as of year 0
	nominal	pv	nominal	pv	nominal	pv	
Principal					1000	839.60	(1000)
interest accrued	100	94.34	100	88.99	100	83.60	1106.91

	Year 1		Year 2		Year 3		total pv as of year 0
	nominal	pv	nominal	pv	nominal	pv	
Principal							(1000)
interest accrued	100	94.34	100		100		
tax on interest accrued	0		0		0		
cash received	100		0		0		
interest written off			(100)		(100)		
tax benefit			40	35.599	40	33.584	
principal written off					(1000)		
					400	335.84	500.68

In the case of a three-year bond paying 10%, the buyer's yield would be increased by the present value of the taxes not paid, or a total of \$106.92 in terms of year 1 values.³⁹ The logic of this justification suggests

39. This justification could only hold if there were a non-financial (and probably irrational) reason why taxpayers were reluctant to buy municipal bonds, and this reluctance lowered investor demand for such bonds. It would only work if the "bounty" for participating in purchases of municipal bonds, the foregone taxes, were set at just the right rate to sell the desired number of bonds. The extent of this reward, perhaps perversely, would be determined by the tax rate to which a citizen would otherwise be subject. Since no reason seems to exist for designing a reward system with these features, a good argument could be made that this could not be the intended result of the exemption. Under this justification, the benefit of the exemption is inappropriately captured by the issuer when it can raise the price of its promised payments, for instance when our issuer above can raise the price of a stream of three annual \$6 interest payments from \$60 to \$100. The reversal of the *District*

that when the interest is not paid, the stalwart citizens should nevertheless be entitled to their \$106.92 rewards. As the tables above illustrate, even without any price effect resulting from the exemption, they will not receive the appropriate reward unless they are allowed a deduction for the promised, but unpaid, interest.

Thus, if the mechanism intended by the exemption for municipal bond income includes a bounty for the purchasing investor, then the *District Bond* rule is clearly wrong. If the investor anticipated the bounty, we should assume she thought she was paying for it, and the failure of the bond would not seem to be a particularly good reason for denying her that bounty.⁴⁰ The bounty was taken into account in the price she paid and the tax law should adjust its rules to make her whole.⁴¹

Many readers will undoubtedly shake their heads at the logical consequences of a no-capitalization-was-intended approach to the exemption for municipal bond interest. There seems to be no reason to try and fashion rules to protect this benefit-to-the-bondholder outcome (and the rejection of the idea that tax capitalization is appropriate that underlies it) where payments on the bond are defaulted when there is no mechanism for protecting this outcome in the more general situations in which the bonds are issued and paid as a matter of course. Our tax accounting doctrine simply anticipates that the benefit will go to the issuing municipality in the form of a higher price for the stream of payments that it promises.

Bond rule would not prevent this capitalization, it would only allow the bounty to work in the absence of capitalization.

40. On the other hand, we might want to limit this bounty to those taxpayers who had chosen to invest in municipal projects that were virtually assured of producing a cash flow adequate to pay the bondholders.

41. Note that allowing a bad debt deduction for unreceived municipal bond interest would not lead to infinitely increasing uncontrollable deductions for all municipal debt. Any such deduction would have to be premised on the existence of real debt, a transfer of funds by the bond buyer to the bond issuer and a promise by the issuer to pay for the use of the money. So long as the bond buyer actually gives up principal, the bond buyer will never be allowed a deduction with a greater present value than the present value of a deduction for that principal, even if the taxpayer is allowed a deduction for the unpaid interest.

In each year that the deduction for interest accrued, but unpaid, is taken, this deduction will have the same value to the taxpayer as the cost of foregoing a deduction for his principal. Whenever he takes that deduction for the principal, his interest should no longer accrue, and there will be no deduction as a result of its nonpayment.

End of	deduction for interest not received	pv equivalent as of beg of yr 1 of deduction for interest in year n	pv equivalent as of beg of yr 1 of deduction for principal in year n	decrease in pv as of beg of yr 1 of deduction for principal
year 1	7	6.543	93.457	100-93.457=6.543
year 2	7	6.117	87.34	93.457-87.34=6.117
year 3	7	5.71	81.63	...
year 4	7	5.34	76.29	...
year 5	7	4.99	71.30	...
year 6	7	4.66	66.63	...

VI. A SURVEY OF THE RESULTING CONFUSION ABOUT TAXES AND PRICES WITHIN TAX DOCTRINE

If current tax doctrine anticipates that the benefit was intended to, and ordinarily will go to the issuing municipality, why does tax law have such a hard time when dealing with other contracts in which a party clearly has paid for tax benefits? The tax law has obviously had a hard time acknowledging the possibility that market responses to particular rules will introduce implicit taxes, and that it makes little sense to condemn transactions simply because the price paid reflected tax benefits. A few examples should demonstrate the extent of this deficiency in discussions of tax rules and doctrine.

Perhaps the most irksome situation in which doctrinal analysis has failed to incorporate implicit taxes is in the search for a means of distinguishing legitimate transactions that are enhanced by tax benefits from illegitimate "tax shelters." Despite the fact that more than 15 years ago observers pointed out the fallacy of expecting transactions into which Congress has deliberately introduced tax benefits to show a profit without taking into account these benefits,⁴² the Internal Revenue Service and the courts seem reluctant to completely reject the idea. Moreover, on occasion they seem not to understand the mechanisms—purchasers willing to pay more and therefore enter into transactions yielding a lower rate of return—through which legitimate transactions might solely rely upon tax benefits.

42. See Alvin C. Warren, Jr., *The Requirement of Economic Profit in Tax-Motivated Transactions*, 59 TAXES 985, 989-91 (1981). That same year, Congress enacted the Economic Recovery Tax Act of 1981 (ERTA), Pub. L. No. 97-34, 95 Stat. 172 (1982), which, together with a temporary regulation adopted thereunder, Temp. Treas. Reg. § 168(f)(8), *et seq.*, provided for tax benefit transfer on safe harbor leasing transactions. These provisions were repealed by the Tax Equity and Financial Responsibility Act of 1982 (TEFRA), Pub. L. No. 97-248, 96 Stat. 324 (1982); see generally Alvin C. Warren, Jr. & Alan J. Auerbach, *Transferability of Tax Incentives and the Fiction of Safe Harbor Leasing*, 95 HARV. L. REV. 1752 (1982). Any explanation of safe harbor leasing should have revealed the extent to which it made sense to pay, for instance, \$100 in present values in exchange for cash flows with a present value of \$80, so long as the present value of the associated tax benefits was at least \$20. The short history of these provisions clearly left the courts at a loss about what to make of similar transactions without legislative blessing.

Although some courts seem to have been frustrated with this clumsy approach, rejection of the "pre-tax profit" tests does not yet appear to have affected many outcomes. Compare *Drobny v. United States*, No. 95-5084, 1996 U.S. App. LEXIS 8279 (Fed. Cir. Apr. 10, 1996), reported in table at 86 F.3d 1174, *affg* *Johnson v. United States*, 32 Fed. Cl. 709 (1995) (Federal Circuit denying the consequences desired from a solar water heating tax shelter, stating that "[i]f the only expectation of profit is one based on tax deductions and credits, the transaction is not necessarily a sham." The court further noted that "[p]rofit is profit, and Congress intended the deductions and credits to induce investment," but nevertheless found that the taxpayers' role in the shelter was simply too insignificant to warrant the consequences urged). *Sacks v. Commissioner*, 69 F.3d 982, 992 (9th Cir. 1995), rev'g, 64 T.C.M. (CCH) 596, which involved similar assets marketed more clearly as a shelter package. In *Sacks*, however, the court concluded that the Commissioner's arguments amounted to little more than "us[ing] the reason Congress created the tax benefits as a ground for denying them," since Congress could not have intended to benefit only those transactions that "would have been made without the Congressional decision to favor them." *Id.*

The resulting criteria for distinguishing legitimate from illegitimate transactions therefore verge on incoherent.⁴³ First, many decisions call for pre-tax profits or a comparison of pre-tax profits with tax benefits⁴⁴ before the legitimacy of the arrangement is accepted. Rarely, however, do these decisions make any sense about how such "pre-tax profits" should be computed and what sort of "tax benefits" must be ignored. Recall the calculation that Jack would undertake in order to determine the price that he would be willing to pay for an asset to use in his business. Jack would not have paid any more than Fred's price if he did not expect to be able to claim deductions for cost recovery. Is his investment at a higher price suspect solely because of this? Surely not, for it would be difficult for anyone who pays more than Fred's price to show a profit if no "tax benefits" (in the sense of any deduction for cost recovery) are to be allowed in the computation at all. In competitive markets for assets producing relatively predictable cash flows, such a comparison of a profit-without-any-tax-benefits test with a tax-benefits test would be impossible for anyone to meet. But who is to determine which tax benefits are to be taken into account and which are not in such comparisons?

Perhaps the test should instead look for positive cash flows completely disregarding any payment of taxes. But how much profit should be required? Is it enough that the sum of all anticipated payments by the taxpayer be less than the sum of all anticipated receipts, without taking into account the timing of payments and receipts? Clearly not, if a profit test is to be meaningful at all. A positive sum of cash flows can nevertheless have a negative present value when outflows sufficiently precede inflows, while a negative sum of cash flows can have a positive present value when inflows sufficiently precede outflows.⁴⁵ Nevertheless, this naive rule has

43. In fairness to the authorities that have struggled with these issues, most of the problems developing these standards derive from the practical impossibility of prospectively determining when a taxpayer's apparent obligation to pay will in fact result in a payment. As a consequence, the tests that can be invoked prospectively, including the examination of "profit" elements and search for "fair market values" unaffected by taxes, have borne an inappropriate share of the burden in shelter litigation.

44. For other discussions of possible approaches to the measurement of pre-tax profit, see Lee A. Sheppard, *Economic Substance and the Case of the T-Bill Rolls*, 48 TAX NOTES 396 (1990); Kenneth Gideon, *Mrs. Gregory's Grandchildren: Judicial Restriction of Tax Shelters*, 5 VA. TAX. REV. 825 (1986); Alvin Warren, *The Requirement of Economic Profit in Tax-Motivated Transactions*, 59 TAXES 985 (1981). The presence of a profit can enter into the analysis in several ways: first, in the determination of whether a transaction will be upheld as a lease (leaving ownership in the taxpayer) or a financing transaction (leaving ownership in the lessee), in the determination of the deductibility of expenses under section 183, and third, in the conclusion that the transaction is not a "sham." Unfortunately, determination of the bona fides of a purchase price borrowing will also depend upon a determination of the values the participating taxpayer can expect from the property.

45. Tests involving the simple summing of undiscounted cashflows are still frequently invoked. See, e.g., *Emershaw v. Commissioner*, 50 T.C.M. (CCH) 246 (1990), *aff'd*, 949 F.2d 841 (6th Cir. 1991) (showing a circular computer lease and a simple sum of cash flows used with stress on residual value); Rev. Proc. 75-28, 1975-1 C.B. 752; Rev. Proc. 75-21, 1975-1 C.B. 715. But the Service has not limited itself to such crude approaches. See EXAMINATION TAX SHELTERS HANDBOOK 7299-6. See also ANDRE LEDUC, FUNDAMENTAL FEDERAL INCOME TAX CONSIDERATIONS IN CURRENT UNITED STATES LEASING TRANS-

never been completely repudiated,⁴⁶ despite its irrelevancy to any meaningful determination of a project's economic viability.

If the naive rule is rejected, should the investor have to prove anything more than an ability (and an intent) to pay all outside financing, or must the investor demonstrate an ability to earn a competitive rate of return on her own capital, again without regard to tax benefits? Some cases have tentatively suggested that such a return might be necessary.⁴⁷ This test has unfortunately led only to a bias in favor of investments such as real estate for which the variance in cash flows in the later stages of the investment remains greatest,⁴⁸ and those situations in which a diversity of holdings, such as businesses relying on more than one asset, minimize the possibility that any one purchase will be subject to the test.⁴⁹

Putting aside transactions involving spurious debt, it is entirely possible that even some one like Jack, who intends to use an asset himself, will not be able to show a positive, much less a competitive, rate of return on an investment without taking into account the tax treatment of the investment. Indeed, if he pays any price above Fred's price, Jack will receive less than a competitive rate of return if we look only at the cash flows

ACTIONS, PRACTICING LAW INSTITUTE TAX LAW AND ESTATE PLANNING COURSE HANDBOOK SERIES.

46. See *Hilton v. Commissioner*, 671 F.2d 316, 317 (9th Cir. 1982), *cert. denied*, 459 U.S. 907 (1982), *aff'g* 74 T.C. 305 (1980) (affirming economic substance determination based on present value analysis of taxpayer's investments, but refusing to endorse any particular approach to the ascertainment of the appropriate discount rate). This approach was not embraced in very many cases and was soundly rejected in others. See *Estate of Thomas v. Commissioner*, 84 T.C. 412, 440 n. 52 (1985) (rejecting the applicability of discounting in making for-profit determinations without statutory authority and citing the language of Treas. Reg. § 1.183-2(b)(9): "the availability of other investments which would yield a higher return, or which would be more likely to be profitable, is not evidence that an activity is not engaged in for profit."). Several more recent cases indicate a willingness to rethink this position. See *Gianaris v. Commissioner*, 64 T.C.M. (CCH) 642 (1992) (openly embracing present value analysis to find that taxpayers had no profit motive in entering into transactions involving energy conservation equipment); *ACM Partnership v. Commissioner*, 73 T.C.M. (CCH) 115 (1997), *aff'd in part*, 157 F.3d 231 (3d Cir. 1998) (considering whether the taxpayer could earn a positive rate of return on financial transactions in denying intended tax consequences).

47. Several cases have suggested that a significant, if not a competitive, rate of return should be required. See *Rice's Toyota World, Inc. v. Commissioner*, 81 T.C. 184, 206 (1983) (finding no economic substance to transaction even "assuming a discount rate of zero.").

48. In many cases in which the taxpayer's obligation to pay is not at issue, the analysis simply boils down to the presence or absence of realistic residual value. See *Smoot v. Commissioner*, 61 T.C.M. (CCH) 268 (1991).

49. The passive activity loss rules in fact implement such an approach. Only those investments that are made in such a way that particular cash flows cannot be traced to assets subject to particularly favorable accounting methods are likely to avoid suspicion under this approach. See Calvin Johnson, *What's A Tax Shelter*, 68 TAX NOTES 879, 882 (1995).

One plausible theory is that section 469 is, at its core, protectionist legislation, trying to keep the bad accounting as the exclusive privilege of insiders. Only the insiders get the artificial losses. You need to be a real real estate man to get the nonreal real estate tax losses. You have to have manure on your boots to get the cow-pod farm tax losses.

Id.

before tax deductions. We can only make sense of an inquiry about adequate economic benefit if we have some benchmark tax treatment as a reference point.⁵⁰

Second, these decisions frequently insist that a price above “fair market value” is inherently suspect. They remain stubbornly silent about the possibility that the fair market value of the asset to those who can use the tax benefit will in fact be higher than the apparent “fair market value” to those further up the production system who cannot make use of the benefits.⁵¹

Indeed, the lack of willingness to take into account the financial techniques most likely to have been used by taxpayers in evaluating these transactions is remarkable. Very few authorities—whether holding for or against the taxpayer—acknowledge that even in transactions motivated by a real need to acquire possession or use of an asset or of a particular function, a portion of the purchase price will be supported not by the cash flows anticipated from the asset or function, but by the tax benefits associated therewith.

Third, there seems to be a widespread refusal to acknowledge the market mechanisms that can lead to some types of transactions in which the tax treatments of assets or activities are shared among several taxpayers.⁵² As the initial discussion of Jack and Fred revealed, buyers who can use a tax break will often be able to bid more than buyers who cannot. Anyone in Jack’s position, a *user of* an asset who can benefit from capitalized tax benefits implicit in the price paid, is highly unlikely to have the portion of the price paid for a tax benefit challenged. Such a buyer can usually get the tax benefits that she has paid for by simply reporting the price of the benefits as part of the price of the underlying asset.

Those buyers who cannot benefit from such capitalized tax benefits—whether because of their permanent tax characteristics or because of a temporary excess of tax benefits—will face considerable obstacles in the tax law if they attempt to transfer these tax benefits even though they may not have been able to avoid buying them. Granted, some Fred-like

50. It seems likely that some who support a requirement of a positive, if not competitive, return on investments, taking into account the time value of money, would be willing to concede that the “tax benefits” available under economic depreciation should be allowed in such computations.

51. *But see* Van Duzer v. Commissioner, 61 T.C.M. (CCH) 249, 279 (1991), *aff’d*, 9 F.3d 1555 (9th Cir. 1993). Judge Ruwe rejected the government’s argument that “tax benefits . . . from the windfarms constitute peculiar circumstances which influenced petitioner to pay more than the fair market value for the windfarms.” The court found the argument that the purchase price was excessive inconsistent with the concession that a bona fide profit motive existed, and further that the Congressional concern that led to the adoption of the business energy investment credit, rendered the transaction not one of “peculiar circumstances.” *Id.* The taxpayer’s expert had included the tax benefits in discounted cash flow analysis of the transaction. *See id.*

52. For other discussions of the inevitability of transactions designed to share tax benefits, see Noel Cunningham & Deborah Schenk, *Taxation Without Realization: A “Revolutionary” Approach to Ownership*, 47 TAX L. REV. 725, n.196-202 (1992) (concluding that Congress has foolishly devised tax incentives that rely on tests of ownership in assigning the nominal benefit of the incentive).

buyers who cannot use a tax benefit will occasionally be able to win bids because of other values they are uniquely able to derive from the purchased assets. But even those Freds who can justify an investment at the tax capitalized price will have an incentive to get as much as they can out of their use of the asset, and therefore to structure their arrangements so that they can pass at least some of the benefit along to someone who can use it. Even when the benefit is uncertain (or, as is more often likely to be the case, the benefit is certain but its transfer is likely to be challenged), these Freds may still find someone willing to gamble on whether the tax benefit is available, and thus to pay them for the chance to claim the benefit. The various doctrines and Code sections that require demonstration of a profit potential without taking into account the tax benefits will frequently make it difficult to effectively use these benefits.

Despite the reality of these economic incentives, in the vast majority of cases, the tax law tries to ignore the possibility that buyers may have no choice but to pay for the tax benefits that others enjoy as a result of using the asset and therefore must find a way to claim this benefit by selling it to others. Ordinarily, if tax issues arise as a result of a purchase by the *user* of an asset at the prevailing price, the tax law does not worry about whether that price has been set by the Freds or the Jacks of the world—even though in the former case, there may be a few Jacks who have extraordinary returns and in the latter case there are many Freds who have simply been outbid. It is curious then that the tax law has such a hard time when the Freds of the world, those who cannot take advantage of the tax benefits reflected in the value of the assets they might buy, seek to join with others who can take such advantage to bolster their bids by including some payment for the tax benefits involved.

VII. EMPTY CRITIQUES OF TAX RULES

In two recent cases,⁵³ appellate courts upheld the proposition that purchasers of antique musical instruments should be allowed cost recovery deductions for their purchases so long as there was in fact physical use made of the instruments, despite the high likelihood that these instruments would actually increase in value during the time that they were held. These decisions, based primarily on statutory construction arguments, seemed to many commentators to run contrary to the well-established notion that the best method of cost recovery would allow deductions only to the extent of actual decline in value.⁵⁴ Under this

53. See *Simon v. Commissioner*, 103 T.C. 247 (1994), *aff'd*, 68 F.3d 41 (2d Cir. 1995); *Liddle v. Commissioner*, 103 T.C. 285 (1994), *aff'd*, 65 F.3d 329 (3d Cir. 1995). Earlier courts had found the fact that these assets tended to rise in value with the passage of time, despite possible wear and tear, precluded depreciation. See *Browning v. Commissioner*, 890 F.2d 1084 (9th Cir. 1989).

54. See Anthony P. Polito, *Fiddlers on the Tax: Depreciation of Antique Instruments Invites Reexamination of Broader Tax Policy*, 13 AM. J. TAX POL'Y 87 (1996); Joseph M. Dodge & Deborah A. Geier, *Simon Says: A Liddle Night Music with Those Depreciation Deductions, Please*, 69 TAX NOTES 617 (1995); Lee A. Sheppard, *News Analysis: Violins*,

proposition, no cost recovery should be allowed for these antique musical instruments. Because these commentaries were limited to critiquing the reasoning supporting the tax treatment allowed, and did not consider the impact of such an allowance on taxpayer's behavior, they largely overlooked some of the more interesting questions raised by possible effects of the tax treatment allowed by the cases. If the only result of these cases is that a few top musicians experience a windfall because they can still claim unexpected depreciation on the instruments that they already owned and planned to hold until they die, the case is of interest only in an introductory tax class as a vehicle for discussion of the problems inherent in establishing cost recovery schemes based on predictions about the future value of oversimplified classifications of assets. Would we feel differently about the results of the cases if we knew that, because of these cases, the price of instruments had risen? What if that meant that some performers (who are entitled to cost recovery for assets used in their business) could now outbid speculators and hoarders (who are not) and obtain these instruments for performances? On the other hand, what if it meant that worthy, but less-wealthy, performers were even more likely than before to be outbid by less accomplished performers who had other sources of income and therefore could make better use of the deductions allowed, but not better use of the instruments? Or if the higher price had stimulated a new market for stolen and forged instruments?

VIII. FAILURE TO PROPERLY MEASURE VALUE

Only recently have the courts acknowledged that a taxpayer using discounted cash flow techniques to evaluate investment possibilities will, as a matter of course, include anticipated tax benefits in the calculation. Thus, only recently have courts, in examining purchase price allocations, allowed tax treatments to be taken into account,⁵⁵ or allowed taxpayers

Ferraris, and the Music of Class Lives, 69 TAX NOTES 669 (1995); Lee A. Sheppard, *News Analysis: The Musicians' Tax Shelter*, 64 TAX NOTES 1259 (1994).

Many of these commentators failed to take into account that the decisions the courts were asked to make—determining the meaning of depreciable property for the purposes of the predictions required by sections 167 and 168—had to work for many types of property for which it is far more difficult to predict increases in value. That, however, is another topic.

55. In the cases involving the highest stakes, pre-Tax Reform Act of 1986 purchases of assets or stock acquisitions eligible for 338 elections, the methodology for including the value of such tax benefits revealed in tax court opinions has slowly but surely become more sophisticated. See *Peoples Bancorporation v. Commissioner*, 63 T.C.M. (CCH) 3028 (1992) (indicating that price allocated to core deposits included tax savings as a result of hoped-for amortization without gross-up of the value assigned to those cash flows, as if Jack had used Fred's price, and the value of the tax benefits associated with Fred's price, rather than Jack's maximum price); *IT&S of Iowa, Inc. v. Commissioner*, 97 T.C. 496, 506 (1991) (purchase of bank stock for which section 338 election was made, in making valuation, clearly figured in cost saving from amortizing deposit core, probably grossed up, although not clear). The court held that "sophisticated taxpayers may consider such savings [from the tax attributes of assets] in assigning a value to property." *Id.* at 532 n.38; cf. *Citizens & Southern Corp. v. Commissioner*, 91 T.C. 463, 498 (1988), *aff'd without published opinion*, 900 F.2d 266 (11th Cir. 1990), *aff'd*, 919 F.2d 1492 (11th Cir. 1990) (*per curiam*) (noting that value of an acquired asset may be determined based on future income

to introduce evidence regarding the tax burdens likely to be imposed on cash flows when attempting to value the assets generating these cash flows. A few cases have recognized this possibility when the form in which assets are held clearly imply greater tax burdens than would be inherent in other forms,⁵⁶ but only a handful have acknowledged such a simple phenomenon as the increment in value to a taxpayer when she can hold assets with a high basis over identical assets with a low basis.⁵⁷

likely to be generated by that asset discounted to present value; the tax treatment value was buried in the effective tax rates implicit in discount rates used to value the spread); *First Chicago Corp. v. Commissioner*, 67 T.C.M. (CCH) 3150 (1994) (following *IT&S*, clearly allowing inclusion of value of amortization in value assigned to asset).

See also *Trustmark Corp. v. Commissioner*, 67 T.C.M. (CCH) 2764 (1994) (rejecting taxpayer's attempt to both discount cash flows by after-tax rate that incorporated only effective tax rate and separately value the amortization of this amount that would be available); *Lorvic Holdings, Inc. v. Commissioner*, 76 T.C.M. (CCH) 220 (1998) (noting that taxpayer's expert grossed up value to take into account value of cost recovery hoped for, but not commenting further).

56. See *Eisenberg v. Commissioner*, 74 T.C.M. (CCH) 1046 (1997), *rev'd*, 155 F.3d 50 (2d Cir. 1998) (holding that the value of gifted stock of a closely held corporation can be reduced for built-in capital gains tax on corporate assets; that "a hypothetical willing buyer . . . would take some account of the tax consequences of contingent built-in capital gains on the sole asset of the corporation . . . in making a sound valuation of the property."); *Estate of Davis*, 110 T.C. 35 (1998) (allowing a lack-of-marketability discount that included discount for corporate level taxes inherent in closely held corporation's stock).

Other authorities have indicated that the tax burdens involved were too speculative. See *Estate of Gray v. Commissioner*, 73 T.C.M. (CCH) 67 (1997); *Estate of Bennett v. Commissioner*, 100 T.C.M. (CCH) 42 (1993). The approach used is still less sophisticated than it might be. It is unclear whether the analysis anticipated by the *Eisenberg* court should take into account the tax burden that would be borne if the earnings generated by corporate assets were regularly distributed as dividends or not subject to tax until a sale of corporate stock occurred. See William L. Raby & Burgess J.W. Raby, *Stock Valuations as a Matter of Law Require Tax Discount*, 98 TAX NOTES 166-57 (1998) (suggesting that asset value be reduced by difference between present value of available tax benefits within corporation and present value of tax benefits if assets purchased directly); William L. Raby & Burgess J.W. Raby, *How Tax Attributes Affect Valuation of Equity Interests*, 97 TAX NOTES 246-33 (1997) (discussing how, in past, minority interest discount justified by minority's inability to trigger pre-1986 basis step-up, now discount should take into account fact that when assets, the price of which to third parties reflect tax attributes, are held in corporation with low basis, they will not yield the same value); Letter from Robert M. Gordon to TAX NOTES, "Education Needed on After-Tax Economic Analysis," 98 TAX NOTES 192-91 (1997) (noting that the "Second Circuit's conclusion that 'a hypothetical willing buyer . . . would take some account of the tax consequences of contingent built-in gains on the sole asset of the Corporation . . . in making a sound valuation of the property' is an unremarkable consequent [sic.] of the proposition that the value of any asset can be viewed as the capitalized discounted after-tax cash flow (i.e., earnings) produced by that asset.>").

The approach urged by the taxpayers in these situations is in many respects consistent with the "new view" of the effect of the double tax on corporate dividends, which suggests that the market value of most stock, both publicly and privately held, has been discounted as a result of the tax burdens that stand between values held by corporations and the ultimate consumption of that value by shareholders. See generally U.S. Dep't of Treasury, *Report on Integration of the Individual and Corporate Tax Systems: Taxing Business Income Once* (1992), reprinted in *Daily Tax Rep. (BNA)* No. 240, at L-7 (Dec. 14, 1992); Alvin C. Warren, Jr., *The Relation and Integration of Individual and Corporate Income Taxes*, 94 HARV. L. REV. 719 (1981).

57. See *Estate of Gladys H. Titus*, 57 T.C.M. (CCH) 1449 (1989) (holding that in valuing bank stock for estate tax purposes, one can mitigate the effect of a possible write-down of various financial instruments by the tax benefit inherent in the ability to deduct such losses). The IRS seems to embrace such arguments inconsistently. For instance, it appears

IX. SPREADING THE CONFUSION BEYOND THE TAX LAW

That the tax law itself has such a hard time dealing with the fact that tax benefits are bought and sold, it is no wonder that other areas of the law have a hard time dealing with the ways in which prices will be affected by the tax attributes of assets, whether those assets are the subject of contracts or the basis for the measurement of damages. With only a handful of notable exceptions,⁵⁸ courts continue to fail to acknowledge the role that tax benefits can have in the value of assets and that these benefits may have been the subject of the bargain between the parties.⁵⁹

In fairness to these courts, tax attributes do have some peculiar features. First, they cannot be separated from the asset itself, and although their availability can be the subject of a warranty, they cannot be transferred independently. Second, their value is not available to all owners, but instead depends upon the characteristics of the owner. Third, their value is contingent upon future events, including legislative and regulatory changes outside the control of the seller or the normal operation of the market, and may be difficult to calculate.⁶⁰ None of these features is unique to tax attributes, however, and cannot explain the reluctance of the courts to consider the value that they add.

that when challenging the reasonableness of a rental payment by a close corporation to its owner in an attempt to recharacterize some part of the payment as a dividend, the IRS has taken into account the tax benefits available to the owner in calculating the approximate rent, presumably to lower the amount of rent deemed reasonable. *See* MSSP AUDIT GUIDE FOR FURNITURE MANUFACTURING, July 15, 1997, reprinted in 98 TAX NOTES 193-42 (1998). One is given pause, however, by the description of the examiner's technique, which included reference to present value tables, rather than to the use of computers and calculators which frequently can provide more useful insights simply because of the ease of iteration.

58. *See* *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837, 863-64 (1975) (Brennan, J., dissenting) (reasoning that hoped-for tax benefits should provide enough profit from the efforts of others to meet the test for the jurisdiction of the securities laws: "[I]n a practical world there is no difference between [money earned and money saved through tax advantages]. The investor finds no reason to distinguish . . . between tax savings and after-tax income."); *Medcom Holding Co. v. Baxter Travenol Laboratories, Inc.*, 106 F.2d 1388 (7th Cir. 1997) (holding that purchaser of stock may recover for NOLs wrongfully used by seller who retained control after contractual time for passage of period had passed, but purchaser must be able to prove that losses would have been used, and not allowing gross-up for taxes owing on damages payment). In *Medcom*, the losses claimed by the seller were \$3.6 million while the purchase price was \$3.7 million.

59. *See, e.g., In re Steele*, 502 N.W.2d 18 (Iowa Ct. App. 1993) (wife arguing that husband should be credited with tax benefits to be available in years after divorce for tax shelter investment made before divorce; court treated as valueless).

60. *See* *Randall v. Loftsgaarden*, 478 U.S. 647, 664 ("The Court of Appeals' elaborate method for calculating damages and interest so as to offset tax benefits supplies an additional reason for rejecting its tax benefit offset rule."); *DePalma v. Westland Software House*, 225 Cal. App. 3d 1534, 1540-41, 276 Cal. Rptr. 214, 217 (Cal. Ct. App. 1990) (holding that damages should not be reduced by tax benefits, because, among other reasons, "estimating tax consequences is not useful because it is speculative, time-consuming, and confusing," in breach of contract suit brought by doctor against software company). *But see* *Oddi v. Ayco Corp.*, 947 F.2d 257 (7th Cir. 1990) (attempting to calculate the damages owed (if any) for mistake made in calculations that induced an individual to take advantage of the soon-to-expire lump-sum distributions from profit sharing plans).

The degree of confusion regarding the possibility of tax benefits as a value anticipated by a purchaser and the effect of taxes on prices is evident in the burgeoning amount of litigation over failed tax shelters, and more generally, over bad tax advice. In many such cases, the courts have come close to refusing to acknowledge that tax benefits can have real economic value, and that such values were the subject of the transaction at issue. For instance, in *Randall v. Loftsgaarden*,⁶¹ the Supreme Court rejected the idea that it would be appropriate to require the purchaser of a tax shelter who sought a rescissory remedy to take into account the tax benefits that the purchaser enjoyed as a result of entering into the deal. In its discussion, the Court invoked three general considerations militating against allowing defendants credit for the benefits the transactions made available to plaintiffs, all which seem to deny the realities of transactions in which taxpayers are willing to pay for tax benefits.

First, the Court invoked decidedly puritanical ideas about the parties who should be benefited by tax treatments. In its brief, the government asserted that to reduce plaintiff's recovery by tax benefit enjoyed would allow the defendant the tax benefits created by the deal, a result that Congress clearly could not have intended.⁶² While it may be true that Congress did not intend to benefit swindlers, it is unclear whether Congress intended to disallow sellers of tax benefits in the ordinary case to retain the benefits they receive as a result. The government's argument logically would suggest that no seller of tax benefits should be able to do so. The Court never questioned why tax benefits should be any different from any other object of exchange.

Second, the Court relied on the fact that the plaintiff was likely to be required to take some amount into income as a result of its litigation and concluded that therefore any benefit the plaintiff had enjoyed was about to be undone. The Court was imprecise about what kind of recapture or invocation of the tax benefit rule it had in mind, but none of the likely possibilities would in fact take away all of the benefits the plaintiffs had enjoyed. The recognition of income in a later year never completely undoes the benefit of deductions in earlier years, unless some sort of interest is charged on the deferral. The Court's observation reflects not only a misunderstanding about the nature of recapture, but also a complete failure to understand that the underlying transaction was primarily driven by the value to be derived through the timing of tax benefits.⁶³

61. 478 U.S. 647 (1986), *rev'g*, *Austin v. Loftsgaarden*, 768 F.2d 949 (8th Cir. 1985).

62. *See id.* at 657.

63. The Court rejected the idea that the plaintiffs would ultimately enjoy a tax benefit: In any case, respondents' contention that plaintiffs will receive undeserved "windfalls" absent an offset for tax benefits is greatly overstated. Even if tax benefits could properly be characterized as a windfall—which we doubt—the tax laws will serve to reduce, although not necessarily to eliminate, the extent of plaintiffs' net economic gain as compared to the status quo ante. We are told that the "tax benefit rule" will apply in cases of rescission, thus making the recovery taxable as ordinary income. . . . Brief for United States and SEC as Amici Curiae 25. Any residual gains to plaintiffs thus emerge more

Many courts have simply taken *Randall* as the final word that tax benefits should not be taken into account in computing damages, even when the litigation is over transactions in which the effects of taxes were explicit.⁶⁴ Slowly but surely, however, its completely unrealistic approach is being challenged.

Even those courts that have attempted a more critical approach than that adopted in *Randall* have had difficulty coming to grips with how the tax law will actually account for the events they are overseeing. As noted

as a function of the operation of the Internal Revenue Code's complex provisions than of an unduly generous damages standard for defrauded investors.

Id. at 663-64.

64. Following *Randall*, and including the idea that "benefits" could not have been intended to be retained by defendants, see *Halling v. Hobert & Svoboda, Inc.*, 720 F. Supp. 743 (E.D. Wis. 1989) (with additional reference to tax benefit rule: the windfall would be essentially limited to the use of the money (in the amount of the tax benefit) between the time that the initial tax benefit was realized and the time that the amended return is filed. On the other hand, if the court were to apply the out-of-pocket measure of damages and, as a consequence, reduce the losses suffered by the plaintiffs by the amount of the tax benefits realized, the prevailing plaintiffs would not be required to apply the tax benefit rule to the amount of tax benefits initially realized. As a result, the IRS could not recoup the difference, and the defendants would in effect have their liability subsidized by the taxpayers); see also *Lee v. Levenfeld*, 1987 U.S. Dist. LEXIS 1458 (N.D. Ill. 1987); *Adalman v. Julia M. Walsh & Sons, Inc.*, 807 F.2d 359 (4th Cir. 1986) (applying 12(2) of 1933 Act, with limitation on recovery to consideration plus interest, less income); *Cody v. Edward D. Jones*, 502 N.W.2d 558 (S.D. 1993) (state law fraud suit against investment advisor for misrepresentations regarding risk; failure to take into account suitability for investment in oil and gas shelters, following *Randall*, the court reasoned that deterrent important, inappropriateness of windfall to defendant financed by government, and tax-benefit rule). In *Cody*, the court fails to take note of importance of misrepresentations by defendants regarding plaintiff's income in years in question, and relationship of this income to value of venture. See also *Anixter v. Home-Stake Prod. Co.*, 977 F.2d 1549 (10th Cir. 1992) (with little analysis), *cert. denied*, *Dennler v. Trippet*, 507 U.S. 1029 (1993); *Biscayne Oil & Gas, Inc. v. Burdette Oil & Gas Co.*, 947 F.2d 940 (4th Cir. 1991) (table case) (following *Randall* for state law rescissionary damages, based primarily on logic that tax benefit rule would produce income on payment); *Rousseff v. E.F. Hutton Co.*, 843 F.2d 1326 (11th Cir. 1988) (following *Randall* in state securities law litigation, based on taxation of recovery); *Nottingham v. General American Communications Corp.*, 811 F.2d 873 (5th Cir. 1987) (following *Randall* in Texas state securities action with no particular emphasis or discussion, except that relating to the benefit of the victim); *Chanoff v. United States Surgical Corp.*, 857 F. Supp. 1011 (D. Conn. 1994) (in securities fraud action for misrepresentations personally made to plaintiffs, court followed *Randall* based on difficulty of calculating damages relating to taxes); *Burgess v. Premier Corp.*, 727 F.2d 826 (9th Cir. 1984) (rejecting reduction of damages because of lost opportunity problem—plus a very confusing statement about tax-benefit rule—as if one had to file amended returns if and when one received a damage reward, and citing *Western Federal Corp. v. Davis*, 553 F. Supp. 818, 820 (D. Ariz. 1982)); *Hayes v. Arthur Young & Co.*, 34 F.3d 1072 (9th Cir. 1994) (following *Burgess*, tax benefits not to be taken into account in reducing damages (estimated to be two-thirds of such losses) in this out-of-pocket recovery in state law action based on misrepresentations regarding the resources available to the shelter-generating plant cultivation business). In *United States v. Driver*, 132 F.3d 34 (6th Cir. 1997), the court held that the victim's loss should not be reduced by the tax benefits enjoyed by the victims of a promoter of tax shelter schemes involving oil wells and gold mines. From the facts presented in the circuit court's opinion, it appears that the most probative evidence in the case against the tax shelter promoter was the disparity between the price at which the promoter purchased the properties and the price at which they were resold. Such a disparity should not, in and of itself, be grounds for concluding that the promoter's activity is fraudulent, since it is completely consistent with the promoter's acting as a middleman between the Freds and the Jacks among taxpayers.

above, one of the peculiar aspects of the capitalization of tax benefits is that there is often no adequate way to account, for tax purposes, for the amount that is actually paid for tax benefits rather than for the underlying asset. Frequently, in order for the tax benefit to survive the transaction, the amount paid for it must plausibly show up as basis in some asset. Unfortunately this fact is not always appreciated, even where courts are realistic about the effects of tax benefits on the transactions before them.

In *Burdett v Miller*,⁶⁵ the plaintiff invested in a tax shelter which turned out to be less objectionable from a tax point of view than most, but a worse investment. The taxpayer actually had to make good on some of the debt she incurred and the underlying shelter property was worth far less than anticipated. The taxpayer successfully sued, for breach of fiduciary duty, those involved in packaging and selling the shelter. The defendant argued that *Randall* should not be followed, and that the measure of the plaintiff's damages should include an offset for the tax benefits she actually enjoyed. Judge Posner agreed, but sought to distinguish the tax benefits that anyone suffering a loss of property in which she has basis may enjoy from the tax benefits that someone who purchases a tax shelter may enjoy. He asserted that the former "normal" tax benefits should not reduce a plaintiff's recovery, but that the latter, which represented a part of what the plaintiff had bargained for, should:

This case, however, involves two types of tax benefit and they have different implications for liability. One is simply the benefit that [the plaintiff] obtained by being able to take a deduction for the loss from the fraud that wiped out her extensive investment in the tax shelters. That is the identical benefit as in our hypothetical case of conversion [in which a taxpayer sues to replace the value of destroyed property, and in which any tax consequences should be disregarded]. The other is the anticipated tax benefits of the investments. The investments were, after all, tax shelters. They were intended to generate tax benefits. To the extent they did, this was a gain to [the plaintiff] not offset by a loss to the taxpayer, because the taxpayer intends as it were to incur a loss on a lawful tax shelter deal. Suppose that in exchange for an investment of \$25,000 in a nonfraudulent tax shelter [the plaintiff] would have obtained \$20,000 in tax savings and \$10,000 in return of principal (plus interest), for a net profit of \$5,000. As a result of fraud, the tax shelter generates the anticipated \$20,000 in tax savings but her principal is wiped out and she gets no interest. Her loss is \$5,000 (remember that she invested \$25,000)—not \$30,000—just as if, in an investment of \$25,000 that involved no tax angle, she had been repaid \$20,000 before the defendant absconded with the balance of the investment. (It is not, however, \$5,000 minus the tax savings she obtained from deducting the \$5,000 loss on her income tax return.) As a matter of fact, one of [the plaintiff's] investments was a \$100,000 loan, half of which was repaid. She does not claim that half as damages. It is equally unreasonable for her to claim as losses the anticipated, and realized, tax benefits of the tax

65. 957 F.2d 1375, 1383 (7th Cir. 1992).

shelters.⁶⁶

It is not clear, however, that the tax law can account for this hypothetical transaction in such a way that the two distinct types of tax benefit can be so easily distinguished. If \$25,000 was expended for the tax shelter, this full amount presumably became a part of the taxpayer's basis in the tax shelter. The opinion elsewhere acknowledges that what should count when measuring the tax benefit enjoyed by the plaintiff is "the present value of the net anticipated tax benefits, not the tax write-off as such."⁶⁷ So, it is assumed that the \$20,000 in tax savings was computed as the present value, as of the time that the \$25,000 was expended, of the deductions and credits later claimed, offset by any tax liabilities resulting from recapture still later on. In order to generate \$20,000 in tax savings (so defined), the taxpayer presumably had to deduct the \$25,000 of basis resulting from her payment, and presumably other basis provided through some sort of debt, and been able to postpone recapture and limit its impact on liability through character and rate changes. This amount of net present value in tax savings could have been produced, for instance, by a shelter that allowed \$100,000 deduction against income taxed at 50%, and immediately recaptured as income taxed at 30%, or an immediate \$100,000 deduction against income taxed at 50% followed by recapture at the same tax rate about seven years later (assuming a 8% after-tax discount rate), or some intermediate combination of the two factors that could mitigate the recapture liability.

The tax accounting for the transaction will not allow the result that the opinion anticipates. If the shelter has been allowed, tax accounting will not produce a \$5,000 loss on her tax return. This amount, the difference between the invested amount and the present value of the tax benefits enjoyed, simply will not show up in the taxpayer's tax accounting in a way that will permit a write-off. The only write-off that will be allowed as a result of the fraud will be the amount of basis remaining unrecovered from the original investment in the shelter. This basis in her original investment represented both the price she paid for any cash flow likely to be generated by her ownership in the asset and the price she paid for the anticipated tax benefits. Tax accounting does not contemplate that the two ever become disentangled. And, in any event, there is not likely to be much of this basis left, since the shelter was undoubtedly packaged so as to allow an early deduction of as much of it as possible. If the shelter were disallowed, some, but not all, decisions suggest that the taxpayer would be able to recast the transactions so that the amount paid less the non-tax benefits received were ultimately deductible. Only in this case would the deduction for the "fraud" loss show up in the way anticipated by the Court's decision.

66. *Id.*

67. *Id.* at 1384.

X. CONCLUSION

Increased general understanding of "time value of money" concepts has made it easier to understand the extent to which asset prices are contingent on tax treatments, especially those treatments relating to timing. However, both tax doctrine and other bodies of law that must incorporate tax consequences still exhibit a stubborn unwillingness to apply these concepts, especially to understand the relationship between tax treatments and prices. Perhaps one excuse lies in the fact that there can be no certainty in any given context about what that relationship in fact is. However, this uncertainty is a poor reason to ignore the relationships completely.