A Theoretical Analysis of the Tax Treatment of Future Costs

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Introduction

The time value of money provisions of the Tax Reform Act of 1984 are, in the words of one prominent commentator, "the most far-reaching and complex changes wrought by the 1984 legislation." They are a congressional response to transactions that were structured to take advantage of rules that did not properly account for the time value of money. These transactions were perceived as abusive, and Congress reacted with a vengeance. The new rules generally require interest to be measured and accounted for as it economically accrues, even if the

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The 1984 Act enacted several provisions requiring interest to be measured and reported under this method. Section 1272(a) extended the rules of former § 1232A to debt obligations issued by individuals and obligations that are not capital assets in the holders' hands. Section 1274 requires interest to be measured
taxpayer normally uses the cash method of accounting. Enactment of these provisions indicates that Congress was aware that (1) when the Code does not accurately measure income, transactions will be planned to take advantage of the inaccuracy, and (2) the proper method of measuring income is the accrual method.

There is one major exception to this new regime. The new provision dealing with premature accrual obligations comes very close to placing all taxpayers, including those who normally employ the accrual method of accounting, on the cash method with respect to those obligations. A premature accrual obligation is an obligation that is incurred to earn current income, but will not be discharged until some time in the future. Accrual accounting seems to mandate that these obligations be taken into account in the same year as the related income. The new rule, however, defers the deduction for such an obligation until “economic performance” occurs.

On a theoretical level, the new provision for premature accruals is the most controversial of all of the time value provisions. It has been the

and reported under this method for certain obligations received in exchange for property where stated interest is inadequate or is not payable at least annually. See also I.R.C. §§ 467 (deferred payments for rents and services), 483 (certain obligations received in exchange for property to which § 1272 does not apply), 7872 (below market loans). Section 1276 is an exception from the general requirement of economic accrual. It characterizes as ordinary income that portion of gain on the sale or other disposition of a bond that is attributable to accrued market discount. Absent an election by a taxpayer, the provision only requires interest to be accrued (but not reported) on a ratable basis.

An excellent example of this is new § 467. Both parties to a "section 467 lease agreement" must report on an accrual basis both rents and interest on amounts that have accrued but remain unpaid. A "section 467 rental agreement" is an agreement for the use of property under which (1) rent allocable to one calendar year is to be paid after the close of the subsequent calendar year or (2) there are increasing rents. I.R.C. § 467(d). For other provisions requiring interest to be reported on the accrual method, see supra note 5.

Other exceptions to this regime are found in §§ 404(a)(5) and 267. Rather than placing cash basis taxpayers on the accrual method, these provisions require the deferral of the deduction by an accrual basis obligor until the item is included in the income of the cash basis obligee.

New I.R.C. § 461(h), as added by § 91(a) of the 1984 Act, provides, in part:

(1) In general.—For purposes of this title, in determining whether an amount has been incurred with respect to any item during any taxable year, the all events test shall not be treated as met any earlier than when economic performance with respect to such item occurs. . .

(4) All events test.—For purposes of this subsection, the all events test is met if all events have occurred which determine the fact of liability and the amount of such liability can be determined with reasonable accuracy.

See infra notes 36–47 and accompanying text for an explanation of new § 461(h).

9 See infra notes 15–22 and accompanying text.

subject of a lively debate since the Treasury first proposed it. Critics assert that the rule does not measure income properly and thereby violates one of the basic canons of taxation—the principle of neutrality. Proponents insist that the rule properly measures income, and is the only administrable solution. This article evaluates the arguments on both sides of this debate in an effort to determine the proper theoretical treatment of these obligations.

The article is divided into four parts. The first part describes premature accrual obligations in more detail and supplies the background of the debate. The second part sets forth the arguments that have been presented by the critics who claim the new provision is not theoretically sound. The third part rebuts these arguments and advances additional arguments in support of the new provision. The last part puts forth the conclusion that the new rule is theoretically sound and, on balance, is a reasonable solution to a very difficult problem.

Background

There are many instances in which an accrual basis taxpayer incurs an obligation that is to be discharged in the future. Some of these obligations are incurred to earn current income. For example, employment related injuries can give rise to worker’s compensation awards due in future years, or a tort liability can be settled by an agreement to

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11 See infra notes 30-34 and accompanying text.
13 See infra notes 58-97 and accompanying text.
14 See infra notes 98-182 and accompanying text.
15 These obligations are in the nature of “ordinary and necessary” expenses. Although payable in the future, they relate solely to income earned during the period in which they are incurred.
16 Federal and state workmen’s compensation laws often require payment of an injured employee’s medical expenses and disability benefits by an employer. The worker’s compensation liability may be settled for a lump sum in the future or may require payments extending over several years. Generally, this liability is a cost of producing current income, and accrual basis taxpayers have been allowed current deductions for the amount of the liability. See, e.g., Kaiser Steel Corp. v. United States, 717 F.2d 1304 (9th Cir. 1983); Wien Consol. Airlines, Inc. v. Commissioner, 528 F.2d 735 (9th Cir. 1976); Crescent Wharf & Warehouse Co. v. Commissioner, 518 F.2d 772 (9th Cir. 1975). But see Rev. Rul. 80-191, 1980-2 C.B. 168.

Supplemental unemployment benefit liabilities are comparable to the worker’s compensation liabilities, and pre-1984 case law also allowed a current deduction to accrual basis taxpayers for this future obligation. See, e.g., Lukens Steel Co. v. Commissioner, 442 F.2d 1131 (3d Cir. 1971); Inland Steel Co. v. United

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make periodic payments over several years. Others are incurred to enable the taxpayer to earn income over a period of years. These latter obligations represent predictable costs of closing out investments, and thus are in the nature of negative salvage value.

For example, the activity of strip mining coal often creates an obligation to reclaim the mined land once the mining is completed, operating a nuclear power plant necessitates the eventual decommissioning of the plant, and offshore drilling ultimately requires the removal of the drilling platform. Until the 1984 Act, if the "all events" test had been met, taxpayers were generally allowed current deductions for the full amounts of these obligations, not discounted to reflect the delay in payment. Since the

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17 See generally City Bar Report, supra note 3.


20 Generally, under the federal Atomic Energy Act of 1954, 42 U.S.C. §§ 2011–2296 (1976), and National Environmental Policy Act of 1970, 42 U.S.C. §§ 4321–47 (1976), and comparable state laws, electrical utility companies are required to decommission nuclear power plants. In some states, these costs are included in the ratemaking determination and passed on to consumers. Amounts received attributable to these increased rates are includable in the income of the utility company.

21 Offshore oil and gas leases with the federal government often require lessees to remove drilling platforms and well fixtures upon termination of the leases or abandonment. Under prior law, the Service viewed this type of obligation as not accruable until performance. Rev. Rul. 80-182, 1980-2 C.B. 167.

22 The pre-1984 version of the all events test is found in § 1.461-1(a)(2) of the regulations, which permits an accrual basis taxpayer to deduct an otherwise allowable expense in the year in which "all the events have occurred which determine the fact of the liability and the amount thereof can be determined with reasonable accuracy." See also United States v. Anderson, 269 U.S. 422, 441 (1926). Courts generally permitted a deduction under this test even if the liability would not be discharged until the distant future. See, e.g., Denise Coal Co. v. Commissioner, 271 F.2d 930 (3d Cir. 1959) (payment due 11 years after accrual); Cyclops Corp. v. United States, 408 F. Supp. 1287, 1299 (W.D. Pa. 1976) (seven years after accrual); Timken Co. v. United States, 78–2 U.S.T.C. § 9653 (Cl. Ct. 1978) ("many years" after accrual); Reynolds Metals Co. v. Commissioner, 68 T.C. 943, 960 (1977) (13 years after accrual); Oxford Inst. v. Commissioner, 33 B.T.A. 1136 (1936) (10 years after accrual). But see Mooney Aircraft, Inc. v. United States, 420 F.2d 400 (5th Cir. 1969) (denying a deduction to an accrual basis taxpayer for a liability payable 20 or 30 years in the future because allowing the deduction would not clearly reflect income).
deduction did not properly reflect the time value of money, it was necessarily overstated.

Generally speaking, the time value of money is the difference between (1) the value of an amount of money today and (2) the value of the same amount of money at some future time. At a rate of return of 10% per year, one dollar today is worth more than the right to $4 in 15 years. The difference ($3) represents what an investor could earn with the dollar over the 15-year period. Similarly, a tax deduction today is more valuable than a deduction in the same dollar amount in a future year. Again, if the rate of return is 10%, a deduction today is more than four times as valuable as a deduction of the same amount in 15 years.

Traditionally, the time value of money was thought to be of little importance. During our tax system's formative years, it was virtually

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24 The general formula for determining compound growth is:

\[ FV = P(1 + i)^n \]

where \( FV \) represents future value, \( P \) represents principal, \( i \) represents the after-tax rate of return, and \( n \) represents the number of compounding periods. Applying this formulation to the example in the text,

\[ FV = \$1 \times (1 + .1)^{15} = \$4.18 \]

25 Discounting a future amount to its present value is the inverse of determining the future value of a present amount. The general formula for discounting is:

\[ PV = \frac{P}{(1 + i)^n} \]

where \( PV \) represents the present value, \( P \) represents the amount to be discounted, \( i \) represents the after-tax discount rate, and \( n \) represents the number of compounding periods. To illustrate, the present value of \$1 to be received in 15 years is 24 cents, calculated as follows:

\[ PV = \frac{\$1}{(1 + .1)^{15}} = .24 \]

26 This statement assumes that the taxpayer is in the same marginal tax bracket in both years. The value of a deduction is equal to the amount of the deduction times the taxpayer's marginal tax rate. If the taxpayer is in the same marginal tax rate bracket in year one and year 15, the tax savings in absolute dollars is precisely the same. The only difference is that in one case the savings occur 15 years earlier than in the other.

27 Professor Henry Simons, whose definition of income is still the one most generally accepted, referred to the issue of the time value of money as being the
ignored. The few Code provisions that took the time value of money into account were not based upon sound economic or accounting principles.\textsuperscript{28} The tax treatment of premature accrual obligations prior to

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\textsuperscript{28} For example, consider the historical development of the original issue discount (OID) rules. OID is the difference between a debt instrument’s issue price and its stated redemption price. Although OID is the “economic equivalent of interest,” United States v. Midland-Ross Corp., 381 U.S. 54, 56 (1965), the Sixth Circuit held prior to the enactment of the first OID rules that a taxpayer who had purchased 10-year noninterest bearing certificates was entitled to capital gains treatment on amounts received at maturity. Commissioner v. Caulkins, 144 F.2d 482 (6th Cir. 1944). To compound this travesty, the Service acquiesced in the decision. The acquiescence was withdrawn retroactively in Revenue Ruling 55-136, 1955-1 C.B. 213, \textit{superseded by} Revenue Ruling 56-299, 1956-1 C.B. 603.

Congress first addressed the tax treatment of OID in 1954 when it enacted § 1232(a) (2). This provision generally provided that gain on disposition of corporate debt obligations was ordinary income rather than capital gain up to the amount of OID attributable to the period the seller held the obligation. For this purpose, OID was prorated over the term of the bond. These rules are now found in new § 1271(c) (2), but generally apply only to OID on obligations issued between 1954 and 1969.

The 1954 legislation demonstrates a dual misunderstanding of the OID problem. First, it fails to recognize that the issue is one of timing as well as character. The 1954 rules mismatch income and deductions when there is an accrual basis issuer and cash basis holders because such an issuer is allowed deductions for OID as it accrues over the lives of the obligations, while holders only report OID on sale or other disposition of the obligations. Second, the rules fail to recognize that as an economic matter, interest is only measured properly if it is compounded. This misconception was also evidenced when § 483, relating to unstated interest in certain sales contracts, was originally enacted in 1964.

In 1969, Congress responded to the timing issue by enacting § 1232(a) (3). In general, it provides that the holder of a corporate bond must include OID in income ratably over the life of the bond. The stated purpose of this provision is that there is no “sound basis for treating the corporation issuing the bonds and the owners of the bonds in a different manner with respect to the original issue discount on the bond.” S. Rep. No. 552, 91st Cong., 1st Sess. 147 (1969). The 1969 rules are now found in § 1272(b); that section generally applies to OID on obligations issued between 1969 and 1982.

In the 1969 rules, however, Congress again failed to provide for the accurate allocation of OID among periods. Economically, OID accrues in ever increasing amounts over the life of a discount obligation because later accruals should represent interest at a constant rate on the sum of the issue price and all earlier accruals. A proration of OID thus allocates too much to earlier periods and too little to later periods. If issuers and holders were taxed at identical rates, the resulting acceleration of tax on holders’ OID income would be matched by an equal acceleration of tax savings of OID amortizations of issuers. OID obligations subject to the 1969 rules, however, tended to be issued by corporations taxed at high rates to low tax rate or tax-exempt holders. \textit{See City Bar Report, supra} note 3; Canellos & Kleinbard, \textit{supra} note 23.

It was not until the Tax Equity and Fiscal Responsibility Act of 1982 that Congress finally enacted a provision that allocates OID in accord with economic
the 1984 Act was a product of this thinking (or lack thereof), and necessarily resulted in deductions being overstated.

The significance of this overstatement can be illustrated with a simple example. *T*, an accrual basis taxpayer, is in the 50% tax bracket. His pretax rate of return is 10%, and his after-tax rate of return is 5%. *T* becomes obligated today to make a $100 payment in 15 years. If he is permitted a current deduction for this amount, the deduction saves *T* $50 in taxes. If invested at 5% per year for 15 years, this $50 will grow to $104.29. The deduction in this example is so overstated that the tax savings it generates are sufficient to fully fund *T*'s obligation and to give *T* a small profit!

In this example, *T* and his obligee do not have adverse interests. If *T* has enough current income so that the deduction offsets otherwise taxable income, dollar for dollar, both he and his obligee profit by increasing the liability. The only loser is the federal government.

Clearly, a present deduction for the undiscounted amount of a current obligation to be performed in the future overstates the true cost of the taxpayer's liability. There is no agreement, however, on how these obligations should be treated for tax purposes. The three principal alternatives are:

(1) Allow the taxpayer a single deduction when the obligation is incurred that is equal to the full amount of the obligation, discounted by the taxpayer's after-tax rate of return.29 This alternative is based on the theory that if this amount were segregated and placed in a reserve when the deduction is taken, the reserve would grow to an amount sufficient to meet the future expense.

(2) Allow the taxpayer a single deduction for the full amount of the obligation when the obligation is satisfied by payment or per-

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29 The taxpayer's after-tax rate of return would almost surely be in excess of 5%. Historically, yields on long-term tax-exempt securities are approximately 70% of those of fully taxable bonds. U.S. DEP'T OF TREASU, BLUEPRINTS FOR BASIC TAX REFORM 84 (1977) [hereinafter cited as Blueprints]. If the taxpayer's after-tax rate of return were 7%, the $50 in tax savings would grow to $138 in 15 years.

30 In testimony, Treasury has taken the position that this is the theoretically correct treatment. See infra notes 48-49 and accompanying text. The Staff of the Joint Committee on Taxation also seems to have endorsed this view. See STAFF OF JOINT COMM. ON TAX'N, 98TH CONG., 2D SESS., BACKGROUND OF TAX SHELTERS 18 (Comm. Print 1984). Variations of this alternative are available on an elective basis for certain reclamation and closing costs under new § 468 (added by § 91(b) of the Act), and for certain nuclear decommissioning costs under new § 468A (added by § 91(c) of the Act). See infra notes 45 and 46.
formance. The present value of this deduction is precisely equal to that of the deduction in alternative (1). This alternative is referred to here as the "deferral rule."

(3) Allow the taxpayer a series of annual deductions over the period of deferral equal in the aggregate to the full amount of the obligation. In the case of an ordinary and necessary premature accrual, the taxpayer would take a deduction when the obligation is incurred equal to the present value of the obligation determined with a pretax rate of return. Each year thereafter, an additional deduction would be allowed to reflect the increase in the liability that occurs due to the passage of time. In the case of a premature accrual in the nature of a capital expenditure, the taxpayer would recover his future expenditure under the principles of economic depreciation. This alternative is referred to here as the "critics' position," and those who advocate it as the "critics."
To appreciate the differences between these alternatives, reconsider the example where $T$ becomes obligated to make a payment of $100 in 15 years. Assume the obligation is in the nature of an ordinary and necessary expense. Alternative (1) would give $T$ a single deduction when the obligation is incurred of $48.10 ($100 discounted by 5% per year for 15 years). Under alternative (2), the deferral rule, $T$ would get a single deduction in the year of payment of $100. The present values of these deductions are precisely the same.

Under alternative (3), the critics' position, $T$ would be entitled to a deduction when the obligation is incurred of $23.94 ($100 discounted by 10% per year for 15 years). For each of the next 15 years, $T$ would have an additional deduction for the increase in the present value of the obligation that occurs during the year. Over the 15 years, $T$ will have $100 of deductions. This alternative differs from the first two in both value and theory. It is more generous than the others, and is based upon the premise that to properly measure income, increases in the present value of a future liability must be taken into account.

Congress essentially adopted the second alternative—the deferral rule—in 1984. New section 461(h) modifies the all events test by allowing a deduction under the accrual method only when "economic performance" of the underlying liability occurs. A statutory or contractual obligation to perform in the future no longer suffices. In many cases, this new rule comes close to placing accrual basis taxpayers on the cash method for this type of obligation.

Exactly when economic performance occurs depends in large part on the type of liability involved. If a liability arises out of the taxpayer’s purchase of services or property, performance occurs as the services are performed. The all events test was formerly found in § 1.461-1(a)(2) of the regulations. See supra note 22. The 1984 Act codified the test in § 461(h)(4), and modified its application. I.R.C. § 461(h)(1).

There sometimes is a significant time lag between economic performance and payment. Suppose an accrual basis taxpayer gives an independent contractor a noninterest bearing note with a face amount of $100,000 due in 10 years in exchange for current services. For purposes of § 461(h), economic performance occurs when the services are performed, even though payment may not be due for years. Although all events test may be met under § 461(h) when the note is issued, the taxpayer still may not be entitled to a deduction. See I.R.C. §§ 404(a)(5), 404(d). When the deduction is allowed, the OID rules might limit it to the present value of the obligation. I.R.C. § 1273(b)(3), (5).
performed or the property is provided. If the liability arises out of a use of property by the taxpayer, economic performance occurs as the property is used. If the taxpayer's liability is an obligation to provide property or services to another, economic performance occurs as the property or services are provided. If the liability arises under a worker's compensation act or from a tort and will be satisfied by a payment by the taxpayer, economic performance occurs as payment is made. Congress delegated to Treasury the responsibility to issue regulations prescribing rules to determine when economic performance occurs in other situations.

There are exceptions for obligations subject to special statutory rules and certain recurring items for which economic performance occurs within eight and one-half months of the close of the taxable year. Also,

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38 I.R.C. § 461(h)(2)(A). For example, the House report explains: "If a strip mining company engages a contractor to reclaim stripped land, economic performance occurs when the contractor performs the reclamation rather than when the strip mining company enters into a binding contract with the contractor." H.R. REP. No. 432 (Part 2), 98th Cong., 2d Sess. 1255 (1984). This example preceded the enactment of § 468, which allows an alternative treatment for certain mining costs. See infra note 45.

39 I.R.C. § 461(h)(2)(A)(iii). This includes the case where the taxpayer leases property from another person. Consequently, the taxpayer cannot take a deduction for rent until he actually uses the property. See new § 467, which requires mandatory accrual accounting for both parties to certain leases.

40 I.R.C. § 461(h)(2)(B). For example, when a strip miner incurs an obligation to reclaim mined land, economic performance occurs as he reclaims the land. (As discussed in note 45, however, an alternative treatment is provided for these reclamation expenses.) As another example, an oil driller who is obligated to dismantle and remove his platform and fixtures at the end of his lease performs economically as the platform and fixtures are dismantled and removed. For the treatment of these expenses under prior law, see supra note 21.

41 I.R.C. § 461(h)(2)(C).

42 I.R.C. § 461(h)(2)(D). Also, section 461(h)(2) says that the rules described in the text apply "[e]xcept as provided in regulations." Is the Treasury empowered to contradict the statutory definition by adopting regulations?

43 Section 461(h)(5) states that § 461(h) does not apply to any item covered by §§ 166(c), 166(f), 463, 466, or any other provision that allows a deduction for a reserve for estimated expenses.

44 I.R.C. § 461(h)(3)(A). This exception allows the taxpayer a deduction prior to economic performance if (1) the traditional all events test (apart from the economic performance requirement) is met during the taxable year; (2) economic performance occurs within the shorter of (a) a reasonable period after the close of that taxable year or (b) eight and one-half months after the close of the year; (3) the item is recurring in nature and the taxpayer consistently treats it as incurred in the year in which the all events test is met; and (4) either the item is not material or accrual of the item in the earlier year results in a better matching against the income to which it relates.

The Conference report says that this exception also applies to costs incurred by taxpayers starting up a new business and that expenses that do not recur every year should not necessarily be excluded. CONF. REP. No. 861, 98th Cong., 2d
a taxpayer can elect an alternative treatment for reclamation and closing costs attributable to strip mining and for nuclear power plant decommissioning costs. Generally, section 461(h) is applicable to expenses incurred (without regard to economic performance) after the date of enactment.

During the legislative process, the Treasury was the principal proponent of the deferral rule. In Treasury’s view, a taxpayer who incurs a premature accrual obligation should theoretically be entitled—in the year the obligation is incurred—to a deduction for the amount of the

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Sess. 873 (1984). The report does not define the term “reasonable period” and this term probably creates the most uncertainty in this provision.

45 I.R.C. § 468. This provision allows a taxpayer to elect to deduct certain reclamation and closing costs prior to economic performance if several requirements are met. This accelerated deduction is allowed for current reclamation costs allocable to the portion of “reserved property” that was disturbed during the taxable year and for current closing costs allocable to the production from the property during the taxable year. Current costs are those the taxpayer would incur if the reclamation were done currently. The amount allowed as a deduction is deemed deposited in a sinking fund that earns interest. When reclamation finally occurs, the hypothetical fund balance is compared with the actual costs, and any difference would be accounted for either as an additional deduction or an inclusion in gross income. This provision also applies to solid waste disposal sites.

46 Section 468A allows an election to establish a nuclear power plant decommissioning reserve fund and deduct payments made to the fund over the life of the plant. The fund is considered a separate entity, and is taxed at the maximum rate. A taxpayer who wishes to use this procedure must request from Treasury a ruling that fixes the maximum allowable deduction. Amounts distributed from the fund for any purpose are includable in income, but the taxpayer is allowed another deduction as economic performance occurs (when the plant is decommissioned). See Staff of Joint Comm. on Tax’n, 98th Cong., 2d Sess., Tax Shelter Proposals and Other Tax-Motivated Transactions (Comm. Print 1984), for an explanation of the proposition that economic performance occurs as a plant is decommissioned.

47 The 1984 Act allows taxpayers to elect to apply either these provisions or prior law when the all events test of prior law was met before the date of the enactment, but economic performance occurs after the date of enactment. H.R. Res. 328, 98th Cong., 2d Sess. (1984).


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obligation, discounted at the taxpayer's after-tax rate of return (alternative (1)). The amount so deducted, when added to the after-tax earnings on this amount, would grow to an amount sufficient to meet the future costs when they become due. Treasury opposed adopting such a rule, however, because it thought the rule would be an administrative nightmare. Since the proper amount of the deduction would not be easily ascertainable, the rule would be plagued with uncertainty and complexity, and would be an easy target for manipulation and abuse. Furthermore, Treasury feared that the rule, if made generally available, might produce a significant revenue drain.

Instead, Treasury advocated the deferral rule. The present value of a deduction determined under the deferral rule is precisely equal to that of the earlier discounted deduction. Treasury took the position that the deferral rule was the only administrable solution to the premature accrual problem that was also theoretically sound.

In testimony before a subcommittee of the Senate Finance Committee, Treasury used the following example: A strip miner generates...
$100 of income in year 1 that necessitates a related reclamation expense of $100 in year 7 (six years later). Treasury assumed a 40% income tax and a 12% after-tax rate of return.\textsuperscript{54} Treasury asserted that the strip miner’s income can be accurately measured by giving it (1) a deduction in the year the obligation is incurred for its present value, using an after-tax discount rate ($50.66 in year 1), or (2) a deduction for the full amount of the obligation when the obligation is performed ($100 in year 7). Treasury then showed that, in present value terms, these two deductions are of equal value.

As an arithmetical matter, the equivalence of these two formulations is not in dispute.\textsuperscript{55} The problem with Treasury’s position is that it simply assumes, without adequate analysis, that the single discounted deduction using the after-tax discount rate is the proper theoretical deduction. The only justification offered by Treasury is that this amount, if put aside, will grow after taxes to an amount sufficient to meet the future expense. It is not self-evident, however, that this is the proper way to measure the seller’s income. Indeed, it is on this point that the critics of the deferral rule believe that Treasury’s position is “seriously flawed.”\textsuperscript{56} They assert that (1) Treasury is improperly measuring the taxpayer’s income, and (2) the deferral rule violates the basic principles of equity and neutrality. The critics believe the proper way to treat these obligations is under the third alternative which takes into account the fact that the present value of these future obligations increases over time.\textsuperscript{57}

\textsuperscript{54} Treasury began its analysis by computing how much the strip miner would add to prices charged customers to cover this future expense in a tax-free world where the rate of return on investments is 12%. By discounting $100 at 12% for six years, Treasury determined that the strip miner would charge customers $50.66 (the present value of the obligation) to cover the liability. Therefore, to measure the strip miner’s income accurately for year 1, one would have to deduct this amount from the strip miner’s gross receipts. Although the strip miner has $50.66 in cash, he has incurred an offsetting liability of an equal amount, and does not have income to this extent.

Next, Treasury introduced an income tax of 40% on all income and “[i]n order to simplify exposition,” assumed that the after-tax rate of return on investments remains at 12%. Much of the confusion surrounding Treasury’s position resulted from Treasury’s simplifying assumption that the after-tax rate of return in its illustration was equal to the before-tax rate of return. This resulted in the discounted deduction being $50.66 in both the tax-free world and in a world with taxes. Furthermore, Treasury asserted that “neither rule [that is, neither the earlier discounted deduction nor the deferral rule] causes an alteration in the charge for reclamation.”

\textsuperscript{55} See supra note 31.  
\textsuperscript{56} Brannon statement, supra note 34; Aidinoff statement, supra note 34.  
\textsuperscript{57} See infra notes 58–97 and accompanying text.
The Critics' Position

The critics' position is that the deferral rule does not, in present value terms or otherwise, accurately measure income and thereby violates one of the basic canons of taxation: the principle of neutrality.\(^5^8\) The principle of neutrality is based upon the beliefs that the market is the best mechanism for allocating resources and that a well designed tax is one that raises revenue without substantially altering economic behavior.\(^6^0\) A neutral income tax is one that is imposed on income from all investments at the same rates so that at any level of taxation the relative rates of return among investments are the same both before and after taxes.\(^6^0\) In effect, it equally reduces the profitability of all transactions. An income tax that violates this principle distorts the investment patterns of investors and causes an economic loss to society. This loss, commonly referred to as the dead weight loss due to taxation, occurs because the burden on taxpayers as a group is greater than the yield to the government in revenue.\(^6^1\)

Accurate measurement of income is essential for a neutral income tax. By the most widely accepted definition, income is the sum of a taxpayer's consumption, plus or minus the change in his wealth during the accounting period, usually a year.\(^6^2\) This definition implies, and econ-

\(^5^8\) Sunley statement, supra note 34; Sunley article, supra note 18; Brannon statement, supra note 34; Kiefer II, supra note 34.


\(^6^0\) See, e.g., Samuelson, Tax Deductibility of Economic Depreciation to Insure Invariant Valuation, 72 J. Pol. Econ. 604 (1964).

\(^6^1\) For a general discussion of this topic, see R. Musgrave & P. Musgrave, Public Finance in Theory and Practice ch. 14 (4th ed. 1984). This excess burden can be illustrated by a simple example. Suppose there exists a 50% tax on all income, and the market demands an after-tax rate of return of 5%. Investors will insist that the before-tax rate of return be at least 10% on their investments. Investments with lower yields will not be made. Now, suppose the rate of taxation is reduced to 33% on a particular investment, but remains at 50% on all others. If this favored investment generates a 7½% before-tax rate of return, it is as attractive as other investments that generate 10%. When people invest in this lower yielding investment, the economy as a whole (investors and the government collectively) have 2½% less return than it would have in either a tax-free world or under a neutral tax. The 2½% lost yield is the dead weight loss resulting from the lack of neutrality.

\(^6^2\) This definition is generally known as the Haig-Simons definition. Haig defined income as "the money value of the net accretion to one's economic power between two points in time." Haig, The Concept of Income—Economic and Legal Aspects, The Federal Income Tax (R. Haig ed. 1921), reprinted in Readings in the Economics of Taxation 59 (R. Musgrave & C. Shoup, eds. 1959). Simons reduced this to the sum of consumption and the change in wealth between two points in time. H. Simons, Personal Income Tax: The Definition of Income as a Problem of Fiscal Policy 50 (1938).

Both Haig and Simons, in defining income focused on the economic power
omists generally agree, that income should be measured using accrual concepts. If a liability is incurred or if the amount of an existing liability increases, the liability or increase reduces net wealth (computed on an accrual basis), and thus reduces income. By its very nature, the present value of a liability underlying a premature accrual obligation increases each year as the time for performance approaches. The critics argue that to properly measure the obligor's income, these increases must be taken into account. Since the deferral rule fails to do this, the critics argue that investments involving premature accrual obligations are overtaxed. By taxing these investments more heavily than others, the deferral rule creates a bias against them, and makes them relatively less attractive.

For premature accruals in the nature of ordinary and necessary expenses, the critics advocate the discount reserve method; for premature accruals in the nature of capital expenditures, they advocate the principles of economic depreciation. They believe that only these methods to consume, not consumption. This definition could never be rigorously applied in a tax system. Indeed, even Professor Simons acknowledged that the accretion definition of income, without some modification, would not describe a workable tax base. Id. at 43, 110. The definition, however, has proved quite useful for analytical purposes by describing the outer limits of what could be considered income for tax purposes. See, e.g., Blueprints, supra note 29, at 22.

To illustrate, suppose a taxpayer incurs an obligation that will require him to pay $1,331 in three years. If the appropriate discount rate is 10%, the present value of this obligation is $1,000 ($1,331 discounted by 10% per year for three years). At the time the obligation is incurred, it might be possible for the taxpayer to be discharged from this obligation by paying a third party $1,000. As time passes, the value of the obligation increases, and so does the amount the taxpayer would have to pay to be discharged from the obligation. For example, after one year passes, the present value of the obligation is $1,100 ($1,331 discounted by 10% per year for two years).

To Brannon statement, supra note 34, at 106–107; Sunley article, supra note 18, at 720–22; Sunley statement, supra note 34, at 70–77.

See id. at 106–08. Sunley's position on ordinary and necessary premature obligations is not clear. In his article, he states that Treasury's "analysis is correct when the future payment is an ordinary and necessary expense." Sunley statement, supra note 34, at 720. This statement seems inconsistent with his thesis relating to the proper treatment of premature accruals in the nature of capital expenditures. In his testimony, Sunley clarified his position. Apparently, the reference to ordinary and necessary expenses in his article was meant to refer to expenses properly allocable to a future period (for example, an obligation to pay rent for a future period), not to a future cost allocable to a present period (a structured settlement, for example). Sunley statement, supra note 34, at 70–75.

See Sunley article, supra note 18, at 720; Sunley statement, supra note 34, at 76–79; Kiefer II, supra note 34. Kiefer only advocates the critics' position for premature accruals in the nature of capital expenditures.
can make the tax law neutral with respect to investments involving premature accrual obligations.

To more fully appreciate the position of the critics, consider the following two simplified transactions. The first deals with a premature obligation in the nature of an ordinary and necessary expense, and the second with one in the nature of a capital expenditure.\(^69\)

*Transaction 1:* Suppose an investor, whose average rate of return on investments is 10% in a tax-free world, has the opportunity to receive $1,200 today if he obligates himself to perform services in five years that will cost him $1,610 (an amount that can be accurately estimated).\(^70\)

The obligation, discounted at the rate of 10% per year for five years, has a present value of $1,000. In the absence of taxes, the transaction is profitable because the investor can fully fund the obligation by investing $1,000 of the $1,200 payment, and make an immediate $200 profit.

Assume a 40% income tax is imposed. The critics argue that because the investor’s average rate of return is generally reduced by 40% to 6%, his profit from this transaction should also be reduced by 40% to $120.\(^71\) If the deferral rule applies, however, the profit from *Transaction 1* is entirely eliminated. Under this regime, the investor would have to put $1,203 aside to fully fund this obligation.\(^72\) This amount, invested at 6% per year after taxes, grows to $1,610 in five years. Since the investor is only offered $1,200, he loses $3 ($1,203 less $1,200) on the transaction. Rather than simply reducing the profit by 40%, the deferral rule transforms a profitable transaction into a losing proposition.\(^73\) The critics assert that the deferral rule causes the transaction to be overtaxed, and thereby distorts investment patterns.\(^74\)

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\(^69\) For the distinction between these two types of expenses in the premature accrual context, see *supra* text accompanying notes 15–22. For the views of those who defend the deferral rule, see *infra* notes 98–179 and accompanying text.

\(^70\) The obligation in *Transaction 1* is an abstraction that could represent any obligation to perform in the future for which compensation is received and taken into account when the obligation is incurred. For example, the obligation might be a warranty or service agreement made when a product is sold. See *infra* text accompanying notes 114–28.

\(^71\) This assumes that the pretax profit remains at $200, a result not at all free from doubt. This assumption, however, helps us focus on the issue.

\(^72\) Invested at 6% compounded annually, $1,203 grows to $1,610 in five years.

\(^73\) Since the taxpayer only receives $1,200, he would not have sufficient funds to meet the obligation even if he invested the entire amount; $1,200 invested at 6% per year for five years only grows to $1,606.

\(^74\) See Brannon statement, *supra* note 34, at 104–109.
In the critics' view, the discount reserve method of accounting is the proper treatment of ordinary and necessary premature accruals because it appropriately takes into account the yearly increases in the present value of the liability.\textsuperscript{76} Under this method, the obligation is bifurcated when incurred into its present value and interest components. A pretax rate of return is used in computing these figures. The present value component is deducted when the obligation is incurred, and the interest component is deducted over time as the present value of the liability increases.

On our facts, the present value of the obligation, the immediate deduction, is $1,000.\textsuperscript{77} If the assumed pretax rate of return is 10\%, the obligor would have additional deductions of $100 (that is, 10\% of $1,000) for the first 12 months the obligation was outstanding, $110 (10\% of $1,100) for the next 12 months, $121 (10\% of $1,210) for the third 12-month period, and so forth. If $1,000 were segregated as a separate fund and invested at 10\%, the fund's annual earnings would equal the annual deductions. In five years, the balance of the fund will equal $1,610. The deductions permit the fund to be established and grow tax free.\textsuperscript{77} Under this method, the investor's after-tax return is $120, that is, the pretax profit ($200) is reduced by 40\% ($80).\textsuperscript{78}

\textsuperscript{76} The "discount reserve method" is the term used by Brannon in his statement to describe this method of accounting and is adopted here. This method is sometimes referred to as "accounting discounting," and is generally required for nontax financial accounts. Accounting Principles Board, Opinion 21, Interest on Receivables and Payables (1971). For an explanation of how accountants treat premature accruals, see Vaxter, Long-Term Liabilities, Davidson & Weill, Handbook of Modern Accounting (2d ed. 1977).

\textsuperscript{77} Using the pretax rate of return of 10\%, the present value of $1,610 discounted for five years is $1,000.

\textsuperscript{78} The investor's pretax profit from the transaction is determined as follows:

\begin{align*}
\text{Gross receipts} & = $1,200 \\
\text{Less the present value of the obligation} & = 1,000 \\
\text{Pretax profit} & = \frac{200}{200} \\
\end{align*}

The investor owes 40\% of the $200 in taxes, leaving a $120 after-tax profit. As
Rather than stripping the transaction of all of its profit, this method simply reduces the profit by the tax rate, precisely the result that the critics assert is proper under a neutral income tax.

The second type of premature accrual obligation, illustrated by Transaction 2, is a predictable future cost of closing out an investment—a cost in the nature of negative salvage value. Since the investor must undertake this obligation at the outset, the obligation resembles a capital expenditure.

**Transaction 2:** Suppose an investor in a tax-free world has an average rate of return of 12% on his investments. He has the opportunity to acquire an income stream of $1,000 a year for five years in exchange for undertaking an obligation to perform services in the sixth year at a cost of $6,716 (an amount that can be accurately estimated).

In the absence of taxes, this investment is quite attractive because the investor can fully fund the future cost by setting aside $944 of each $1,000 received. If invested at 12%, the amounts so set aside will grow to $6,716, the amount of the obligation, by the time the services must be performed.

A neutral 40% income tax would reduce the investor's average rate of return by 40% to 7.2%. The critics argue that the tax should also reduce the profit from this transaction by 40%. Under the deferral rule, however, the investor would have to put $1,085 aside each year for five years in order to fund the future liability. Since the income stream is only $1,000, the deferral rule strips the investment of all its profit, and makes it uneconomical. The critics assert that this is another case where the deferral rule violates the principle of neutrality and distorts investment patterns.

Transaction 2 is analogous to a borrowing transaction in which the investor borrows $1,000 each year for five years with principal and interest due and payable in the sixth. If this had been done and if the

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79 The obligation in this transaction could be an obligation to reclaim land, decommission a nuclear power plant, or dismantle a platform used in oil drilling. See supra notes 18-21.

80 Using an interest rate of 12%, the future value of an annuity of $944 a year for five years is $6,716 in the sixth year.

81 Using an interest rate of 6%, the future value of an annuity of $1,085 a year for five years is $6,716 in the sixth year.

82 This transaction might also be characterized as one in which the investor borrows the present value of the obligation ($3,791), and uses the proceeds to acquire the investment. See infra notes 90-93 and accompanying text.
borrowings bore interest at 10%, the investor would owe $6,716 in the sixth year. Transaction 2 is essentially the same, except that the obligation is to be discharged by a performance of services, rather than a payment of money. It could be described as having an implicit borrowing cost of 10%.

Under an income tax, interest is generally deductible. The deduction effectively reduces the cost of borrowing by the rate of tax imposed. For example, in a world with a 40% income tax, the after-tax cost of borrowing at 10% is 6%. Thus, under a 40% neutral income tax, the critics argue, the implicit borrowing cost of Transaction 2 should also be reduced from 10% to 6%. The deferral rule, however, keeps the implicit borrowing cost of Transaction 2 at 10% because it gives no deduction for the interest component of the obligation. Since a sensible investor would not borrow at 10% to invest at 7.2%, the deferral rule kills this transaction.

Two alternative methods have been offered by the critics for cases like Transaction 2. The first is the economic depreciation method. In general, the principle of economic depreciation is that the owner of a depreciable asset should be allowed an annual deduction equal to the actual decline in the asset's value during the year. Economic depreciation is the only neutral method of cost recovery under an income tax.

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**Table:** Present Values of Cash Flows

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Deduction</th>
<th>Cash Flow After Tax</th>
<th>Present Values* of Cash Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000</td>
<td>0</td>
<td>600</td>
<td>909</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>0</td>
<td>600</td>
<td>826</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>0</td>
<td>600</td>
<td>751</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>0</td>
<td>600</td>
<td>683</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>0</td>
<td>600</td>
<td>621</td>
</tr>
<tr>
<td>6</td>
<td>(6,716)</td>
<td>6,716</td>
<td>(4,030)</td>
<td>(3,791)</td>
</tr>
</tbody>
</table>

* Present values are determined when the investment is made, using a discount rate of 10%.

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83 The phrase "implicit borrowing cost of 10%" means that at an interest rate of 10%, the net present value of the cash flow from this investment is zero.

84 See, e.g., I.R.C. § 163(a). See generally Blueprints, supra note 29.

85 The following table shows that at an interest rate of 10%, the net present value of both the pretax and after-tax cash flows is zero.

86 Economic depreciation is the actual decline in value of the asset or investment between two points in time.

87 Samuelson, Tax Deductibility of Economic Depreciation to Insure Invariant Valuations, 72 J. Pol. Econ. 604 (1964); Sunley statement, supra note 34, at 77. This type of neutrality has been referred to as "Samuelson neutrality," and must be distinguished from "Musgrave neutrality." Professor Musgrave discusses the possibility of permitting taxpayers to immediately deduct (expense) capital expenditures. R. Musgrave, The Theory of Public Finance (1959). Allowing
With economic depreciation, the nominal and effective rates of tax are the same for all investments, and the relative rates of return on all investments are the same as they would be in a tax-free world.  

Theoretically, the value of any asset at equilibrium equals the present value of the expected cash flow from the asset. If the cash flow to be generated by an asset is known, economic depreciation can be determined by simple present value calculations. Economic depreciation for a year is the excess of (1) the present value of the remaining cash flow, computed at the beginning of the year, over (2) the present value of these cash flows, computed as of the end of the year. To illustrate, consider an investor in a tax-free world who invests $3,791 to acquire an annuity of $1,000 a year for five years. This annuity reflects a rate of return of 10%. As each payment is made, the remaining value of the annuity declines. The annual decline in value is the amount of the annuity's economic depreciation. Using economic depreciation, the investor's annual net income from this investment is:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Present Value of Remaining Cash Flow*</th>
<th>Economic Depreciation**</th>
<th>Net Income ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>$3,791</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>$1,000</td>
<td>3,170</td>
<td>$621</td>
<td>$379</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>2,487</td>
<td>683</td>
<td>317</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>1,736</td>
<td>751</td>
<td>249</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>909</td>
<td>827</td>
<td>173</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>0</td>
<td>909</td>
<td>91</td>
</tr>
</tbody>
</table>

Total  $3,791

* Present value is determined at the end of each year using a discount rate of 10%.
** Economic depreciation is the annual change in present value of the remaining cash flow.
*** Net income is the difference between the cash flow for the year and economic depreciation.

investors to expense their investments is the equivalent of exempting the income from the investments from tax, and therefore is not consistent with a tax on income in the Haig-Simons sense. See infra note 179.

For this reason, an enormous amount of time and resources has been devoted to developing cost recovery systems that reflect the economic depreciation for various assets.


Another way to conceptualize depreciation is to consider the value of an asset as the net value of two income streams, one positive and one negative. The positive stream is the cash flow from the asset (net of all expenses other than depreciation), while the negative stream is the decline in value of the asset as it wears out. See generally R. MUSGRAVE & P. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 420-21 (4th ed. 1984).
The net income for each year is 10% of the present value of the future cash flows during the year. The pretax return, in other words, is always 10% of the remaining value of the investment. If a tax of 40% were imposed on the net income, the rate of return on the investment would be reduced to 6%.  

The principle of economic depreciation applies to cases like Transaction 2 in this way: The entire (undiscounted) amount of the premature accrual is treated as if it were a capital expenditure, albeit payable in the future. The obligation is considered an additional cost of the investment. This cost is recovered by applying the principle of economic depreciation—that is, by allowing the investor an annual deduction for the decline in value of the investment during the year. The investor's annual net income in Transaction 2 under this method is:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Present Value of Remaining Cash Flow</th>
<th>Economic Depreciation</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>$1,000</td>
<td>($1,000)</td>
<td>$1,000</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>(2,100)</td>
<td>1,100</td>
<td>(100)</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>(3,310)</td>
<td>1,210</td>
<td>(210)</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>(4,641)</td>
<td>1,331</td>
<td>(331)</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>(6,105)</td>
<td>1,464</td>
<td>(464)</td>
</tr>
<tr>
<td>6</td>
<td>(6,716)</td>
<td></td>
<td>611</td>
<td>(611)</td>
</tr>
</tbody>
</table>

The following Table compares the present values of pretax and after-tax cash flows from Transaction 2 using economic depreciation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Economic Depreciation</th>
<th>Cash Flow After-Tax</th>
<th>Present Value at 10% of Payment in Column (2)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$909</td>
<td>$943</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>1,100</td>
<td>1,040</td>
<td>826</td>
<td>926</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>1,210</td>
<td>1,084</td>
<td>751</td>
<td>910</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>1,331</td>
<td>1,132</td>
<td>683</td>
<td>897</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>1,464</td>
<td>1,186</td>
<td>621</td>
<td>886</td>
</tr>
<tr>
<td>6</td>
<td>(6,716)</td>
<td>611</td>
<td>(6,472)</td>
<td>(3,791)</td>
<td>(4,562)</td>
</tr>
</tbody>
</table>

Net present values
0
0

91 For the first year, for example, pretax income is $379, which is 10% of the investment's present value of $3,791 at the beginning of the year. With a tax of 40%, the after-tax income for the year is $248 ($379 less tax of $131), which is 6% of the present value for the year.

92 Sunley article, supra note 18, at 720; Sunley statement, supra note 34, at 78–79; Kiefer II, supra note 34.
The present values in columns (5) and (6) are computed at the beginning of year 1. Column (5) gives these present values before taxes, and the after-tax figures are shown in column (6). The discount rates are 10%, the pretax rate of return, for column (5) and 6%, the after-tax rate, for column (6). The sum of each of the columns is zero. This means that under this regime, the 40% tax reduces the implicit borrowing cost of the investment from 10% to 6%. Transaction 2 remains profitable after the imposition of the tax, just 40% less so. If the investor can invest at 12% before taxes, the transaction allows him, after taxes, to borrow at 6% and invest at 7.2%. If the investor invested the after-tax cash flow from this investment at 12% (7.2% after taxes), in the sixth year, he would have more than sufficient funds to meet the future obligation.\(^9\)

The second method that has been suggested for premature accruals like that in Transaction 2 is to bifurcate the obligation into its present value component and its interest component using a pretax rate of return.\(^9\) Under this method, the investor is viewed as incurring an immediate cost equal to the present value of the future obligation. The present value of the obligation is depreciated, while the interest component is deducted over time as it accrues.\(^9\) In Transaction 2, the present value of the obligation is $3,791 ($6,716 discounted at 10% for six years), and the balance is interest. Under this method, the investor is treated as if he purchased an asset for $3,791 with borrowed funds. If economic depreciation is used to recover the present value component, the cost recovery schedule under this method is identical to what it would be using economic depreciation for the entire (undiscounted) obligation.\(^9\)

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\(^9\) In the sixth year of this investment, the investor has a negative cash flow of $6,472. However, if the after-tax cash flow for the first five years is invested at 7.2% (after-tax), he has $6,697 in the sixth year, $225 more than is necessary to meet his obligation.

\(^9\) Aidinoff & Lopata, supra note 23, at 813–18.

\(^9\) This approach is similar in many respects to the way that current expenditures are treated under the discount reserve method. See supra notes 75–78 and accompanying text.

\(^9\) Cf. supra table accompanying notes 92–93. If the cost of the present value component were recovered by an accelerated method of depreciation, the cost recovery schedule under this method would be more favorable. One critic argues that if the premature accrual is related to a particular asset, the same cost recovery rules applying to that asset should be applied to the present value component. See Aidinoff statement, supra notes 34, at 44–45. Another of the critics, however, argues that if cost recovery deductions for capital expenditures are generally accelerated, they should be decelerated for premature accruals. Kiefer II, supra note 34, at 931.
In sum, the critics insist that in all but a trivial case, the deferral rule (1) is not neutral and would overtax investors who incur premature accruals, and (2) is, therefore, inequitable and distortive of investment patterns. They insist that to the extent that Treasury's analysis rests upon traditional income tax principles to justify the deferral rule, it is wrong.

**In Defense of the Deferral Rule**

Are the critics right? Does the deferral rule overstate the obligor's income, and thereby distort patterns of investment? To answer these questions, four arguments in defense of the deferral rule are addressed below. The first two are that it is the critics' analysis, not Treasury's, that is seriously flawed, and that deferral does accurately measure the obligor's income and does not distort investment patterns. The third argument draws an analogy between a premature accrual obligation and a borrowing transaction. It maintains that even if the deferral rule overstates the obligor's income, the obligee's income is understated by a similar amount and the transaction as a whole is fairly taxed. The final

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The first two arguments are quite closely related, and may appear at times to overlap. The first argument focuses on the investment decision involved when an investor commits himself to perform services (or deliver goods) in the future, and attempts to prove that the deferral rule accurately measures the investor's income. The point is that although the obligor's income is nominally over-

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97 One of the critics used the following example to illustrate the only case where he felt that Treasury's analysis should generate the proper deduction. Suppose a taxpayer has made a binding promise to give $100 to charity in five years, but wants a current deduction. If Treasury were willing to allow the earlier deduction, it is argued, the amount should be $100 discounted by the taxpayer's after-tax rate of return for five years. Brannon statement, supra note 34, at 107.

98 These arguments were not explicitly made by Treasury in any of its testimony before the tax writing committees. See supra note 48.

99 The first two arguments are quite closely related, and may appear at times to overlap. The first argument focuses on the investment decision involved when an investor commits himself to perform services (or deliver goods) in the future, and attempts to prove that the deferral rule accurately measures the investor's income. The point is that although the obligor's income is nominally over-
argument is based on the observation that the federal income tax is not a pure income tax, and has many characteristics of a consumption tax.\textsuperscript{100} Whereas the first two arguments maintain that the deferral rule is appropriate in an income tax system, the final argument is that it is also generally consistent with a personal tax on consumption.

**Rebuttal of the Critics’ Analysis**

In measuring income and determining the yield from various investments, the critics do not distinguish between present expenditures and obligations to make future expenditures (that is, premature accruals).\textsuperscript{101} The investment decisions involved in undertaking these two types of expenditures, however, are quite different.

A prudent investor makes an immediate outlay for an investment only if he expects both a return of his capital and an adequate yield. Such an investment includes an income interest, and all receipts thereon are properly taken into account in determining his Haig-Simons income.\textsuperscript{102}

The investment decision is quite different when it involves a current obligation to make a future expenditure. If the transaction is otherwise profitable, the investor can cover this obligation by simply adding to the price charged customers an amount sufficient (in present value terms) to fully fund the future expenditure.\textsuperscript{103} If he does so,\textsuperscript{104} he will never invest any of his own capital. In effect, he is simply a custodian during the period of deferral. Assume the amounts charged customers to cover the obligation are segregated in a reserve.\textsuperscript{105} If contributions to the reserve and the income that accumulates in the reserve are fully committed to the future expenditure, the reserve is not available for the

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\textsuperscript{100} As used in this article, the term “consumption tax” refers to a progressive personal tax on consumption; it does not encompass a sales or value added tax. See infra notes 159–79 and accompanying text.

\textsuperscript{101} This position is exemplified by Sunley’s application of the principles of economic depreciation to premature accruals. See supra notes 86–93 and accompanying text.

\textsuperscript{102} See supra note 62.

\textsuperscript{103} This is so whether the future expenditure is in the nature of an ordinary and necessary expense or a capital expenditure.

\textsuperscript{104} The investor would usually be restrained by the market from charging more than is necessary to fund the future expenditure. If he does charge more, the excess would be additional profit from the transaction.

\textsuperscript{105} The term “reserve” in this article refers to a fund of money set aside for a particular purpose—in this case, to satisfy a premature accrual obligation.
Investor's individual consumption, and does not add to his wealth. Economically, the investor has no income interest in the reserve (except as a custodian), and the income earned by the reserve should not be taken into account in determining his Haig-Simons income.106

If the income generated by the reserve is not the investor's income, to whom should it be attributed? Arguably, it is the customers' economic income.107 The additional amounts customers pay to cover the investor's future obligation are less than the amount the investor will pay to discharge the obligation. The investor will use all of the reserve, including accumulated income, to meet the obligation. The income of the reserve thus inures to the customer's benefit.

There is no apparent reason to exempt this income from tax. However, if premature accruals are accounted for under either the discount reserve method of accounting or economic depreciation, income of the reserve is effectively exempt.108 Because they treat this income more favorably than other income, these methods are not neutral, would lead to price distortions, and would result in a misallocation of resources.109

If the income is considered economic income of the customers that should be taxed, the tax rates of each customer should be applied to the income that accrues to that individual's benefit. Although this rule might work in some cases, in many others it would not be administrable.110 Furthermore, the amount charged customers is determined in the market, and thus does not depend on the customers' individual tax brackets. For these reasons, it seems most reasonable to tax the income at the investor's rates. This can be accomplished by allowing the in-

106 The critics would include in the investor's economic income both the income generated by the amount set aside and the increase in the present value of the future liability. The net effect of the critics' approach, however, is to exempt the income generated on the set aside from tax during the period of deferral. See infra text accompanying notes 127–28. In contrast, defenders of the deferral rule would not take either the amount earned on the set aside or the increase in the present value of the liability into account in determining the investor's economic income. This argument in support of the deferral rule, however, proceeds from the premise that the set aside should be attributed, at least nominally, to the investor. Confusing? Read on.


108 Although the discount reserve method of accounting would attribute the income earned by the reserve to the obligor, this income would be offset by the deduction that the investor would be entitled to for the increase in the present value of the obligation. For an illustration of how this would work, see supra notes 75–78.

109 See infra notes 125–28 and accompanying text.

110 In many cases, the amount of the charge for the future cost and the value of the future (or past) benefit are not directly observable. Furthermore, as developed below in another context, it would be impractical (if not impossible) to identify all customers. See infra text accompanying notes 155–58.
vestor a single deduction when the obligation is incurred for the present value of the future expenditure, determined with an after-tax rate of return. As explained below, this deduction would both provide an accurate measure of the investor's income and subject the reserve income to tax. Since this deduction is the present value equivalent of the deduction allowed by the deferral rule, the deferral rule has the same consequences.

In evaluating this argument, consider the following two situations. The first involves a seller of goods who incurs an obligation to perform services in the future for a particular person. The second involves a strip miner who incurs an obligation to reclaim land in the future. The analysis employs the following simplifying assumptions: Except as otherwise specified, all taxpayers are subject to an income tax of 40%; the pretax rate of return on investments is 10%, and the after-tax rate of return is 6%; all future costs can be estimated accurately; and there is no inflation.

Transaction 3: In a tax-free world, Seller (S) sells a television set (TV) to Buyer (B) for $983.20. In the sales contract, S promises to do a complete overhaul of the TV in five years at no additional charge. S's cost for the TV, aside from the future overhaul expenses, is $700. S estimates that each overhaul will cost him $134 to perform. In order to fund the cost of a future overhaul, S places $83.20 of the selling proceeds in a reserve. This amount, growing at 10% per year for five years, will become $134, just enough to meet S's future expenses. S offers to sell the same TV without the overhaul for $900. In either case, S's profit from the sale of a TV is $200. His profit in the sale to B is:

| Selling price       | $983.20 |
| Less cost of good sold | (700.00) |
| Less reserve for overhaul | (83.20) |
| **Profit**          | **$200.00** |

From B's point of view, the $83.20 is in the nature of a prepayment for

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111 This is the treatment Treasury repeatedly asserted was the proper theoretical treatment for all premature accruals. See supra notes 48–52 and accompanying text.

112 As discussed earlier, the problem with this solution is that it is very difficult to estimate the proper amount of the deduction. See supra note 49 and accompanying text.

113 See supra notes 51–52 and accompanying text.

114 Regarding land reclamation, see supra note 19.
a future service, the overhaul. When a buyer makes a prepayment for goods or services, he usually enjoys a discount from the price he otherwise would have to pay. The size of the discount is principally a function of the time value of money—that is, the amount the payee can earn on the prepayment before the future costs must be paid. On our facts, B is paying $83.20 today for an overhaul that in five years would cost him $134. From S's point of view, the future obligation is simply a cost of the sale; it differs from other selling costs only in that it is payable in the future. The $83.20 covers this future cost, and leaves S with the same profit of $200 that he makes on sales made without this obligation.

Economically, S could be viewed as a depository for B with respect to the reserve. If $83.20 is an accurate measure of the present value of the obligation, S has no beneficial interest in the reserve. S receives $83.20 in cash, but simultaneously undertakes an obligation whose present value is also $83.20. Neither his receipt of this amount nor the realization of income on the reserve increases S's power to consume or his wealth because the reserve is fully committed to cover the future cost of the overhaul. It is B who is the beneficiary of the income of the

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115 For an analysis of the tax treatment of B, see infra notes 152–55 and accompanying text.
116 Invested at 10% for five years, $83.20 will grow to $134—S's cost to perform the overhaul. See supra text accompanying notes 114–15.
117 The facts of Transaction 3 are similar to those in Schuessler v. Commissioner, 230 F.2d 722 (5th Cir. 1956), where the taxpayer sold furnaces with a guarantee that he would turn them on and off for five years. Upon proof that the prices of the furnaces were increased to cover the cost of the guarantee, the court allowed the future costs to be accrued in the year of sale. Similar facts are found in RCA Corp. v. Commissioner, 664 F.2d 881 (2d Cir. 1981), where the taxpayer entered into contracts with buyers of its television sets to service them on demand for varying periods up to two years. The taxpayer, however, attempted to defer income from the sales rather than accrue the deduction as in Schuessler. The Second Circuit denied the deferral. See also Artnell v. Commissioner, 400 F.2d 981 (7th Cir. 1968) (income from advance payments for tickets allocated to particular ball games).

New § 461(h) overrules the Schuessler case. It requires in the Schuessler, RCA, and Artnell situations that the costs of future services be deducted in the year of economic performance, that is, when the services are performed. See supra notes 36–42 and accompanying text.
118 S charges only what is necessary to cover the anticipated costs of the overhaul, probably because the offer of the overhaul is only an inducement to increase TV sales, not an additional source of profit. The analysis would not change if he charged more for the overhaul.
119 The reserve produces income at the rate of 10% per year, but the present value of S's liability increases at the same rate.
120 Under the Haig-Simons definition, an individual's income is the sum of his consumption and the change in his wealth between two points in time. See supra note 62.
reserve, not $S$. $B$ will receive a service worth $134 even though he pays only $83.20 for it. This difference ($50.80) is nominally earned by $S$ in the reserve, but economically accrues to $B$'s benefit. $B$, in effect, invests $83.20 at $S$'s rate of return. If one were trying to accurately measure the economic income of $S$ and $B$, the income earned by the reserve should be attributed to $B$, not to $S$.121

Assume a neutral 40% tax on all income is introduced. For simplicity, assume the wholesale and retail prices of the TV and the estimated costs of the future overhaul are unaffected by the tax.122 $S$ is still able to make a pretax profit of $200 on each sale by charging $900 plus enough to cover the future costs of the overhaul.

The amount of this additional charge will depend on whether we adopt the critics' position (permitting $S$ to use the discount reserve method of accounting), or the deferral rule. Under the discount reserve method, $S$ could fund the future costs by charging $83.20 and placing it in a reserve; the package price (TV plus overhaul) would remain $983.20.123 Under the deferral rule, $S$'s charge to cover the future obligation would be $100 ($100 growing at $S$'s after-tax rate of return of 6% per year for five years will equal $134), and the package price would increase to $1,000.124

The critics insist that the discount reserve method is the proper rule because it permits $S$ to maintain the same pretax profit on the transaction ($200) without raising the price of the package.125 Although this position is superficially appealing, it also can be argued that the principle of neutrality requires that $S$ be forced to increase his price in order to maintain the same pretax profit.126

The portion of the price that is charged to cover the future cost is different from the remainder in one important respect: It is a function of the time value of money. $S$ charges whatever is necessary to fund the

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121 It has been argued that the buyer's income and consumption are both understated unless the income from the reserve is attributed to him. See Fiekowsky, supra note 107, at 20–29.
122 However unrealistic, these assumptions are helpful to our analysis.
123 On our assumptions, the reserve grows at the rate of 10% per year. The present value of the liability also grows at this rate. Under the discount reserve method, reserve income is included in gross income, but an annual deduction is allowed for the growth in the present value of the liability. Because the inclusion and the deduction offset one another, the reserve grows at the pretax rate of 10% per year; $83.20 growing at 10% will become $134.
124 Under the deferral rule, $S$ would be entitled to a $134 deduction at the end of five years. As discussed earlier, the amount of this deduction is the present value equivalent of the $100 deduction in the year of the sale ($134 discounted by the after-tax rate of 6% for five years is $100).
125 See, e.g., Brannon statement, supra note 34.
126 Fiekowsky, supra note 107, at 20–29.
The amount of this charge depends on S's rate of return on amounts in the reserve, which, in turn, depends on the tax rule adopted for premature accruals. If the discount reserve method is adopted, the rate of return in the reserve is 10% because this rule essentially permits the reserve to grow tax free. If the deferral rule is adopted, the income produced by the reserve is taxed, and the rate of return on the reserve is only 6%. The issue is whether the reserve should be permitted to grow tax free.

In a world without taxes, where the rate of return on investments is 10%, $83.20 would accumulate to $134 in five years, and B could obtain the $134 overhaul five years from now either by setting aside $83.20 on his own or by paying S an additional $83.20 in the TV purchase. In either case, B's effective rate of return on the $83.20 would be the same. If the after-tax rate of return is reduced to 6% by a 40% tax, a deposit by B of $83.20 would accumulate to only $111 in five years. To accumulate $134 in five years, B would have to put aside $100. In terms of neutrality, there does not appear to be any reason to treat income generated by S's reserve for B's benefit more favorably than income on amounts invested directly by B. Indeed, the discount reserve method would distort investment patterns because it would effectively reduce the relative prices of goods and services that could be paid for in advance.

Transaction 4 deals with a future obligation in the nature of a capital expenditure—that is, a predictable cost of closing out an investment, a negative salvage value. Although the transaction directly raises only the issue of how reclamation expenses should be treated under the tax law, the analysis should be equally applicable to all investments involving these obligations.

Transaction 4: In a tax-free world, M, a strip miner, invests $3,000 in a mine that will generate $1,000 of net cash flow each year for five years. At the end of these five years, the mine will be closed, and, under state law, M will be required to reclaim the land. M expects the reclamation costs to be $1,401, payable at the end of the sixth year. This investment has an implicit rate of return of 10%.

As noted above, the critics believe that M should treat the $1,401 obligation in the same fashion as any other capital expenditure.

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127 See supra notes 75-77 and accompanying text.
128 Id.
129 For examples of these investments, see supra notes 18-21 and accompanying text.
130 This transaction is based on a hypothetical found in the Sunley article, supra note 34, at 720.
131 Aidinoff statement, supra note 34; Aidinoff & Lopata, supra note 23, at 814;
Under a neutral income tax, they argue, $M$ should account for this obligation using the principles of economic depreciation. If this were done, $M$ would have the following income and depreciation deductions from the mine:

<table>
<thead>
<tr>
<th></th>
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</tr>
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<tbody>
<tr>
<td>0</td>
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<td>$3,000</td>
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<tr>
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<td>770</td>
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<td>153</td>
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<td>4</td>
<td>1,000</td>
<td>(249)</td>
<td>932</td>
<td>68</td>
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<td>5</td>
<td>1,000</td>
<td>(1,274)</td>
<td>1,025</td>
<td>(25)</td>
</tr>
<tr>
<td>6</td>
<td>(1,401)</td>
<td></td>
<td>127</td>
<td>(127)</td>
</tr>
</tbody>
</table>

Total $4,401$

$^*$ Present value is determined at the end of each year using a discount rate of 10%.

$^{**}$ Economic depreciation is the annual change in present value of the remaining cash flow.

$^{***}$ Net income is the difference between the cash flow for the year and economic depreciation.

If a 40% neutral income tax were imposed, the critics would simply use net income shown in the right column as the base of the tax.

This obligation can be viewed quite differently. Rather than representing an additional investment by $M$, it could be viewed as an additional coal cost that $M$ passes on to his customers. Since no outlay is required until the reclamation, $M$ can cover the obligation by adding to the prices charged his customers an amount equal in present value to the future cost. The obligation can be analyzed in precisely the same way as the obligation for the future overhaul in Transaction 3. $^{132}$

Although the analysis is necessarily somewhat more complicated, the underlying principle is the same. Both can be viewed as charges that must be paid by consumers to receive a particular service. In the case of the overhaul of the TV, the relationship between the charge and the benefit to $B$ is obvious. In the case of the reclamation expenses, the relationship is less obvious, but is equally clear: All those who want coal from strip mines must bear their fair share of the reclamation cost, and the strip miner is merely the custodian of a fund that is earmarked for this purpose. $^{133}$

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Kiefer II, supra note 34; Sunley article, supra note 34, at 720; Sunley statement, supra note 18, at 76-79.

$^{132}$ See supra text accompanying notes 122-24.

$^{133}$ Fiekowsky, supra note 107, at 19.
This analysis suggests that the income stream from the mine should be bifurcated into two portions. One portion should be considered a return on M's capital investment, and the other should be considered amounts received from customers to meet the future reclamation costs. Since M invests $3,000 and requires a 10% rate of return, $791 of the annual cash flow should be allocated to M's capital investment. The remaining $209 of the annual cash flow should be allocated to fund the future reclamation costs. This latter portion of the cash flow, growing at 10% per year, would equal $1,401 in six years. As was argued with respect to the reserve for the overhaul expenses, the strip miner should not be considered to have an income interest in this fund.

**CAPITAL INVESTMENT**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Present Value of Remaining Cash Flow</th>
<th>Economic Depreciation</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
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<tr>
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<td>5</td>
<td>791</td>
<td>0</td>
<td>719</td>
<td>72</td>
</tr>
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</table>

**RECLAMATION FUND**

<table>
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<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Fund Earnings</th>
<th>Annual Additions</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
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<td>$209</td>
<td></td>
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<td>209</td>
<td>$21</td>
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<tr>
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<tr>
<td>5</td>
<td>209</td>
<td>97</td>
<td>306</td>
<td>1,276</td>
</tr>
<tr>
<td>6</td>
<td>127</td>
<td>127</td>
<td>1,403</td>
<td></td>
</tr>
</tbody>
</table>

If we now impose an income tax of 40%, M should certainly be taxed on the income generated by his $3,000 investment. The question is whether he should be taxed on the earnings of the reserve. If these earnings are taxed, M will have to charge more for coal. If the rate of return on the reserve is reduced by the tax to 6%, M will have to charge his customers an additional $25 each year to fully fund the reclamation costs.

134 An annuity of $791 a year for five years has a present value of $3,000 if the interest rate is 10%.
135 An annuity of $209 a year for five years has a future value in the sixth year of $1,401 if the interest rate is 10%.
136 See supra text accompanying notes 119–21.
costs. The charge for reclamation will be less than its future cost because customers will pay an amount discounted to reflect the time value of money. The price of the coal is thus less than 100% of the ultimate cost of the consumption of the coal. At the time of reclamation, the balance of the reserve (consisting of portions of the prices paid by customers and reserve earnings) will be just sufficient to meet the future costs. The income of the reserve will thus be applied toward one of the costs of consuming coal. It is as if each customer invested with the strip miner a portion of price paid for the coal, with both the amount invested and the earnings thereon being dedicated to one of the costs of the customers' current consumption.

The case for the deferral rule is not as strong in Transaction 4 as it is in Transaction 3. Even if we assume that $M$ has no income interest in the reserve, as we did for $S$ in Transaction 3, it is not as clear to whom the income in the reserve should be attributed. The benefits a coal customer receives are far less direct than those resulting from TV overhaul expenses. The TV purchaser receives the benefit of the overhaul when the overhaul is done, whereas the coal purchaser receives all benefits of his purchase immediately, long before the reclamation occurs. Indeed, one could argue that the income from the reserve accrues to the benefit of the state, not the seller or the purchaser of coal. If the state, a tax-exempt entity, is considered the beneficiary of the reserve, the income generated by the reserve arguably should not be taxed.

Suppose the state, instead of imposing the duty of reclamation on strip miners, levies a sales tax on coal sold by strip miners. If the state were to place the taxes in a trust fund earmarked for the reclamation of strip mined land, the income earned on the fund would be exempt from tax. Is there any reason to treat a reserve set up by a strip miner any differently?

The obligation in Transaction 4 is different from the one in Transaction 3 in another major respect. Investments involving negative salvage values require a commitment by the seller at the outset to under-

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137 At a 6% interest rate, an annuity of $234 for five years is needed to reach a future value of $1,401 in the sixth year. Under these circumstances, $M$ thus would have to put aside $234 ($209 + $25) a year to fund the future obligation.

take a certain obligation without any assurance that he will be able to pass it on to his customers. In Transaction 4, for example, M is required to commit himself to reclaim the land, no matter how much coal he is able to mine, and no matter at what price he is able to sell it. He is at risk for this amount. In contrast, in Transaction 3, S receives the full amount of the prepayment up front because the liability only arises on a sale. If his estimates are accurate, S will never have any of his capital at risk.

Negative Income Tax

There is an additional problem with the critics' method of accounting for premature accruals: This method of accounting for premature accruals has the effect of imposing a negative income tax on the "investment" represented by the obligation. Within the context of a neutral income tax, this result is difficult, if not impossible, to justify.

To illustrate, consider an investor who incurs a premature accrual obligation that is in the nature of negative salvage value. The critics insist that this obligation should be viewed as an additional capital investment in the underlying asset and accounted for using economic depreciation—a method clearly more beneficial to the investor than is the deferral rule.¹³⁹

The deferral rule—allowing a deduction for a premature accrual only when the obligation is satisfied by economic performance—essentially lets an investor expense that portion of his investment represented by the obligation. When the tax rate is constant over time, allowing an investor to expense an investment is the present value equivalent of imposing a zero rate of tax on the income from that investment.¹⁴⁰ There-

¹⁴⁰ If a taxpayer's rate of return on investment is the same both before and after taxes, the effective rate of tax on the income is zero. This occurs when the cost of an investment is immediately expensed. Expensing decreases a taxpayer's investment by the tax savings generated by the immediate deduction. This decrease increases the pretax rate of return because the taxpayer receives income on the entire investment, including the portion effectively paid for by the government. The tax on income from the investment only reduces the after-tax rate of return to the pretax rate the taxpayer would have enjoyed without expensing. Assume a 40% taxpayer buys a $1,000, 10% bond at par. Each year, the bond generates an after-tax return of $60. If the taxpayer can immediately deduct the full cost of the bond, the deduction saves $400 in taxes, reducing his investment in the bond to $600. Each year, the taxpayer receives $100 on his $600 investment, which is reduced to $60 by the tax. His after-tax return is 10%. Since the rates of return generally available to the taxpayer are 10% before tax and 6% after tax, the 10% yield after taxes on this bond is effectively a tax-free yield.

This relationship was first identified by E. Cary Brown. Brown, Business Income Taxation and Investment Incentives in Income Employment and Public
fore, if a premature accrual is viewed as an investment, the deferral rule imposes a zero rate of tax on the income (if any) from that investment. Since economic depreciation in this context is more beneficial than expensing, it follows that applying economic depreciation to premature accrual obligations necessarily results in a negative rate of tax. Because of this favorable treatment, the adoption of this rule would create a bias in favor of all investments that entail premature accruals, a result that flies in the face of the principle of neutrality.

Compensating Errors

Assuming, arguendo, that the obligor is overtaxed under the deferral rule, the rule can still be defended by focusing on the transaction as a whole, rather than solely on the obligor. If the obligor is overtaxed, the argument runs, the obligee is undertaxed by a similar amount. Under this theory, the deferral rule is clearly not the ideal solution, but it may be the only one available.

There are other provisions in the Code that have the effect of taxing one taxpayer to compensate for an understatement of another taxpayer's income. Sections 404 and 267, for example, each defer an accrual basis obligor's deduction of an item until the item is included in the income of a cash basis obligee. One of the purposes of this matching requirement is to insure that the income earned on the deductible amount does not escape taxation.


See supra text accompanying notes 34–35. For a contrary view, see Kiefer I, supra note 34, at 48–49, and Kiefer II, supra note 34, at 930. Kiefer maintains that although accounting for a premature accrual obligation using economic depreciation is more beneficial than expensing, the effects of this treatment are more than offset by the treatment of receipts, resulting in a positive rate of tax.

For an excellent discussion of the theory behind this solution and the reason it may be the most practical one, see Halperin, supra note 23.

Section 404(a)(5) requires an employer to defer its deduction for a contribution to a funded, nonqualified deferred compensation plan until the employee-beneficiary (who typically uses the cash method of accounting) includes the contribution in gross income. Section 267(a)(2) requires that a deduction for an expense owed a cash method taxpayer by a related accrual method taxpayer be deferred until the payee includes the item in income.

See Halperin, supra note 23. It is fundamental that at a constant rate of tax a current deduction is the present value equivalent of exempting the yield of the deducted amount from the tax. The effect of an overstated deduction, therefore, is to permanently exempt from the tax the yield of the overstated portion of the deduction, thereby permanently reducing both the overall tax base as well as federal revenues. To illustrate, assume a 40%, accrual method taxpayer incurs a $100 obligation to a 40%, cash method taxpayer, but does not pay the obligation until the next year. Assume further that the prevailing pretax rate of return is
obligor the income that is earned over the deferral period.\textsuperscript{145} 

One could argue that the deferral rule addresses a similar problem, and works in essentially the same fashion. From the obligor's point of view, a premature accrual obligation is economically similar to a borrowing transaction in which the obligor borrows the present value of the obligation from the obligee at a market rate of interest. The obligor should be able to deduct the interest component of the obligation as it accrues. The deferral rule allows the obligor no deduction for the interest component, and thereby arguably overstates his income.\textsuperscript{146} 

A premature accrual obligation differs from a borrowing transaction in one major respect: There is no lender. Under an ideal income tax system, when a borrower takes an interest deduction, there is a correlative inclusion by the lender, and the overall tax base remains unchanged\textsuperscript{147} because the borrower's deduction and the lender's inclusion offset one another.\textsuperscript{148} Since there is no lender on a premature accrual

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10% and after-tax rate of return is 6%. The real value of this obligation is not $100, but $94.34 ($100 discounted for one year by the after-tax rate of return of 6%). If the obligor takes a current deduction of $100, his deduction is overstated by $5.66. Since this overstatement will not be compensated for by a corresponding overstatement of income, it has the effect of permanently reducing the overall federal tax base by $5.66. Federal revenues, therefore, will be permanently reduced by $2.26 (40% of $5.66). In present value terms, $2.26 is precisely the amount of tax that would have eventually been due the federal government if $5.66 had been invested at the prevailing rate of return. This result can be avoided by deferring the obligor's deduction of $100 until the following year when the obligee is required to include that amount.\textsuperscript{145} 

As in all deferred payment transactions, the obligee will demand, and the obligor will be willing to pay, a larger amount in the future than if payment were made currently. Assume in the example in note 144 that the gap between accrual and payment is 12 months and the prevailing rate of return is 10%. If the delay was bargained for, the $100 deferred payment presumably consists of a principal amount of $91 and an interest equivalent of $9. If the obligee had received $91 at the time of accrual, he could have invested $55 ($91 less 40% in tax) at his own rate of return. In contrast, if the payment is deferred and § 267(a)(2) or 404(a)(5) applies, the obligor has the $55 (that is, the $91 not paid the obligee less the extra tax on the obligor resulting from denial of the deduction). In either case, $55 is invested in the private economy, and the government taxes the return on it. The difference is that the rate of return and tax rate are the obligee's rates in the former situation and the obligor's in the latter. See Halperin, supra note 23. 

If there is a discrepancy in tax rates between the obligor and the obligee, matching may not provide an adequate solution. This is developed in another thought provoking piece by Professor Halperin. Halperin, Tax Postponements without Tax Advantage: An Approach to Deferral of Compensation and Related Tax Avoidance Techniques (unpublished manuscript).\textsuperscript{149} 

Aidinoff statement, supra note 34, at 44–45.\textsuperscript{146} 

This is the theory underlying matching, discussed in notes 143–45 and accompanying text.\textsuperscript{147} 

Tax collections, however, may not be unchanged because borrowers and lenders are not always taxed at identical rates. Some lenders are tax exempt (pen-
obligation, however, the overall tax base would be reduced if the obligor were allowed annual deductions for the interest component of the obligation. In effect, during the period from the time the obligation is incurred until it is satisfied, the investment income generated by the principal amount of the obligation would be exempt from tax.  

To illustrate, consider this tort settlement:  

*Transaction 5:* *T* Corp. keeps its books on the accrual method of accounting. *A*, a cash method taxpayer, brings an action against *T* Corp. for injury to *A*’s business reputation. At all relevant times, *T* Corp. and *A* are in the 40% tax bracket, and each has a pretax rate of return of 10% on investments. *T* Corp. is willing to settle the case for $1,000 cash. This is acceptable to *A*, but he would prefer to defer receipt of the settlement for five years. 

If the discount reserve method of accounting were adopted, *T* would be indifferent between settling the case for $1,000 payable today or $1,610 payable in five years. In either case, *T* would be entitled to a deduction of $1,000 in the year of settlement. The deduction for the deferred settlement is $1,000 because that amount is the present value of the future payment, determined with the pretax rate of return of 10%. *A*, on the other hand, would be far better off with the deferred settlement. If *A* receives $1,000 today, he owes $400 in taxes, leaving him with $600 to invest. This amount, invested at a 6% after-tax rate of return, would grow to $803 in five years. Under the deferred settlement, when *A* receives the $1,610, he will owe $644 in tax, leaving him $966 after taxes. *A* would be $163 better off under the deferred settlement at no additional cost to *T*. The reason for this discrepancy is that the $1,000 is permitted to grow tax free in *T*’s hands under the deferred

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149 See supra note 139.

150 This transaction can also be analyzed using an argument discussed earlier. If the claim is settled on a deferred basis, the present value of the settlement would be properly deductible. Thereafter, *T* Corp. would no longer have any income interest in the amount set aside to fund the settlement; therefore, amounts earned on that fund should not be reflected in *T*’s income. Prior to the enactment of § 461(h), a structured settlement might have been mutually advantageous to *T* and *A*. See supra notes 103–06 and accompanying text.

151 The future value of $1,000 growing at 10% annually for five years is $1,610.

152 Under the discount reserve method, *T* would be entitled to an initial deduction of $1,000. Thereafter, for each year during the period of deferral, *T* would be entitled to a deduction equal to the earnings of the reserve. See supra text accompanying notes 75–78.
settlement, whereas if \( A \) receives the $1,000 today, he must pay annual taxes on the investment income as it accrues.

The discrepancy would open an avenue for manipulation and abuse. At no cost to the obligor, the obligee could set up what amounts to a tax-free savings account for the period of deferral. The longer the deferral, the larger the savings. Sophisticated obligors would doubtlessly share in these savings.\(^{153}\)

The deferral rule eliminates this potential. With the deferral rule, \( T \) Corp. would not settle for $1,610 payable in five years because such a settlement would not be equivalent to an immediate $1,000 payment. If \( T \) set aside $1,000 today, income on the set aside would be taxed, thus, the after-tax yield would only be 6%. The future value of $1,000 growing at 6% annually for five years is only $1,338. Under the deferral rule, \( T \) would be indifferent between settling for $1,000 today or $1,338 in five years. If \( T \) and \( A \) agreed on a deferred settlement of $1,338, \( A \) would owe $535 in taxes when he was paid, leaving him $803 after taxes. This is the amount that \( A \) could accumulate, after taxes, if he received the $1,000 today and invested it himself. In this situation, the deferral rule taxes the transaction fairly. If the build-up is considered economic income of \( A \) rather than of \( T \), the deferral rule forces \( T \) to pay a portion of \( A \)'s tax, but the only distortion in this is that the tax is at \( T \)'s rates rather than at \( A \)'s.

Transaction 3, where the seller of a TV set agrees to perform a future overhaul,\(^ {154} \) could also be characterized as including a borrowing transaction. That portion of the purchase price attributable to the overhaul ($83.20) could be viewed as the principal of a loan from buyer to seller, and the performance of the overhaul (value of $134) as the repayment of the principal with interest. Under this characterization, the seller should be permitted a deduction for the interest component of the obligation as it accrues, and the buyer should have a like amount of interest income. Under current law, however, the buyer is never taxed on the interest component, and the deferral rule could be viewed as an intentional compensating error. The buyer's income is understated, but the seller's income is identically overstated. In the aggregate, the transaction is taxed fairly.\(^ {155} \)

If the perceived problem with premature accruals is that the obligee is undertaxed, why not attack the problem directly? Why not require

\(^{153} \) If the discount reserve method of accounting were adopted, \( A \) and \( T \) probably would settle for an amount due in five years between $1,338 and $1,610; the exact amount would depend on the strength of their relative bargaining positions.

\(^{154} \) See supra text accompanying notes 114–45.

\(^{155} \) See supra note 146 and accompanying text.
the obligee to report the interest component of the obligation over time as it accrues economically? The deferral rule only gives the correct result when the obligor and the obligee are in the same marginal tax bracket. If the obligee had to report the interest component as it accrued, the result would always be correct.¹⁵⁷

There are at least two situations, however, where it would be difficult, if not impossible, to tax the obligee on the interest component. The first is where the identity of the obligee is not known during the period of deferral. Suppose $T$, a surgeon, performs 1,000 operations on various patients during the current year. He knows from experience that one of these patients is likely to successfully sue him for malpractice. He self insures by placing $1,000 of his current income into a reserve.¹⁵⁸ It would be extremely difficult to impute investment income of the reserve to the unknown obligee.¹⁵⁹ Practically, the tax system must either tax this income to the surgeon using the deferral rule or permit the reserve to grow tax free.

Economically, this situation is not very different from the situation where the obligee is known. The identity of the obligee will eventually become known. He will have benefitted from the growth of the reserve every bit as much as if his identity had been known from the outset. The tax results should thus be the same whether the obligee is immediately known or later becomes known. Since the deferral rule is the only feasible solution for the latter situation, it should govern the former, too.

The second situation where an imputation of interest income to an obligee would not be administrable is where the premature accrual represents negative salvage value. Consider the example of a nuclear power plant that must, at some future time, be decommissioned. The loan analogy could only be drawn by treating each customer as an

¹⁵⁶ After the Tax Reform Act of 1984, obligees in many analogous situations must report interest as it accrues. See, e.g., I.R.C. §§ 1272 et seq. (requiring the inclusion of original issue discount for most debt instruments, including those issued for property and those issued by individuals), and 467 (requiring the accrual of both rent and interest in the case of certain rental and service agreements). See also I.R.C. § 7872 (relating to certain below market interest loans).

¹⁵⁷ Whenever the obligor is in a lower tax bracket than the obligee, the deferral rule is more beneficial to taxpayers than requiring the obligee to report the interest component as earned. If the obligor is tax exempt, for example, the investment income is not taxed at all.

¹⁵⁸ Halperin, supra note 23, at 761.

¹⁵⁹ Once the identity of the obligee becomes known, it would be possible to impose a tax that in present value terms, would put the obligee in the same position he would have been in if he had been paying tax on the interest income as it accrued. This solution, however, would be complicated. Cf. I.R.C. §§ 666 et seq. (taxing trust beneficiaries on accumulation distributions in a way designed to approximate the consequences that would have obtained if trust income had been distributed as earned).
obligee and characterizing a portion of the purchase price of each unit of power as the principal of a loan from customer to plant owner which falls due with interest on the date of decommissioning. The complexity of this imputation, however, would be mind boggling. Each purchase of a unit of power would give a customer interest income from the date of purchase until decommissioning. The amount of interest per unit could vary depending on when during the power plant's life the units were purchased. Even in this age of computers, this solution would never be seriously considered. If investment income on a decommissioning reserve is to be taxed, it must be taxed to the obligor.

Also, the characterization of a premature accrual obligation as a borrowing transaction loses its appeal when the obligation is in the nature of negative salvage value. In this context, it is not clear that (1) the customers are obligees or (2) they enjoy any future benefit that could fairly be considered income. If customers have no economic income, an overtaxing of the obligor cannot be justified as compensation for undertaxation of the obligee. An investor cannot be accused of taking advantage of the system by engaging in an investment that has negative salvage value. Nor can it be said that he is facilitating an underpayment of tax by any other taxpayer. He is simply putting funds aside for a predictable, necessary business expense. If the investment income in the reserve is not taxed, this is not a result of manipulation of the tax laws. Indeed, a critic would insist that it is simply a function of the definition of income.

The critics' analysis, however, is not wholly satisfactory. Not taxing this investment income is troublesome. When there is income, as there clearly is in this situation, an income tax should reach it. Is it possible for this income not to increase anyone's wealth?

**Consumption Based Tax**

The arguments presented thus far have all been premised on the assumptions that the tax base is income and that the rule for premature

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160 If market forces or government regulation require all nuclear power plant operators to sell power at the same price, the loan portion of the purchase price of each unit of power is the same, regardless of the age of the plant that produces it. Interest would be imputed on this amount for 20 to 40 years if a customer buys power shortly after the plant opens, but for only a year or two if the purchase were made shortly before decommissioning. Strange.

161 A tenacious defender of the deferral rule might contend that it is better to tax the investment income to the wrong person than not tax it at all. Halperin, supra note 23, at 761.

162 In the context of this discussion, a tax based on consumed income, or consumption, refers to a personal tax imposed at progressive rates on consumption. It is not intended to refer to a sales or value added tax.
accruals should be designed for an income tax. Although our tax base has many characteristics of a tax based on income,\textsuperscript{163} it also has a surprising number of characteristics of a tax on consumed income, or consumption.\textsuperscript{164} Thus, it is not clear whether our present tax system is

\textsuperscript{163} The most important characteristic our current system has in common with an ideal income tax is the borrowing rules. Borrowed funds are not includable in the tax base when received and are not deductible when repaid. Interest is generally deductible when paid or accrued. I.R.C. § 163. In the Tax Reform Act of 1984, several new provisions dealing with the time value of money were enacted that are also designed for a tax based on income, not consumption. Under a variety of circumstances, these provisions require a lender to include, and a borrower to deduct, interest as it economically accrues, regardless of their respective methods of accounting. See, e.g., I.R.C. §§ 1272 et seq. (dealing with original issue discount), 467 (dealing with certain payments for the use of property or services).

The rules governing cost recovery for nonwasting assets, such as land and stock, and for intangible depreciable assets are also more consonant with an income tax than a consumption tax. As discussed in notes 90–91 and the accompanying text, under an ideal income tax, a taxpayer would be entitled to a depreciation deduction equal to the decline in the value of all assets during the taxable year. Under current law, a taxpayer who invests in a nonwasting asset not subject to depreciation is generally not permitted to recover his investment in that asset until he disposes of it; a taxpayer who invests in an intangible depreciable asset is allowed to recover his investment by taking annual depreciation deductions over the useful life of the asset. See I.R.C. § 168(c)(2) (intangible assets are not "recovery property" for purposes of § 168). These depreciation deductions are meant to represent the cost of using the asset during the year. See Commissioner v. Idaho Power Co., 418 U.S. 1 (1974). For a description of a model cost recovery system under a comprehensive income tax, see Blueprints, supra note 29, at 64–67. See also Treasury Proposal, supra note 138, at 1026–34.

\textsuperscript{164} The principal distinction between an income tax and a consumption tax is the treatment of savings. Current savings are included in the base of an income tax, but not a consumption tax. Some of the most obvious consumption tax characteristics of present law are the deductions and exclusions for contributions to individual retirement accounts and qualified deferred compensation arrangements. See I.R.C. §§ 219, 401 et seq. These contributions are excluded from the base when made, but are taxed when distributed (made available for consumption), precisely the appropriate treatment under a consumption tax.


A less obvious parallel with a consumption tax is the treatment of consumer
more accurately described as being based on income or on consumption. Furthermore, there is no consensus among economists,\textsuperscript{165} lawyers,\textsuperscript{166} or politicians\textsuperscript{167} as to what the base should be. Since the fundamental character of the present tax base is not clear and since there is no general agreement as to what the base should be, an analysis of premature accruals would be incomplete without evaluating the deferral rule under a personal tax based on consumption (consumption tax). For reasons that will become apparent, the deferral rule is generally consistent with such a tax.

A tax based on income and one based on consumption differ in one major aspect—the treatment of savings. Net savings are included in the base of an income tax; they are not under a consumption tax.\textsuperscript{168} Income is generally defined as the sum of a taxpayer's consumption and his net savings (or dissavings) during a taxable year.\textsuperscript{169} A tax on income thus can be made a tax on consumption simply by adding a deduc-

\begin{footnote}


\textsuperscript{167} Congressional dissatisfaction with our current tax system, as well as the lack of political consensus on what the tax base should be, is evidenced by a provision in the Tax Reform Act of 1984 mandating that Treasury conduct a study of replacing our current income tax system. One of the alternatives that Treasury was directed to investigate is a tax based on consumption. 1984 Act § 1081. Upon investigation, Treasury decided not to recommend a consumption tax. See Treasury Proposal, supra note 138, at 1002–1010.

\textsuperscript{168} See generally Blueprints, supra note 29, at 26–31.

\textsuperscript{169} See supra note 62 and accompanying text. An income tax focuses on a taxpayer's economic power to consume; a consumption tax focuses on actual consumption.
\end{footnote}
CONSUMPTION = INCOME — NET SAVINGS

This relationship can be expressed algebraically as follows:

A consumption tax system dispenses with many of the distinctions that must be drawn under an income tax. The consumption tax base can be determined by looking solely at the taxpayer's cash flow. There is no need to determine the nature of a receipt. When a taxpayer receives cash or property, from whatever source, the taxpayer includes the full amount of it in the base. Loan proceeds, gifts, bequests, and other similar receipts are included in the tax base. However, if the taxpayer invests the proceeds of a loan, he is given a deduction for the investment, and there is no immediate tax. As the taxpayer makes payments on a loan, he is given a deduction for both principal and interest. Under a consumption tax, borrowed funds are included in the tax base. If these funds are invested, however, the taxpayer has an offsetting deduction for the investment, and there is no immediate tax. As the taxpayer makes payments on a loan, he is given a deduction for both principal and interest. Blueprints offers an alternative treatment for loans under its model cash flow tax. This alternative would permit a taxpayer to not include loan proceeds when received, but would not allow a deduction for either interest or principal as he made payments. In present value terms, these alternatives are equivalent.

Query, is it constitutionally permissible to tax loan proceeds? Does Congress have the authority under the sixteenth amendment to include loan proceeds within the tax base? In General Am. Investors Co. v. Commissioner, 348 U.S. 434, 436 (1955), the Supreme Court stated that "the legislative design [of the Code is] to reach all gain constitutionally taxable unless specifically excluded [emphasis added]." In Glenshaw Glass Co. v. Commissioner, 348 U.S. 426, 431 (1955), the Court defined income as "undeniable accessions of wealth, clearly realized, and over which the taxpayers have complete dominion." Since Glenshaw Glass, this definition has been the touchstone for determining whether a receipt constitutes income. See, e.g., Commissioner v. Kowalski, 434 U.S. 77 (1977). When a borrower receives loan proceeds, he incurs an offsetting liability in an equal amount. Loan proceeds, therefore, are not either gain or an accession to wealth. See James v. United States, 366 U.S. 213 (1961) (distinguishing embezzled funds from borrowed funds, the latter not being income).

The Supreme Court has repeatedly held, however, that a taxpayer has income when he receives amounts related to future services, even though there will be related expenses which cannot be currently deducted. E.g., Schlude v. Commissioner, 372 U.S. 687 (1961). These cases lend support to the proposition that, if it chose to, Congress could tax loan proceeds when received, giving a deduction.
and the proceeds from dispositions of property\(^{174}\) are all included in full. Conversely, when a taxpayer makes a profit seeking payment, whether it is in the nature of an ordinary and necessary expense or a capital expenditure, he is given a current deduction for the full amount of the payment.\(^{175}\) Cost recovery is quite simple under this tax: Taxpayers simply expense all investments.\(^{176}\)

Under a consumption tax, the obligor of a premature accrual should have no deduction for the obligation until he satisfies the underlying liability. The deferral rule delays the deduction until there has been for the repayment thereof. Also, since deductions are a matter of legislative grace, Sullivan v. United States, 356 U.S. 327 (1958), Congress, instead of including loan proceeds in income, could accomplish the same effect by denying a deduction for all interest.

\(^{174}\) There is no basis offset when property is disposed of because the cost of property is expensed on acquisition.

\(^{175}\) The costs of personal residence and consumer durables might also be deductible. Ideally, under a consumption tax, these costs would be deductible because they are savings transactions, and the use value of the property would be taxed as consumption items. The difficulty of measuring the use value, however, probably would lead to a compromise solution. See supra note 164.

\(^{176}\) To illustrate how expensing would work, reconsider the facts of Transaction 4, described in the text accompanying note 130. In that case, a strip miner, \(M\), invests $3,000 currently, and obligates himself to pay $1,401 in reclamation expenses in six years. Under a consumption tax, he would be able to deduct the initial $3,000 in year 1, and the $1,401 in year 6. If the tax were 40\%, \(M\) would have the cash flow, before and after tax:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow Before Tax</th>
<th>Expensing Deductions</th>
<th>Cash Flow After Tax</th>
<th>Present Value (^{\star}) of Amounts in Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($3,000)</td>
<td>$3,000</td>
<td>($1,800)</td>
<td>($3,000) (4) (4)</td>
</tr>
<tr>
<td>1</td>
<td>1,000</td>
<td>600</td>
<td>909</td>
<td>545</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>600</td>
<td>826</td>
<td>496</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>600</td>
<td>751</td>
<td>451</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>600</td>
<td>683</td>
<td>410</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>600</td>
<td>621</td>
<td>373</td>
</tr>
<tr>
<td>6</td>
<td>(1,401)</td>
<td>1,401</td>
<td>(841)</td>
<td>(791) (475)</td>
</tr>
</tbody>
</table>

Net present values

* Present values are determined with a discount rate of 10\%.

As shown in the two columns on the right, the sum of the present values of the cash flows is zero, both before and after taxes. This shows that the rate of return is unaffected by the imposition of the tax.

Some commentators refer to this method of cost recovery as being neutral. See R. Musgrave, The Theory of Public Finance: A Study in Public Economy 343 (1959). It is only neutral in a special sense. At a constant rate of tax, expensing has the effect of exempting the yield of an investment from tax. See supra note 140. That is, under a consumption based tax, the income from capital is not subject to tax. Since the existence of the tax does not reduce the rates of return on investments, it has no effect on investment decisions.
economic performance.\textsuperscript{177} In the case of a workers' compensation or tort liability, economic performance occurs as payments discharging the liability are made.\textsuperscript{178} This is also the appropriate treatment under a consumption tax. In other cases, economic performance does not usually occur at the precise time of payment because payments for services or use of property often occur after economic performance. A strip miner, for example, economically performs his reclamation obligation when he reclaims the land, not when he pays the costs incurred in the reclamation. Thus, the deferral rule is often more generous than a rule designed specifically for a consumption tax.\textsuperscript{179} Despite this difference, it is fair to say that the deferral rule is generally consistent with a tax based on consumption.

An advocate of a personal tax on consumption should not champion a rule under our current system simply because it is consistent with his ideal. He should look more closely at how the rule would work within our existing system.\textsuperscript{180} The rules of the present system for borrowing transactions are based upon an income tax model, and do not work properly with the cost recovery rules of a consumption tax. If capital costs are expensed (as in a consumption tax), but loan proceeds are excluded from the tax base (as in an income tax), a negative tax (that is, a rate of return higher than would obtain in a tax-free world) necessarily results whenever capital expenditures are debt financed.\textsuperscript{181} The deferral

\begin{itemize}
\item \textsuperscript{177} I.R.C. § 461(h).
\item \textsuperscript{178} I.R.C. § 461(h) (2) (C).
\item \textsuperscript{179} This difference is most significant with respect to items the economic performance of which occurs at year end and payment for which is made the following year. If there is a long delay between economic performance and payment, other provisions may come into play to limit or delay the deduction. See, e.g., I.R.C. §§ 404(a) (5) (dealing with unfunded deferred compensation), 467 (dealing with certain payments for the use of property or services).
\item \textsuperscript{180} See generally Lipsey & Lancaster, The General Theory of Second Best, 24 REV. ECON. STUD. 11 (1956). In general, the theory (or paradox) of second best is that the perfect solution in an ideal world may be a poor solution in a less than an ideal world.
\item \textsuperscript{181} See generally Johnson, supra note 164. This can be illustrated with the following example taken from ANDREWS, FEDERAL INCOME TAXATION 532-33 (1979):
\end{itemize}

Suppose a 40 percent taxpayer can buy a 9 percent perpetual bond [face amount, $1,000] on a deductible basis. Now suppose he finances the purchase, in part, by borrowing $500 at 8 percent interest. Net income from the investment, before tax, is then $50 ($90 interest received minus $40 interest paid) on a net investment of $500, for a rate of return of 10 percent. The return after tax will be $30, since the interest received is taxable and the interest paid deductible. But the taxpayer's net investment now is only $100: $1000 for the bond minus $500 borrowed and $400 tax savings from deducting the cost of the bond. A net after-tax return of $30 a year on a net after-tax investment of $100 is a rate of return of 30 percent, three times the before-tax rate of

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rule, however, does not present this problem. Economically, a premature accrual obligation is similar to a note with interest and principal due at maturity. Under the deferral rule, the taxpayer is not permitted to deduct any of the accrued but unpaid interest until economic performance. This treatment is consistent with the borrowing rules of a consumption tax, and does not generate a significant negative tax.¹⁸²

Conclusion

The fundamental issue addressed in this article is whether premature accrual obligations (that is, current obligations to make future expenditures) should be treated in the same fashion as present expenditures. The critics assert that they should be treated in the same way, maintaining that the proper way to account for premature accruals is to use the discount reserve method for those that are in the nature of ordinary and necessary expenses and to use economic depreciation for those that are capital in nature. The critics insist that the deferral rule, recently adopted by Congress, is not theoretically sound and will cause economic distortions. In the view of this observer, for several reasons, the deferral rule is a superior method of accounting for these obligations.

First, premature accruals are different from present expenditures in at least one meaningful way: If an obligor charges his customer a sufficient amount to fund a future expenditure, the obligor will never have to invest his own capital. If the obligor places the amount charged for the future obligation in a reserve, the obligor does not have an economic interest in the reserve, and can accurately be described as a custodian of the funds. Neither the income generated by the reserve nor the increase in the present value of the underlying liability should be considered economic income of the obligor. Under the discount reserve and economic depreciation methods, however, both the income generated and the increase in the liability would be taken into account in determining the obligor's income. Since these two amounts offset one another, the income earned in this reserve would be exempt from tax. This result is difficult to justify, and appears to be inconsistent with the basic premise of an income tax. The deferral rule, on the other hand, has the effect of taxing this income at the obligor's rates. This may not

¹⁸² See supra note 181. As demonstrated in note 140, expensing is the equivalent of a zero rate of tax on an investment. If, prior to payment, economic performance occurs and the taxpayer is permitted a deduction, a negative rate of tax is possible.
be the ideal solution, but it appears to be a better solution than not tax-
ing the income at all.

Second, the deferral rule is superior to the critics' methods because it is neutral in application, and will not distort relative prices or invest-
ment patterns. The discount reserve method and the principles of eco-
nomic depreciation, as applied to premature accruals, result in a negative income tax rate. By favoring these investments, these rules would lead to economic distortions.

Third, the deferral rule taxes the income earned on a reserve set-aside for the future obligation to the obligor. The obligor can be characterized as a custodian of these funds for the obligee or the transaction can be analogized to a loan from the obligee to the obligor. In either case, the income of the reserve should theoretically be taxed to the obligee, either as the person with the beneficial income interest, or as a lender entitled to interest on a loan. It is not generally feasible to tax the obligee on this income. The tax on the obligor, however, roughly achieves the proper result.

The deferral rule is also generally consistent with proper treatment under a theoretically pure consumption tax. Under such a tax, deduc-
tions for ordinary and necessary expenses and capital expenditures are permitted when funds are expended. This is almost precisely how pre-
mature accrual obligations are treated under the deferral rule, which only allows a deduction upon economic performance.

While a consumption tax and an income tax are useful models, the U.S. tax system conforms to neither. Indeed, one commentator has asserted that our system's tax treatment of capital investments does not resemble "any known conceptual model." It is therefore difficult to identify the appropriate standard by which to judge a particular rule. What is interesting, and appealing to this observer, is that the deferral rule is theoretically defensible under both a consumption tax and an income tax. The deferral rule thus is sound theoretically and an excel-
ent solution given the hybrid nature of our current tax system.

183 Kiefer I, supra note 34, at 35–36.