

AN INQUIRY INTO THE SPECIAL STATUS OF INTEREST PAYMENTS

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I. INTRODUCTION

Interest is a type of rental payment—an amount paid for the use of borrowed money.¹ Yet the tax code's treatment of interest payments differs markedly from the treatment afforded other types of rental payments. Interest payments, with a few exceptions,² are currently deductible regardless of the use made of the borrowed money.³ In contrast, the deductibility of other rental payments depends primarily on the taxpayer's use of the rented property. For example, the tax code prohibits the deduction of rental payments when the taxpayer's use of the rented property is personal.⁴ Similarly, rental payments used to create or improve a capital asset must be capitalized.⁵

Many commentators have criticized some features of the special status of interest payments.⁶ They have frequently objected, for exam-

1. For a discussion of this capsule definition, see Asimow, *The Interest Deduction*, 24 U.C.L.A. L. REV. 749, 751 (1977).

2. See note 8 *infra*.

3. I.R.C. § 163(a) provides: "General Rule—There shall be allowed as a deduction all interest paid or accrued within the taxable year on indebtedness." This general allowance was found in the personal income tax act adopted in 1913. Tariff Act of 1913, ch. 16, § IIB, 38 Stat. 167. It was also contained in the personal income tax enacted during the Civil War. Act of Mar. 3, 1865, ch. 78, § 117, 13 Stat. 479.

For a summary of the scant legislative history concerning the interest deduction in the personal income tax system, see Asimow, *Principal and Prepaid Interest*, 16 U.C.L.A. L. REV. 36, 62-63 (1968); Berger, *Simple Interest and Complex Taxes*, 81 COLUM L. REV. 217 (1981). For the history of the interest deduction under the corporate income tax, see Warren, *The Corporate Interest Deduction: A Policy Evaluation*, 83 YALE L.J. 1585, 1585-86 (1974).

4. Compare I.R.C. § 162(a)(3) (permitting deduction for "rentals . . . required to be made as a condition to the continued use or possession, for purposes of the trade or business . . .") with I.R.C. § 262 ("no deduction shall be allowed for personal, living, or family expenses"). This rule is so well established that cases arise only at the fringes. See, e.g., *Summers v. Commissioner*, 33 T.C.M. (CCH) 695 (1974) (rental payment to church for wedding party nondeductible personal expense); Rev. Rul. 68-12, 1968-1 C.B. 96 (Congressman's rental of apartment in his district nondeductible personal living expense).

5. I.R.C. § 263(a) prohibits deductions for amounts paid to acquire a capital asset, including construction costs. See *Commissioner v. Idaho Power Co.*, 418 U.S. 1, 16-17 (1974). Treas. Reg. 1.471-11(c)(2)(i)(d) (1973) requires taxpayers to treat rental payments as an inventory cost when the rented property is used to produce inventory items.

6. See, e.g., R. GOODE, *THE INDIVIDUAL INCOME TAX 150-52* (rev. ed. 1976); J. PECHMAN, *FEDERAL TAX POLICY 86* (rev. ed. 1977) (recognizing as important the problem of mismatching of income caused by a current interest deduction on loans used to acquire assets producing deferred gains); Bittker, *Income Tax Deductions, Credits, and Subsidies for Personal Expenditures*, 16 J. LAW & ECON. 193 (1973). For a concise analysis of the traditional arguments for and against a deduction for home mortgage interest and an extensive list of references to the literature, see Pomp, *Mortgage Interest and Property Tax Deduction: A Tax Expenditure Analysis*, 1 CANADIAN TAX. 23 (1979). See also W. Hellmuth, *Homeowner Preferences* in *COMPREHENSIVE INCOME TAXATION* 163, 172-79 (J. Pechman ed. 1980). The multitude of problems one encounters in attempting to identify interest payments are analyzed in Asimow, *supra* note 1, at 751-72.

ple, to the deductibility of interest on loans that finance the purchase of consumer durables, such as home mortgages.⁷ Congress has responded periodically to perceived abuses resulting from the special status of interest payments by enacting narrowly drawn exceptions to that special status.⁸ No one, however, has proposed a theoretically defensible, yet practicable, system for tracing interest payments to the use made of the "rented" money—a requirement for a tax system that would treat interest like other rental payments. Indeed, although no one has challenged the propriety of determining the tax significance of rental payments other than interest by referring to the use made of the rented property,⁹ several distinguished commentators have argued forcefully that tracing interest to the use made of the borrowed funds is administratively infeasible, theoretically objectionable, or both.¹⁰

These commentators attempt to defend the universal interest deduction of current law by demonstrating that a tracing requirement would be administratively unworkable and would give taxpayers who could finance purchases by drawing down their savings an unfair advantage over taxpayers who borrow to make the same purchases.¹¹

7. See Pomp, *supra* note 6, at 23-24.

8. Remedial rules are found in I.R.C. §§ 163(d) (placing \$10,000 ceiling on deduction for investment interest in excess of investment income), 170(f)(5) (preventing both an interest deduction and a deduction for charitable gift for same payment), 189 (requiring construction period interest to be capitalized by individuals, but permitting ten-year writeoff), 263(g) (requiring interest payments relating to certain straddle transactions to be capitalized), 264 (preventing deduction for interest paid to carry certain life insurance and annuity contracts), 265 (prohibiting deduction for interest paid to carry tax-exempt bonds), 267(a)(2) (prohibiting deduction for interest incurred by accrual basis debtor but not paid to cash basis creditor where debtor and creditor are related parties), 279 (limiting deduction for interest paid as part of cost of a large corporate acquisition), 385 (authorizing regulations distinguishing corporate debt from corporate equity), 461(g) (limiting deduction for prepaid interest), 465 (limiting deduction for interest paid on certain nonrecourse debts and other debts in which taxpayer bears no risk of personal liability for repayment).

9. The chief arguments for a special status for interest payments apply with equal force to other types of rental payments, as the following example illustrates. Consider *C* and his tax clone *D*, each of whom owns a lake front cottage, which each rents out every summer for \$1,000. Assume also that one summer *C* and *D* want to vacation at the lake themselves. *C* rents a cottage identical to his own from a neighbor for \$1,000, and continues to rent out his own cottage for \$1,000. *D* decides, instead, not to rent his cottage, but to use it himself. If *C* could deduct his \$1,000 rental payment he could use it to offset his \$1,000 rental income and end up in exactly the same tax position as *D*. Assuming it is desirable to equalize the tax treatment of those who rent and otherwise similarly situated taxpayers who enjoy imputed income from their own assets, *D* should be taxed on his imputed income or *C* should be given his deduction, even though *C*'s rental payments for a summer vacation constitute personal consumption.

The author is indebted to May Ping Soo Hoo for suggesting this example.

10. See Gunn, *Is an Interest Deduction for Personal Debt a Tax Expenditure?* 1 CANADIAN TAX. 46 (1979); White & White, *Tax Deductibility of Interest on Consumer Debt*, 5 PUB. FINANCE Q. 3 (1977).

11. White and White, for example, argue that the disallowance of an interest deduction on consumer debt would favor "asset finance over debt finance," a result they condemn. White &

Section II of this article refutes these arguments by articulating the principles that should govern the deductibility of interest in an ideal income tax system based on Haig/Simons principles¹² and by demonstrating that a tax system that consistently applies those principles would preserve the essential features of the tracing requirement generally applicable to other types of rental payments.¹³

The current tax system, of course, is not a pure Haig/Simons system. Perhaps its most significant departure from Haig/Simons principles is that it includes only realized income in the tax base. Section III develops and defends tracing rules that would operate fairly, at modest administrative cost, in an "ideal" realization system. Finally, Section IV illustrates the critical importance of good tracing rules in a tax system that departs even further from a Haig/Simons system by treating income from some sources more favorably than income from others.

II. A DEFENSE OF TRACING IN AN IDEAL INCOME TAX SYSTEM BASED ON HAIG/SIMONS PRINCIPLES

Taxpayers are as individualistic as snowflakes. They may differ in wealth and income, in their consumption and saving patterns, in their degree of enterprise, in their natural endowments, in their general appearance, and in countless other ways that affect their ability to obtain and enjoy economic benefits. A tax system that accounted for all the considerations that affect an individual's taxable capacity would not be

White, *supra* note 10, at 5. This contention is essentially a restatement of the widely cited arguments made earlier by M. White. White, *Proper Income Tax Treatment of Deductions for Personal Expense*, in 1 HOUSE COMM. ON WAYS AND MEANS, 86TH CONG., 1ST SESS., TAX REVISION COMPENDIUM 365 (Comm. Print 1959).

12. Simons defined income as follows:

Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in the value of the store of property rights between the beginning and end of the period in question. In other words, it is merely the result obtained by adding consumption during the period to "wealth" at the end of the period and then subtracting "wealth" at the beginning. The *sine qua non* of income is *gain*, as our courts have recognized in their more lucid moments—and *gain to* someone during a specified time interval. Moreover, this gain may be measured and defined most easily by positing a dual objective or purpose, consumption and accumulation, each of which may be estimated in a common unit by appeal to market prices.

H. SIMONS, PERSONAL INCOME TAXATION 50 (1938) (emphasis in original).

For Robert Haig's somewhat different formulation, see Haig, *The Concept of Income—Economic and Legal Aspects*, in READINGS IN THE ECONOMICS OF TAXATION 59 (R. Musgrave & C. Shoup eds. 1959).

13. In contrast to the treatment of other rental payments, commentators have uniformly treated interest as a current cost. For example, Musgrave and Musgrave assert that interest paid in a business setting "is properly deductible in computing taxable income. It is a cost of doing business, just as are wage payments." R. MUSGRAVE & P. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 307 (2d ed. 1976). The tax code, however, requires taxpayers to capitalize their wage payments if those payments are made to construct or acquire a capital asset.

a system at all—it would be complete chaos. All practical tax systems select a small number of quantifiable considerations that are used as either complete or partial proxies for the taxable capacity of individual taxpayers. An ideal income tax ignores differences in the taxable capacity of individuals, including arguably relevant differences in wealth and consumption, unless those differences effect a change in the income of those individuals.¹⁴ Stated most simply, similarly situated taxpayers under an ideal income tax are taxpayers with equal incomes.

Among tax specialists, the Haig/Simons definition of income is most commonly used in specifying the features of an ideal income tax. According to this income concept, the tax code should require taxpayers to include in income the benefits obtained from interest payments whenever those benefits constitute personal consumption or produce a net increase in accumulated savings.¹⁵ This deceptively simple rule leaves unresolved the problem of determining when these benefits constitute consumption or accumulation, as the following example illustrates.

The Airline Ticket Example. Assume that both *A* and *B* have a net salary income of \$12,000 in years one and two, and that both own a \$1,000 money market certificate paying 10% interest. Assume also that both *A* and *B* plan to vacation away from home, and for that purpose, they both purchase in year one a \$1,000 airline ticket. *A* finances the ticket purchase by cashing in his money market certificate. *B* finances the purchase by borrowing \$1,000 at 10% annual interest. In year two, *A* will receive no interest income on the cashed certificate and will have no interest payments to make, leaving \$12,000 of salary income subject to taxation. *B* will receive \$100 interest income on his certificate, giving him a total income of \$12,100, but he will have to make a \$100 interest payment on his loan. After *B* makes that payment, both he and *A* will have the same \$12,000 for consumption and accumulation.¹⁶

14. For a discussion of the strategy of a tax based chiefly on money income, see Andrews, *Personal Deductions in an Ideal Income Tax*, 86 HARV. L. REV. 309, 327-30 (1972). See also McIntyre & Oldman, *Taxation of the Family in a Comprehensive and Simplified Income Tax*, 90 HARV. L. REV. 1573, 1593 (1977).

15. For the Haig/Simons definition of income, see note 12 *supra*. Because the Haig/Simons income concept includes consumption and accumulation, interest payments would, by definition, be taxable when they fall into either category. But as explained in the text accompanying notes 19-22 *infra*, payments attributable to accumulation would enter the tax base only indirectly, through their impact on the taxpayer's store of goods at the end of the taxable period.

16. The example modifies the one offered by White and White, *supra* note 10, at 4, in two respects. First, White and White posit a situation in which an individual taxpayer faces the choice of either drawing down assets or borrowing. Their example does not address the fairness of an interest deduction, because a fairness argument, in contrast to the efficiency argument addressed

Thus equal tax treatment of *A* and *B*, achieved under current law by giving *B* an interest deduction, is intuitively appealing. But as will be seen,¹⁷ achieving this result in a Haig/Simons system requires modification of the tracing rules applicable to other types of rental payments.¹⁸

In discussing tracing rules one must not confuse these issues with issues that arise in characterizing payments after the tracing issues have been settled. Assume, for example, that the proceeds of a loan are properly traced to the purchase of an airline ticket. If the ticket was used for business purposes, then tracing, in effect, determines the character of interest payments on the loan. Technically, however, conclusions drawn from the use of the ticket determine the character of the interest payments. When the use of the ticket is ambiguous, a combined vacation and business trip for example, then tracing is only a step in the process of characterizing the payments.

A. *The Theory of Tracing.*

Because of the difficulty of directly measuring the consumption of individual taxpayers, every tax system, including one based on Haig/Simons principles, must look to sources of income as the starting point in identifying the tax base and in computing and collecting the tax.¹⁹ A taxpayer who asserts that he should have some portion of

by White and White, must compare the tax burdens on two or more taxpayers who are similarly situated. Second, White and White do not specify what assets the taxpayer can draw down for financing his consumption, a matter of great importance in both a tax on realized income and a Haig/Simons tax applied in a world with high transaction costs for liquidating some types of investments. The example in the text assumes that the taxpayers hold easily liquidated assets.

17. See text accompanying notes 22-23 *infra*.

18. In an ex ante consumption tax, equality of burdens could be achieved by exempting the interest income *B* earned on his money market certificate. A tax on potential income could achieve equality of burdens by taxing *A* on the income he could have earned if he had not called his money market certificate. For a brief discussion of these alternatives, see McIntyre, Book Review, 26 WAYNE L. REV. 1181, 1187-89 (1980).

19. No tax administration could conceivably determine each taxpayer's actual consumption by recording the value of all consumption expenditures (*C*). As a practical matter, consumption would have to be computed indirectly from presumably knowable information about income sources and about the change in value of assets held by the taxpayer. The following formula would yield Haig/Simons income (*HSY*):

- (1) Total income sources (money income plus the money equivalent of property and services received during the taxable year)(*S*); plus
- (2) Net increase in the value of assets held both at the close and the start of the year over their value at the start of the year ($OA_1 - OA_0$); plus
- (3) Value of assets acquired during the taxable year and held at the close of the year (*AA*); minus
- (4) Acquisition costs (*AC*); minus
- (5) Profit seeking expenses (*E*); minus
- (6) Personal expense deductions excludable from a refined consumption concept (*PD*).

gross income excluded from his taxable income must show that he has made expenditures—out of income sources, loan proceeds, or accumulated wealth—that qualify as a cost of earning income or that otherwise satisfy the tests for deductibility in the tax system. To make this showing, the taxpayer must trace his expenditures to their tax-significant use. For example, the payment of money to a university might be a deductible donation or a nondeductible tuition payment. Thus, tracing is a familiar, fundamental, and necessary feature of any net income tax system.

Because interest, by definition, is money paid to acquire the use of borrowed funds, tracing an interest expenditure to its initial use poses no special problem. Borrowed funds, however, are almost invariably used as a medium of exchange. This secondary use, the use made of the goods and services received in exchange for the borrowed funds, determines whether the interest payments qualify for exclusion from the tax base.²⁰ Thus the obvious problem for the taxpayer is that physically tracing borrowed dollars can in some cases be impossible,²¹ and

The above formula mixes consumption and accumulation. Consumption could be computed, however, by measuring accumulation and subtracting it from the sum of consumption and accumulation yielded by the above formula. Accumulation would equal the net value of all assets held by the taxpayer at the close of the taxable year (NW_1), minus the net value of assets held by the taxpayer at the start of the year (NW_0).

That formula may be expressed symbolically as follows, using the symbols defined above:

$$HSY = S + (OA_1 - OA_0) + AA - AC - E - PD$$

The elements of the traditional Haig/Simons definition may be expressed as follows:

$$HSY = C + NW_1 - NW_0$$

$$NW_1 = AA + OA_1 - L_1$$

$$NW_0 = SA + OA_0 - L_0$$

$$C = S - AC - E - PD + (L_1 - L_0) + SA$$

(where SA is the value of assets on hand that were valued at the start of the year and that were sold or exchanged during the year, and $L_1 - L_0$ is the net increase in liabilities at the close of the year over the liabilities at the start of the year).

The above formula excludes from Haig/Simons income the economic gain that accrues during the taxable year on assets held at the start of the year and sold for consumption during the year. In theory that element of gain could be taxed by valuing the assets at the time of sale, but that would be impractical. It would require recording the value of consumption expenditures, which the source formula is intended to avoid. See note 65 *infra* for an example illustrating this point.

20. Though rented property other than money is not commonly exchanged for other goods and services, on those occasions when it is, the tax code determines the tax-significant purpose of the rental payment by looking at the use made of the goods or services acquired in the exchange. For example, if an employer permitted an employee to vacation at a rented beach cottage, the employer usually could deduct the rental payment so long as he paid the rent in order to compensate the employee for services rendered. See Treas. Reg. §§ 1.162-7 (1958), 1.274-2(d)(iii) (1963).

21. The following example illustrates the impossibility of tracing in some instances. Consider *F*, a commercial farmer, who wants to spend \$1,000 for his daughter's wedding reception and another \$1,000 for feed for his hogs. In anticipation of these expenditures, *F* deposits \$2,000 in his checking account—\$1,000 from his savings account and \$1,000 from an unsecured bank

can cause his tax liability to be determined by his tax planning ability, rather than by his material well-being.

The airline ticket example illustrates the undesirable tax consequences of a rule that would require the taxpayer to trace the loan proceeds. In that example, physical tracing would prevent *B* from deducting his interest payment, a result that is intuitively unappealing, but easily avoided. The tax-sophisticated *B* would shuffle his affairs in the following manner. First, he would call his money market certificate and use the proceeds to buy his airline ticket. Then he would take out a \$1,000 loan, using the proceeds to purchase a money market certificate identical to the one he had just called. The use of the loan proceeds would then be a cost of acquiring an asset, includible in income under Haig/Simons only to the extent that the fair market value of *B*'s accumulation at the end of the taxable year exceeded his accumulation at the beginning of the year. Because *B*'s payment of interest on the loan would not increase the value of his money market certificate, the money he expended to pay the interest charge would not be includible in his tax base.²²

B should not be taxed on the portion of his gross income used to pay interest because no legitimate tax policy objective is served by a tracing rule that operates merely as a trap for the unwary. A tracing rule in an ideal income tax should presume that the taxpayer had spent his loan proceeds for a purpose other than consumption when he actually did so or when he could have done so merely by restructuring the form of his transaction. The taxpayer should lose his deduction, however, whenever his interest payment could be linked with an expenditure that arguably constituted consumption regardless of the changes he could have made in the form of his transaction.²³ Such a rule would

loan. *F* later writes two \$1,000 checks, one to the wedding caterer and one to the grain merchant. He also pays \$100 of interest on his loan. Under these facts, *F*'s actions in depositing his funds laundered their source.

22. Assume, for example, that *T*, a taxpayer, starts the taxable year without any savings and earns \$10,000 in wages during that year. Assume also that he borrows \$1,000 during the year, which he uses to buy a money market certificate with a face amount of \$1,000, which earns \$100 in interest income. Assume finally that he pays \$100 in interest on his loan and spends the balance of his income on consumption. Employing the formula set forth in note 19 *supra*, *T* would have Haig/Simons income of \$10,000 computed as follows: (1) \$10,000 plus (2) \$0 plus (3) \$1,000 minus (4) \$1,000 minus (5) \$0 minus (6) \$0.

23. Assume, for example, that *R*, a taxpayer, starts the taxable year holding land worth \$1,000. He earns \$10,000 during the year and borrows \$2,000. Assume that he spends all his available dollars on consumption. Under these assumptions, if *R* uses \$1,000 of the loan proceeds, he is able to consume without selling his land. The other \$1,000 of the loan, however, could not be traced to anything but consumption under any conceivable tracing rule.

In the above example, tracing would determine the character of an interest payment if the character of the actual or hypothetical use of the loan proceeds was unambiguous. If the loan

remove the trap for the unwary without creating a special status for interest payments distinct from the tax treatment accorded other types of expenditures.

The proposed rule for interest payments would be simple to apply due mainly to the tax treatment of acquisition costs under a practical Haig/Simons system. Because practical Haig/Simons uses gross income as the starting point in identifying the tax base, all acquisition costs—even those made to purchase consumer durables—would be deductible. The accumulation component of income would enter the tax base only once through the valuation of assets held by the taxpayer at the close of the taxable year.²⁴ When this treatment of acquisition costs is combined with the proposed tracing rule, a borrower could deduct interest payments on a loan to the extent that his loan proceeds in the year of the loan did not exceed the value of his assets (net of liabilities from prior years) on hand at the close of that year. For taxpayers with a positive net worth at the end of the taxable year, the proposed tracing rule would identify their interest payments as deductible acquisition costs.²⁵ Only taxpayers whose borrowings exceeded the value of their assets would need to be concerned about the mechanics of tracing.

proceeds were traced to an ambiguous expenditure—an entertainment expenditure that arguably constituted a business expense and arguably constituted consumption, for example—then tracing would be the first, but not the final, step in characterizing the interest payments on the loan.

24. Consider, for example, Mr. *T*, a taxpayer with no assets at the start of the taxable year who earns gross wage income for the year of \$10,000: \$1,000 of which he spends for business expenses; \$6,000 of which he spends on a work of art; and \$3,000 of which he spends on consumption. Assume that at the close of the taxable year, the art piece was worth \$11,000. Under the classical Haig/Simons income definition, Mr. *T*'s net income for the year would be \$14,000, computed by valuing his consumption during the year—\$3,000—and adding to it the net change in his savings—the value of the art piece at the close of the taxable year. The cost of the art piece and the amount of his business expenses would have no direct impact on his income; indirectly they would reduce his income by reducing resources otherwise available for consumption or for the acquisition of other assets.

A Haig/Simons system that initially included all income sources in income would need to give Mr. *T* a deduction for his acquisition costs in order to prevent those costs from entering the tax base twice. Thus, Mr. *T* would compute his income under the above facts by taking his gross wage income of \$10,000, subtracting his acquisition costs of \$6,000 and his business expenses of \$1,000, and adding the value of his art piece at the close of the year, for total income of \$14,000. The chief advantage of this alternative method of measuring income is that it obviates the need to measure directly the value of the taxpayer's consumption. For a more formal discussion of the relationship between a classical Haig/Simons system and one that begins with gross income, see note 19 *supra*.

25. Like all other acquisition costs, interest payments properly traced to the acquisition of an asset would have no direct effect on taxable income under the classical formulation of the Haig/Simons income definition, but would be deductible in a Haig/Simons system that uses gross income as the starting point in specifying the tax base. Consider for example, Mr. *S*, a taxpayer, who started the taxable year without any savings and who earned \$10,000 in wages during that year. Assume that he borrowed \$1,000 during the year, which he used to buy a nonappreciating money market certificate paying \$100 annual interest. Assume finally that Mr. *S*. paid \$100 in interest on his loan and spent the balance of his income (\$9,000) on consumption. Under these

Taxpayers who borrowed in excess of their assets would first trace their loans to the actual or to a deemed reacquisition of those assets. The balance of their loan proceeds would then be traced to their current expenses, first to their deductible business expenses and then to their personal consumption expenses. Only interest paid on loans traceable to consumption would not be deductible. The taxpayer would bear the burden of proving the amount of business expenses paid, though to avoid the trap for the unwary, he would not be required to trace the borrowed funds to the business expense.

B. *The Argument for Denying a Deduction for Interest Attributable to Consumption.*

Taxpayers who purchase consumption goods with borrowed money pay a cost in addition to the purchase price. The extra cost is interest—the rental fee paid for the use of the borrowed money. That a cost of consumption falls within the definition of consumption seems to be a self-evident proposition. But that proposition is hotly disputed among tax specialists.²⁶

Advocates of the universal interest deduction (UID) turn the argument for classifying interest as consumption on its head. They contend that because interest makes consumption more costly for borrowers than for savers, it should be excluded from the definition of consumption.²⁷ The following example illustrates both the crux of their argument and the response of this article by showing the potential impact of the interest deduction on the relative burdens of borrowers and similarly situated taxpayers who draw down their savings.²⁸

facts Mr. *S* would have Haig/Simons income of \$10,000. Using the classical Haig/Simons formulation, that result would be reached by adding his consumption of \$9,000 to the \$1,000 net increase in his savings. Using gross income as the starting point, Mr. *S* would get that same result by subtracting from his gross income his acquisition costs of \$1,100 (the cost of the money market certificate plus the interest payment) and adding to gross income the value of his money market certificate at the close of the taxable year. Using the formula set forth in note 19 *supra*, Mr. *S* would compute his Haig/Simons income as follows: (1) \$10,000 plus (2) \$0 plus (3) \$1,000 minus (4) \$1,100 minus (5) \$0 minus (6) \$0.

26. See Gunn, *supra* note 10, at 49. Gunn argues correctly that interest on consumer debt should not be classified as consumption merely because of the taxpayer's subjective intent in incurring the debt. But Gunn's attack is not relevant to the argument addressed here for classifying interest as consumption. The correct argument for classifying interest as consumption arises because the taxpayer exchanges borrowed dollars for consumption goods. Subjective intent has relevance in determining the character of expenditures only when the tax-significant purpose of the expenditure is ambiguous—as may occur, for example, with certain business-related entertainment and travel. No such ambiguity about the use of borrowed funds exists, however, when the taxpayer borrows money to finance a vacation.

27. See, e.g., Gunn, *supra* note 10, at 48-49.

28. This example bypasses issues concerning the design of tracing rules by considering tax-

The Ant/Grasshopper Example. Consider two taxpayers, both of whom have a net salary income of \$12,000. Mr. Ant, a thrifty person, holds a \$1,000 money market certificate earning 10% interest; Mr. Grasshopper, who is a spendthrift, has accumulated no savings at all. Assume that Mr. Ant and Mr. Grasshopper both spend \$1,000 on a personal vacation. Mr. Ant finances his vacation by cashing in his demand certificate. Mr. Grasshopper finances his by borrowing the \$1,000 at 10% interest. Assume also that Mr. Grasshopper pays \$100 in interest on his loan, and that he and Mr. Ant spend all of their remaining net income on food and recreation. Both have enjoyed the benefit of a vacation worth \$1,000, but Mr. Ant has \$100 more than Mr. Grasshopper to spend on food and recreation. Unless permitted a deduction for his interest payment, Mr. Grasshopper will pay the same amount of tax as Mr. Ant despite this difference in spending power.

Mr. Ant undoubtedly enjoys an economic advantage over Mr. Grasshopper. But all differences in the economic conditions of taxpayers do not justify differences in tax burdens. Differences in economic conditions must reflect differences in income before they merit response in an ideal income tax system.²⁹

payers who use all their gross income (after taxes) either to pay interest or to purchase goods that indisputably constitute consumption.

29. Apparently, White and White believe that a difference in taxable capacity means that there is a difference in income. They state:

The income definition generally accepted as ideal is that formulated by Simons (1938: 50) as the algebraic sum of consumption and net change of assets over an accounting period. By this definition, the act of asset accumulation in one period implies accretion of income in subsequent periods because of the positive rate of return that will ordinarily be earned, whereas the act of consumption does not.

Suppose, for example, an individual chooses a traveling vacation in year 1, the cost of which exceeds his alternative of vacationing locally by the amount of transportation expense. In year 2 his Simons income will be lower than if he had chosen a local vacation and saved the transportation expenses, by the amount of interest on that saving. This will be true regardless of how he finances the travel: if he does it by drawing down his own assets, interest earned on assets in year 2 will be lowered; if he finances the travel by incurring debt, interest payments in year 2 will reduce the net interest component of his income. In other words, the act of consumption in the present, in and of itself, implies sacrifice of future income irrespective of the means by which the consumption is financed.

Now, if tax law definition of income is to conform to the Simons concept, the effect of the traveling vacationer's consumption in period 1 on his income in period 2 must be allowed for in the computation of taxable income. If the individual finances the travel by drawing down his own assets, the tax allowance is automatic—the interest income that would otherwise be included in taxable income in period 2 is simply not there. If, on the other hand, the travel is debt-financed, then deduction of the resulting interest cost must be explicitly allowed in period 2; otherwise taxable income would be overstated relative to Simons income.

White & White, *supra* note 10, at 4.

Mr. Ant's economic advantage over Mr. Grasshopper stems from his previously accumulated wealth. Because of his savings, Mr. Ant is able to spend in excess of his income without incurring interest expense. Mr. Ant would have enjoyed the same relative economic advantage over Mr. Grasshopper whether Mr. Grasshopper had borrowed nothing, and paid no interest; or had borrowed more than \$1,000, and paid over \$100 interest. Society could tax Mr. Ant on the economic advantage conferred by his savings by enacting a wealth tax, but it could not tax him systematically on that advantage under an ideal income tax.³⁰

The UID does not equalize the burden on a taxpayer with accumulated wealth and one without such wealth when the taxpayer without wealth fails to borrow. It undercompensates the taxpayer without wealth, according to wealth tax criteria, whenever he borrows less than the amount of the savings consumed by the taxpayer with accumulated wealth. It overcompensates the taxpayer without wealth whenever he borrows more than the amount that the taxpayer with accumulated wealth spends out of savings.³¹

There is serious question, moreover, about the need for any adjustment in tax burdens on account of the economic advantage resulting from accumulated wealth, at least when an ideal income tax has been in operation from time immemorial.³² Consider the following variation on the Ant/Grasshopper example. Assume that Mr. Ant and Mr. Grasshopper both begin their income producing lives without accumulated wealth and that each has a fixed salary of \$12,000. Assume also that in their first income-producing year, Mr. Ant saves \$1,000 and Mr. Grasshopper saves nothing. Assume finally that in their second year,

Gunn rejects White and White's argument but defends the UID on the ground that in a Haig/Simons income tax system, tracing disadvantages taxpayers whose income is derived from labor. Gunn, *supra* note 10, at 48-49. Presumably, Gunn would not extend his argument to interest payments made in the ideal realization system described in Section III or the tax system that made the source distinctions described in Section IV.

30. For a thoughtful discussion of this point, see Andrews, *Fairness and the Personal Income Tax: A Reply to Professor Warren*, 88 HARV. L. REV. 947, 956-58 (1975).

31. Consider two taxpayers, *A* and *G*. *A* has savings of \$1,000 earning a 10% return and *G* has no savings. *A* has earnings of \$12,000 and *G* has earnings of \$12,000. Assume *A* spends his savings on consumption, forgoing his potential investment income. If *G* borrows \$500 and pays interest of 10%, he will pay a higher tax than *A* even if he is permitted to deduct his \$50 interest payment. If *G* borrows \$10,000 for consumption and pays interest of \$1,000, an interest deduction will permit him to pay less tax than *A*, even though *G*'s income was the same as *A*'s and his consumption was greater than *A*'s.

32. The best argument in favor of a wealth tax is that an income tax inherently tends to perpetuate the status quo. If the distribution of wealth prior to the introduction of the income tax is considered unfair, then a wealth tax or a consumption tax should be added to the tax system to help diminish that perceived unfairness. See Andrews, *supra* note 30, at 957.

they behave exactly as they did in the first example. Under these assumptions, the economic advantage represented by Mr. Ant's \$1,000 nest egg has been reflected in the income tax burden imposed on him during the first taxable year. That economic advantage provides no basis for an extra income tax burden on Mr. Ant or a diminished burden on Mr. Grasshopper in later years.

Mr. Ant's economic advantage in the above example is a necessary by-product of the decision to make actual rather than potential income the base of the income tax. As many commentators have noted, that choice of bases does not always work to the advantage of savers.³³ In many situations, it forces savers to pay a so-called "double tax" on savings, as the following variation on the Ant/Grasshopper example illustrates.

Assume that Mr. Ant and Mr. Grasshopper both begin their tax lives without any accumulated wealth and with an annual income stream from wages of \$12,000. Assume also that Mr. Ant saves \$1,000 in year one and Mr. Grasshopper saves nothing. Assume finally that Mr. Ant earns \$100 on his savings in years two and three and then spends the \$1,000 he saved in year one on a vacation in year four. Under these facts, Mr. Ant will be taxable on \$100 of investment income in years two and three and thus will pay higher income taxes than Mr. Grasshopper over the four-year period. The two taxpayers had equivalent economic opportunities during that period, however, because Mr. Grasshopper could have earned interest income in years two and three if he had elected to save in year one.

C. *Economic Implications of Tracing.*

In a world without taxes, an individual's choice between financing consumption by borrowing and financing consumption by drawing down assets would turn on the complex interplay of many considerations.³⁴ The two considerations emphasized by advocates of the UID are the interest rate at which the individual can borrow money and his estimated rate of return on the assets he holds. Advocates of the UID assert that an ideal income tax that requires tracing would make the choice of drawing down assets more attractive than it would be in a

33. See, e.g., Dyer, *The Relative Fairness of the Consumption and Accretion Tax Basis*, 1978 UTAH L. REV. 457, 485-87.

34. Those considerations would include, among others: (1) the rate of return the taxpayer could earn on his retained assets; (2) the rate at which he could borrow; (3) his ability to borrow at any rate; (4) the transactional costs involved in drawing down his assets; (5) his preference for liquidity; (6) his subjective evaluation of his retained assets; (7) his expectations about changes in economic conditions; and (8) the nature of his ownership rights in his retained assets.

tax-free world by lowering the after-tax return on assets without changing the after-tax cost of borrowing.³⁵ This assertion is intended not only as a defense of a UID but also as a criticism of the physical tracing rule generally applicable to expenditures other than interest.³⁶ It is not a valid criticism, however, of the modified tracing rule proposed in this article.

This article advocates a tracing rule that denies taxpayers a deduction for interest only to the extent that their borrowings exceed their assets. Denying an interest deduction to taxpayers without any assets obviously does not affect their choice between borrowing and drawing down assets, because they have no such choice. Taxpayers with assets who do face this decision should be permitted to take an interest deduction. These taxpayers would be denied an interest deduction only when their borrowings exceed their assets. But at that point they would no longer have the choice of drawing down assets.³⁷

This tracing rule would ameliorate the economic defect of the UID—its tendency to encourage taxpayers to borrow for consumption. In a world without taxes, an individual who borrows in order to consume would have to pay the market interest rate on his loan. The UID allows an individual to use the deduction given for interest on his consumer loan to reduce his taxes otherwise due.³⁸ Consequently, the taxpayer's effective interest rate on the consumer loan falls below the market rate.³⁹

35. See, e.g., Gunn, *supra* note 10, at 47.

36. *Id.*

37. Assume, for example, that *P*, a taxpayer, borrows \$1,000 to buy a television at a time when he holds \$500 in his savings account and has no other assets. The first \$500 of the loan proceeds will be traced to the savings account so that interest on that portion of the loan will be deductible. *P* will get no interest deduction on the \$500 balance, but he will not have a tax incentive to draw down assets, because spending his \$500 will change the tracing for the loan proceeds, making them nondeductible.

38. Assume, for example, that *C*, a taxpayer who holds no assets at the start of the taxable year, has a salary income of \$10,000 and no other income. Assume also that he borrows \$1,000 at the start of the year and pays interest of \$100. He spends the loan proceeds and his salary income on personal consumption. In a society that does not tax income, *C*'s out-of-pocket interest cost is \$100. In a tax system that imposes a 40% tax on net income and gives a UID, *C* could use his \$100 interest deduction to shelter \$100 of consumption from tax, thereby saving \$40. His out-of-pocket interest cost, therefore, is only \$60. This example, of course, abstracts from possible effects of an income tax on the market rate of interest.

39. If we assume, as economists often do, that an ideal tax operates in an ideal world populated by economically rational persons, then a pure physical tracing rule without the modifications advocated here probably will not favor the choice of drawing down assets over borrowing because taxpayers will structure their borrowing to avoid the trap for the unwary which the rule creates. Curiously, economists generally assume that the only solution to a trap for the unwary is a tax system in which all forms of economically equivalent transactions receive the same tax treatment. Lawyers, in contrast, generally cease to worry about such pitfalls once taxpayers have been in-

III. THE DEDUCTIBILITY OF INTEREST PAYMENTS IN A SYSTEM THAT TAXES ONLY REALIZED INCOME

All tax systems use realized income, not Haig/Simons income, as their starting point in defining the tax base. In a realization system no gain or loss is included in the tax base until it materializes in, or is "realized" by, a transaction. The realization system recognizes that annual valuation of the assets of all taxpayers, as Haig/Simons demands, is not feasible.⁴⁰

The tax base in a realization system differs from that of a system based on Haig/Simons in three respects. All three differences affect principally the taxation of gains or losses on assets. First, the tax base in a realization system does not include Haig/Simons gains or losses that arise but are not realized during the current tax year. Second, the tax base in a realization system includes gains and losses that arose under Haig/Simons in a prior year but are not realized until the current year. Finally, the tax base in a realization system would be reduced by an estimate of the loss in value of wasting assets by using depreciation or some other cost-recovery method.⁴¹ Other than these three exceptions, the bases of the ideal realization system and the Haig/Simons system are identical.⁴²

formed about the techniques for avoiding them. The difference in outlook may occur because economists often are paid to design rules that avoid such inequities, whereas lawyers often are paid to lead taxpayers around the traps that tax statutes inevitably create.

40. Commentators generally have not attempted to defend the realization rule on theoretical grounds. See, e.g., Shoup, *The White Paper: Accrual Accounting for Capital Gains and Losses*, 18 CANADIAN TAX J. 96 (1970). In the recently adopted tax-straddle legislation Congress requires taxpayers to offset their realized straddle losses with their unrealized gains before claiming any losses—a significant departure from the realization doctrine. I.R.C. §§ 1092, 1256 (added by Economic Recovery Tax Act of 1981, §§ 501, 503, Pub. L. No. 97-34, 95 Stat. 323, 327).

41. See Brown & Bulow, *The Definition of Taxable Business Income*, in COMPREHENSIVE INCOME TAXATION 241, 244 (J. Pechman ed. 1977).

42. The following definitions express the relationship between the two bases. Realized income is equal to:

- (1) Total gross income received during the taxable year (money income plus the money equivalent of other acquired property and services), minus the sum of
- (2) Basis of assets disposed of during the year, plus
- (3) Estimated depreciation, plus
- (4) Profit seeking expenses, plus
- (5) Personal expenses excludable from the refined consumption concept.

Haig/Simons income is equal to:

- (1) Realized income, plus
- (2) Unrealized income arising in the taxable year, minus
- (3) Realized income that arose in a prior taxable year, plus
- (4) The excess of "real" depreciation (the actual change in value, during the taxable year, of assets held by the taxpayer) over estimated depreciation.

In a Haig/Simons system all interest payments, except those attributable to personal consumption, are deductible from the taxpayer's income sources in computing taxable income. Inter-

The interest deduction rules proposed in this section are patterned after the rules generally accepted as applicable to expenditures other than interest in a realization system. An ideal realization system includes in the tax base the personal consumption and accumulation components of realized income, and denies a deduction for expenditures not traceable to current profit-seeking activities or to some other deductible use.⁴³

Expenditures attributable to the acquisition of an asset used for business or pleasure become part of the taxpayer's cost basis in the asset. Basis is an unnecessary concept under Haig/Simons because each year the gain or loss in the value of the asset is recognized in the tax base; under the realization system, the amount received on the disposition of an asset, less its basis, defines taxable gain or loss. If the taxpayer is entitled to a depreciation or similar deduction in the current year, he must reduce the asset's basis by the amount of the deduction.⁴⁴

The need to determine the historical cost basis of the asset complicates the treatment given to interest payments in a realization system. Interest payments financing either current consumption or realized accumulation generally can be taxed as under Haig/Simons, but interest

est payments attributable to accumulation enter the tax base indirectly through their impact on the taxpayer's store of wealth on hand at the close of each taxable year. See note 19 *supra*.

43. Some commentators argue that only profit-seeking expenses should be deductible from income sources in an ideal tax on realized income. See S. SURREY, *PATHWAYS TO TAX REFORM* 12-14, 20-22 (1973). Others suggest that a deduction for some personal expenses, such as medical costs, would provide a better measure of net accretion. See Andrews, *Personal Deductions in an Ideal Income Tax*, 86 HARV. L. REV. 309, 331-43 (1972); Turnier, *Evaluating Personal Deductions in an Income Tax—The Ideal*, 66 CORNELL L. REV. 262 (1981). This dispute is beyond the scope of this article.

44. Most tax analysts would add interest to the basis of assets acquired with borrowed funds when the interest is paid prior to the construction of the assets, but they have not generalized this rule for all interest payments. See I.R.C. § 189. Tax analysts have realized the need, however, to capitalize payments other than interest when those payments are made to acquire a capital asset. The following example illustrates the contrast between the proper treatment of rental payments in a Haig/Simons tax and a realization system. Consider the XYZ Power Company, a taxpayer that has undertaken to build an electric generating plant for use in its business. Assume that the construction costs for the plant total one million dollars, which includes a \$100,000 rental fee paid during the taxable year for use of cranes and other heavy equipment. Under Haig/Simons the rental fee would not enter directly into the tax base, even if it were paid out of current income sources. Instead, XYZ would compute its taxable income by adding together its consumption for the year, presumably zero, and the net change in its worth for the year. Because the power plant will constitute a portion of XYZ's wealth at the close of the taxable year, the costs of acquiring the plant, including the \$100,000 rental fee, indirectly enter into the tax base.

Under a realization system, the \$100,000 rental fee would constitute part of XYZ's basis in the power plant, recoverable in later years through deductions for depreciation. The rental fee would not reduce XYZ's taxable income for the year, even if the fee were paid out of current income sources. In effect, a tax on realized income would trace the \$100,000 rental fee to the construction of the generating plant and would treat it as the cost of an undivided one-tenth share of the plant.

payments financing unrealized accumulation must be traced to the benefit financed and are deductible only if the benefit financed is introduced into the tax base. The following variations on the airline ticket example illustrate this problem.

Assume, as in the original airline ticket example,⁴⁵ that *A* and *B* each has an annual salary income of \$12,000 and each holds an asset worth \$1,000. Assume, however, that instead of money market certificates paying 10% annual interest income, each holds vacant land that has not appreciated in value since the time of purchase. Assume finally that *A* buys the ticket for his vacation from the proceeds of the sale of his land and that *B* finances his ticket by borrowing \$1,000 at 10% interest. Under a strict physical tracing rule, *B* would not receive a deduction for his interest payments, since he used his loan proceeds for personal consumption. In contrast with a Haig/Simons system, no deduction would be allowed even if *B* could trace the loan proceeds to a deemed repurchase of his land, because land is a nondepreciable capital asset and no acquisition costs are deductible until gain or loss is realized. This result is intuitively appealing because it causes both *A* and *B* to have taxable income of \$12,000 and thus to pay equal taxes. To achieve this result the tax system requires a practicable and theoretically justifiable method for tracing the proceeds of the loan to their tax-significant use.⁴⁶

Although a proper tracing rule would have to tie loan proceeds to their tax-significant use to justify denying *B* his current deduction, the rule would also have to be constructed to minimize traps for the unwary taxpayer. Consider the following variation. The tax-sophisticated *B*, faced with a physical tracing rule, sells his land, uses the proceeds to purchase his airline ticket, and then repurchases his land with the proceeds of his loan. The shuffle would not make his interest payments deductible, but it would cause them to be added to his basis in the land, instead of being attributed to personal consumption. This type of trap for the unwary has no analogue in a Haig/Simons income tax system because taxpayers in that system receive the same tax benefit from capital expenditures as they receive from current profit-seeking expenditures.⁴⁷

Eliminating such traps is not always desirable. Assume that *A* and *B* are both holding bonds worth \$1,000 paying 10% annual taxable in-

45. See text accompanying notes 16-18 *supra*.

46. Without a workable tracing rule, the tax treatment of all interest payments must be identical because the system is unable to attribute such payments to the financing of accumulation as opposed to consumption.

47. Both would be deductible. See note 19 *supra*.

terest. Also assume that *B* purchased his bond for \$800, while *A* paid the face amount of \$1,000. Assume finally that *A* sells his bond to finance his trip and *B* borrows \$1,000 to purchase his airline ticket. Under a Haig/Simons system *B* would be permitted to trace his interest payments to the deemed repurchase of his bond and therefore would get his interest deduction. Under a realization system, however, this result is intuitively unappealing, because an actual sale and repurchase of the bond would force *B* to realize a \$200 taxable gain. Thus the deemed repurchase rule would not only eliminate a trap for the unwary, but it would also give *B* a tax advantage that he could not otherwise obtain.

As a final example, assume that *A* and *B* are both holding XYZ stock worth \$1,000, which is appreciating at the rate of 5% annually and pays 5% annual dividends. Assume also that *A* sells his stock and that *B* gets his \$1,000 by borrowing at 10% annual interest. Under these assumptions, *A* and *B* would pay equal taxes only if *B* were allowed a deduction for half of his interest payments—an impossible result under any tracing rule. Yet equal treatment of *A* and *B* has the same intuitive appeal in this case as it had under the facts of the first variation of the airline ticket example.⁴⁸

Equal treatment of *A* and *B* can be achieved by treating the interest payments as part of the cost of the current income stream from the XYZ stock, and by permitting *B* to recover that portion of the cost currently. But the theoretical justification for such a departure from the generally accepted cost-recovery mechanisms of a realization system requires a special tracing rule capable of matching interest payments to the income stream they finance.

A. *Proposed Tracing Rules.*

To solve the problems discussed and to give all taxpayers the benefits of expert tax planning, the ideal realization system should employ the following two tracing rules. Rule One directs taxpayers to trace the proceeds of purchase-money loans—for example, home mortgages and consumer credit loans—to the purchases the loan proceeds finance. Rule Two has three components and governs the tax consequences of interest paid on untied loans.⁴⁹ The first component presumes that tax-

48. See text accompanying notes 16-18 *supra*.

49. This article does not attempt a comprehensive definition of a "tied" or an "untied" loan, but simply classifies as "untied" all loans not of the purchase money type. An untied loan does not depend on the existence of security for the loan, but rather on the limitation on the use of the loan proceeds. Thus "fungible" and "nonfungible" might be more descriptive terminology. Most initial home mortgages are tied loans but most second mortgages are untied loans.

payers spend the proceeds of untied loans on purchases made during the taxable year in which the loan proceeds were received. The burden should be on the taxpayer to rebut this presumption. The second component establishes a conclusive presumption that taxpayers contracting more than one loan during the taxable year spend the proceeds of their loans in the order the proceeds were received. The third component directs taxpayers to match their actual purchases made during the tax year with the proceeds of untied loans according to the following accounting conventions:

First, to current business expenses for the year;

Second, to purchases of depreciable properties or other income producing properties that generate an annual deduction under the tax system's cost recovery mechanisms;⁵⁰

Third, to purchases of other income producing property;

Fourth, to purchases of consumer durables; and

Fifth, to current consumption expenses.

Allocation according to the above plan would attribute untied borrowed dollars and their associated interest payments to the use that would give the taxpayer the tax benefits he could have achieved through optimal tax planning under a physical tracing rule that operates without conventions.⁵¹ The following example illustrates how the plan would operate for taxpayers making untied loans.

Q, an investment consultant who has a gross business income of \$26,000, takes out an unsecured loan of \$14,000 during the taxable year. Assume that his only asset at the start of the year is a personal residence, purchased for \$60,000, on which he has an outstanding purchase-money mortgage of \$40,000. Assume also that he has made the following expenditures during the year: \$4,000 for interest on his home mortgage; \$1,000 for job-related travel; \$5,000 for the purchase of a money market certificate; and \$3,000 for remodeling his home. Assume finally a balance of \$27,000 for personal consumption, with a reserve for taxes. Under these assumptions Rule One would not directly come into play because *Q* made no purchase-money loans during the year. Unless *Q* produced evidence to the contrary, the proceeds of

50. These purchases would usually be of depreciable property, but could also be of certain income-producing intangibles that would provide a current deduction under the cost-recovery mechanisms suggested in the text accompanying notes 66-67 *infra*. The ordering among types of income-producing property could easily be provided by an operating system in a way that minimized traps for the unwary.

51. Taxpayers would be entitled to a deduction greater than the maximum allowable under a physical tracing rule whenever an asset acquired before the loan had appreciated in value by the time the loan proceeds had been spent. Under a physical tracing rule, the taxpayer would be forced to realize his gain to be able to trace his loan proceeds to the appreciated asset. See note 65 *infra*.

the \$14,000 loan would be attributed under Rule Two to expenditures made during the taxable year. The first \$1,000 of the loan proceeds would be allocated to the job-related travel. Interest for that portion of the loan would be deductible when paid. The next \$5,000 of the loan would be allocated to the money market certificate and capitalized.⁵² Three thousand dollars would then be allocated to the renovation of the house and \$4,000 to the payment of interest on the purchase-money mortgage. Interest paid for these portions of the loan would become part of *Q*'s basis in his home.⁵³ The balance of \$1,000 would be allocated to personal consumption. Only interest tied to the personal consumption portion of the loan would provide no present or future tax benefit to *Q*.

B. *The Practicability of Physical Tracing.*

1. *Rule One: Physical Tracing for Purchase-Money Loans.* Physically tracing borrowed funds to a particular use is sometimes difficult and occasionally impossible. For example, a taxpayer who deposits his borrowed funds in a checking or savings account destroys the possibility of physical tracing because his bank balance makes no distinction between deposits on the basis of source.⁵⁴ In a substantial number of situations, however, physical tracing is easy. For home mortgages and most other loans made to acquire real property, the lender requires the borrower to spend the loan proceeds for a previously agreed upon use. Often the lender will send the loan check directly to a seller in order to protect his security interest in the purchased asset. Most consumer credit given by department stores and other retail outlets can be linked easily to particular purchases, though revolving credit plans complicate the tracing problem.⁵⁵ Similarly, wholesalers and distributors usually receive trade credit from their suppliers for identified goods. Virtually all installment sales contracts tie the installment loan to an identified purchase. The above types of purchase-money loans represent the bulk

52. The interest paid for that portion of the loan would be recoverable under the tax system's cost recovery mechanisms for income-producing intangibles. See text accompanying notes 66-67 *infra*.

53. The \$4,000 mortgage interest would be added to *Q*'s basis in his home under Rule One.

54. See note 21 *supra*.

55. Customers charging more than one item usually pay interest on their total unpaid balance without any specific tracing of interest payments to particular purchases. After some payments of interest and principal have been made, it becomes impossible, absent some accounting convention, to know the amount of the unpaid principal on any one of the charged purchases. This tracing problem has significance, however, only if some of the charged purchases had a business purpose and some had a personal purpose.

of commercial loans made in the United States.⁵⁶

The result of tying purchase-money loans to specific purposes is that instead of fungible dollars,⁵⁷ purchase-money borrowers receive goods and services in exchange for their promises to pay interest and principal on their loans. As shown by the variations of the airline ticket example, physical tracing of purchase-money loans does not create traps for the unsophisticated unless three conditions exist. First, the borrower must have available a source of funds, other than his loan, which he can use to finance his consumption. Second, he must be able to use those funds without incurring tax on an unrealized gain. Finally, the borrower must be free to divert his loan proceeds from the consumption purchase to the one that will generate a tax benefit, *i.e.*, he must have the choice between a purchase-money loan and an untied

56. The table below shows amounts borrowed by individuals through United States Credit Markets in 1979:

By Sector and Instrument	Amount	Percent
Households:	\$165	80%
Mortgages	109	53
Consumer Loans	44	21
Other	12	6
Farms:	26	13
Mortgages	16	8
Other	10	5
Nonfarm Noncorporate	16	8

Billions of dollars, figures are rounded.

Source: Financial and Business Statistics, 66 Fed. Res. Bull. A44 (Sept. 1980).

Mortgages and installment credit loans represented about seven-eighths of all commercial loans made to individuals in 1979. Of the \$382 billion in consumer credit outstanding (other than mortgages) during 1979, 30% was for installment automobile loans, 14% was for revolving installment loans, 4% was for installment mobile home loans, and 32% was for other installment loans. Only 19% was for noninstallment loans. 66 Fed. Res. Bull. A42, A44 (Sept. 1980).

57. Many commentators assume that the proceeds of a loan can be spent for anything the taxpayer desires. They then conclude that fungibility makes a farce of tracing. See Note, *The Deductibility of Interest Costs by a Taxpayer Holding Tax-Exempt Obligations: A Neutral Principle of Allocation*, 61 VA. L. REV. 211, 221 (1975).

Gunn restates the classical fungibility argument against tracing as follows:

But even if taxpayer purpose could somehow be established, denying interest deductions to those who borrow for personal as opposed to business reasons would make no sense. Compare a taxpayer who borrows \$100,000 to buy business assets, and who later uses his own cash to buy a \$100,000 house with another who borrows the same amount to buy a house and later uses money not borrowed to buy business assets. The first might be said to have had a business motive for borrowing, and the second a personal motive. Yet each, after buying the business assets and the house, is in the same economic position as the other; each has the same gross income, the same interest payments, and the same annual consumption. A taxpayer's motive for borrowing is not only hard to find, it is not even worth looking for.

Gunn, *supra* note 10, at 47. In Gunn's example, the apparent unfairness to the person using borrowed funds to purchase his house is illusory because the taxpayer could have easily avoided the less favorable tax consequences by using the borrowed dollars for business. He has identified a trap for the unwary, not a fundamental fairness problem.

loan. Those borrowers who can meet all three conditions, however, will be confronted by the previously discussed traps for the unwary taxpayer.⁵⁸ Those traps are tolerable in a tax system based on realized income because they arise infrequently.⁵⁹

The most important purchase-money loan is the home mortgage. Although few home purchasers have the option of making an untied loan, a significant number probably have some discretion concerning the size of their down payment.⁶⁰ Because lending institutions usually favor large down payments,⁶¹ perhaps they could be relied on to eliminate the trap for the unwary by informing borrowers of the possible tax advantage of untied loans.⁶²

Borrowers who could obtain nonrecourse loans would probably never get caught by a trap for the unwary for two reasons. First, nonrecourse borrowers typically are knowledgeable about the tax consequences of tied and untied loans.⁶³ Second, the nonrecourse feature of such loans would probably be so important to the borrower that he would never choose to make an untied loan. A lending institution would never give a borrower a nonrecourse loan without getting a security interest in previously specified property acquired with the loan proceeds, because a nonrecourse loan without such a security interest would be practically uncollectible.

Similarly, taxpayers obtaining trade credit would usually be sophisticated enough to know about the traps for the unwary created by a physical tracing rule for purchase money loans. Also, they would often have business constraints that would make it impossible for them to finance their trade purchases with an untied loan. In any case, trade debtors would rarely receive a major tax advantage from an untied loan because interest on trade credit would usually be a current busi-

58. See text accompanying note 22 *supra*.

59. The vast majority of borrowers appear unable to meet even the least stringent of these conditions, *i.e.*, negotiate an untied loan. Most loans made in the United States are tied to specific purchases. See note 56 *supra*.

60. Some taxpayers have the resources to carry a larger mortgage while keeping some assets in reserve, but, given the high cost of borrowing in recent years, this breed of taxpayer is rapidly disappearing.

61. The larger the down payment, the smaller the risk of loss in the event of default on the loan.

62. No trap for the unwary will arise for those taxpayers who do not make purchases that generate a tax benefit during the taxable year.

63. For example, many nonrecourse loans are obtained in tax shelter transactions, in which the participants almost by definition would know the tax implications of their actions. For a discussion of the problem of nonrecourse debt in tax shelter transactions, see Popkin, *The Taxation of Borrowing*, 56 IND. L.J. 43, 53-65 (1980).

ness expense, hence immediately deductible, or an inventory cost deductible soon after purchase as part of the cost of goods sold.

The only group of taxpayers likely to suffer any hardship from a physical tracing rule for purchase money loans would be those making consumer purchases on an installment plan. For the following reasons, however, the pitfalls awaiting this group would be negligible. First, many consumer debtors do not have the borrowing power to obtain an untied loan. Second, because the interest rate on consumer credit is often higher than that on untied loans, those who can obtain an untied loan will have a financial incentive independent of taxes to do so. Third, many borrowers do not make deductible expenditures out of savings or current income sources during the taxable year in which the consumer purchases are made. Finally, many taxpayers could be taught to avoid the pitfalls of tracing, just as many have been taught the advantages of the UID.

2. *Rule Two: Modified Physical Tracing for Untied Loans.* A Haig/Simons system would avoid traps for the unsophisticated by permitting taxpayers to trace the proceeds of their loans not only to assets acquired during the current taxable year but also to the deemed reacquisition of assets on hand at the start of that year. As illustrated by the variations on the airline ticket example, such a tracing rule in an ideal realization system would do more than merely eliminate these pitfalls. It would also permit taxpayers holding appreciated property a tax advantage that they could otherwise obtain only by recognizing their accrued gain on the appreciated property.⁶⁴ For this reason the tracing rules for untied loans should require taxpayers to trace the proceeds from untied loans to the acquisition of assets purchased during the taxable year in which the loan proceeds were spent.

The only theoretical shortcoming of the above rule is that it would produce a trap for certain taxpayers holding unappreciated property at the start of the taxable year.⁶⁵ Those taxpayers would occasionally be

64. See text following note 47 *supra*.

65. Another apparent shortcoming of the proposed tracing rule is that it would permit a taxpayer to trace his loan proceeds to a deemed acquisition of property that had appreciated during the current taxable year but prior to the time the taxpayer had actually obtained his loan proceeds. A contrary rule, however, would be nearly impossible to administer and would cause taxpayers in some instances to manipulate the timing of the receipt of their loan proceeds.

The tax advantage here is analogous to the one that arises in a Haig/Simons income tax system when taxpayers use property for consumption that has appreciated in value during the year in which it was consumed. Arguably that gain would be taxable in a tax system that taxed "the market value of rights exercised in consumption." See note 12 *supra*. But as a practical matter, a Haig/Simons system that uses sources of income as the starting point in assessing tax burdens would have difficulty reaching such gains. See note 19 *supra*.

in a position to minimize their taxes by actually selling and then reacquiring their unappreciated property. This shortcoming could not be easily eliminated because the presence or absence of unrealized gains is unknowable in a realization system. The significance of this shortcoming is undoubtedly modest.

Rule Two also eliminates potential tax losses for taxpayers who either cannot prove that they have spent their loan proceeds during the current year or cannot trace the proceeds of two or more loans to the year's expenditures. It does so by establishing a rebuttable presumption that taxpayers spend the proceeds of their loans during the taxable year in which they actually receive those proceeds, and by establishing a conclusive presumption that taxpayers spend the proceeds of their loans in the order in which those proceeds are received.

The proposed tracing rules serve three separate functions. First, they keep tracing simple by requiring the taxpayer to do little more than is now required of him. In order to receive a deduction for any interest used to finance a purchase he need only prove that he made an expenditure—as he is required to do under the present tax system. Second, the rules eliminate most traps for the unsophisticated, thereby assuring fairness. Third, by giving the taxpayer the benefit of several presumptions, the rules minimize both the enforcement burden on the tax collector and the record-keeping responsibilities of the taxpayer.

C. *Cost Recovery Mechanisms for Nondepreciable Assets Acquired with Borrowed Money.*

Two special problems arise in an ideal realization system when interest payments are made on a loan that financed the acquisition of an income producing asset. One problem concerns the timing of the deduction for interest payments when those payments are made in years following the year in which the taxpayer used the borrowed money to acquire a depreciable asset. This problem is beyond the scope of this article. The second problem involves the proper cost recovery mechanisms for interest paid to acquire income-producing intangibles and other nonwasting assets—the problem illustrated by the second variant on the airline ticket example.⁶⁶ This section proposes and defends some practical solutions to this second problem.

Consider, for example *J*, the owner/manager of a drygoods store, who purchases a gallon of green paint on day one for \$10. On day six, she purchases an identical can of green paint for \$12. On day ten, she hires two painters, one to paint the basement of her house and the other to paint the storeroom of her drygoods store. By using the \$10 paint for pleasure, *J* would never pay tax on the \$2 appreciation—under Haig/Simons or a realization system—unless her consumption was measured by the fair market value of goods devoted to consumption at the time of their use rather than by the purchase price of those goods.

66. See text following note 47 *supra*.

A tax system built strictly on Haig/Simons principles would automatically link the timing of a deduction for interest paid to acquire an asset with the taxation of the gain on that asset. For example, assume that a taxpayer borrows \$1,000 to buy a parcel of land, paying \$100 per year in interest on the loan. The land increases in value by \$200 each year and the taxpayer sells the land after five years for \$2,000. Under a Haig/Simons tax system, the taxpayer would compute his annual accumulation by subtracting the fair market value of his assets on hand at the start of the taxable year from the fair market value of his assets on hand at the close of the year. The taxpayer would therefore include in each year's income \$200 of unrealized gain on the land, but he would exclude from income the \$100 expended to pay his interest cost.

A tax system that deviated from Haig/Simons by taxing only realized gains would match the gain from the sale of the land against the costs of producing that gain by capitalizing the annual interest payments. At the time of sale, the taxpayer would have a basis in the land of \$1,500—the sum of the \$1,000 purchase price and the five \$100 interest payments—and hence a gain of \$500. Capitalizing interest payments achieves the correct theoretical result whenever the taxpayer's gain from the asset purchased with borrowed funds comes solely from capital appreciation. In those situations, delaying the deduction for interest until the asset is sold vindicates the fundamental tax-accounting principle of a realization system that deductions should be matched with the income they generate.⁶⁷ Merely capitalizing all interest payments that are traced to the acquisition of an asset, however, produces incorrect results for assets that are generating a current income stream.

For traditional wasting assets, such as machinery, a realization system permits the taxpayer to take a current deduction for a portion of each interest payment through the tax code's depreciation mechanism.⁶⁸ But commentators have argued that a realization system should not permit taxpayers to deduct any portion of the cost of acquiring so-called nonwasting assets—stocks and bonds are classic exam-

67. See, e.g., ACCOUNTING PRINCIPLES Bd., APB STATEMENT No. 4, BASIC CONCEPTS AND ACCOUNTING PRINCIPLES UNDERLYING FINANCIAL STATEMENTS OF BUSINESS ENTERPRISES, Oct. 1970, reprinted in FINANCIAL ACCOUNTING STANDARDS BOARD, FINANCIAL ACCOUNTING STANDARDS, ORIGINAL PRONOUNCEMENTS AS OF JULY 1, 1978, 437, 466:

Expenses are the costs that are associated with the revenue of the period, often directly but frequently indirectly through association with the period to which the revenue has been assigned. Costs to be associated with future revenue or otherwise to be associated with future accounting periods are deferred to future periods as assets.

68. For a summary of the simplifying assumptions inherent in common systems of depreciation, see Kahn, *Accelerated Depreciation—Tax Expenditures or Proper Allowance for Measuring Net Income?*, 78 MICH. L. REV. 1 (1979).

ples—until taxpayers have sold or otherwise disposed of those assets.⁶⁹ That treatment may be defensible whenever the acquisition costs closely approximate the anticipated proceeds from disposition. When nonwasting assets are purchased with borrowed money, however, the total acquisition costs—including interest payments—usually exceed the proceeds from disposition. Under such circumstances at least some portion of the acquisition cost should be matched with the current income generated by those assets, as the following example illustrates.

Consider *M*, who has \$1,000 of savings which he uses to purchase a four-year bond with a face amount of \$1,000 and a 12% annual return. Ownership of the bond confers on *M* two intertwined though distinct rights: the right to receive the face amount of the bond after four years, and the right to four annual interest payments of \$120. If *M* were to allocate his cost basis between those two rights according to their respective fair market values, his annual net interest income would be reduced, but the increase in the annual unrealized gain from his right to collect the face amount of the bond would offset the reduction in his net interest income. Consequently, his realized and unrealized annual net gains would equal the \$120 interest payment made by the issuer of the bond, regardless of how his basis was allocated. A realization system would impose no great hardship on *M* by prohibiting him from dividing his cost basis between his current income right and his right to collect the face amount of the bond.

The equities would change if *M* financed his purchase of the four-year bond by borrowing \$1,000 at 10% annual interest. Assuming that the loan remained outstanding for four years and was then paid off, *M* would pay a total of \$1,400 to acquire the bond—the \$1,000 purchase price plus \$400 in interest. Under these facts, a realization system would seriously mismatch the timing of *M*'s deduction for acquisition

69. For a discussion of alternative treatments of intangibles, see M. CHIRELSTEIN, *FEDERAL INCOME TAXATION: A LAW STUDENT'S GUIDE TO THE LEADING CASES AND CONCEPTS* 24-32 (2d ed. 1979).

Bittker and Stone pose a famous question based on a variation of the facts of *Helvering v. Horst*, 311 U.S. 112 (1940). In *Horst* a father held a negotiable bond with negotiable interest coupons attached. He clipped one of the coupons before its due date and gave it to his son, who subsequently cashed the coupon. The Court held that the father was taxable on the interest coupon, relying on the horticultural metaphor that the owner of a tree is taxable on the fruit of that tree. *Id.* at 120. Bittker and Stone ask who would have been taxed on the interest income if the father had given the bond to his daughter and the interest coupon to his son. See B. BITTKER & L. STONE, *FEDERAL INCOME, ESTATE, AND GIFT TAXATION* 445-46 (5th ed. 1980). One answer, described in the text, is to allocate the father's cost basis in the bond between his right to interest income and his right to repayment of principal in accordance with the fair market value of those rights at the time of the gifts. The result is that the bare bond and the interest coupons are treated as discount bonds, taxable to the holder under the normal rules for bonds issued at a discount.

costs and the income generated by those costs if it were to prohibit any cost recovery until the bond matured. The maximum amount reasonably attributable to *M*'s right to collect the face amount of the bond would be \$1,000 because that is the total he will receive when the bond matures.⁷⁰ The balance of his acquisition costs—the \$400 in interest payments—should be allocated to his current income right. The current income right should be viewed as a wasting asset, because its value decreases annually as the income generated by that right is collected. Straight line amortization of the \$400 cost of that right produces an annual deduction of \$100, the exact amount of *M*'s annual interest payment. The cost of acquiring the income right is thus properly matched with the benefit obtained from that right.

The above example illustrates an acceptable tax treatment for assets, such as bonds, that produce current taxable income without any likelihood of capital appreciation.⁷¹ For assets such as common stock, which taxpayers usually hold both for current dividend income and for capital appreciation, a full current deduction for interest payments would be too generous. In theory, the taxpayer should allocate his total acquisition costs, including interest payments, between his current income right and his anticipated proceeds from disposition, presumably

70. This discussion assumes that the current income generated by the intangible is subject to tax. Obviously if the income were exempt, then the expenses allocated to the current income would not be deductible.

The exemption for interest on state and local bonds provided in I.R.C. § 103 has caused Congress to deny a deduction under I.R.C. § 265 for interest paid to carry those bonds. Tracing loans used to purchase such bonds has been problematic for two reasons. First, because interest is otherwise deductible, the taxpayer, to preserve his deduction, merely must show that an alternative source of funds was used to purchase the tax-exempt bonds. Second, many tax analysts consider it unfair that taxpayers with savings should be permitted to purchase their taxable assets with borrowed funds and their exempt assets with savings. As illustrated by the Ant/Grasshopper example, no such unfairness exists so long as the taxpayer has been previously taxed on his savings. Of course the exemption of the interest income is itself unfair under traditional income tax principles.

Canada presently prohibits a deduction for personal debt but permits an unlimited deduction for reasonable business debt. It has encountered serious tracing problems with its system. See Bale, *The Interest Deduction Dilemma*, 21 CANADIAN TAX J. 317 (1973). The Canadian experience illustrates the intractable problems presented by partial tracing. These problems would not arise in a tax system that conditions all interest deductions on the ability of the taxpayer to prove a deductible use of his loan proceeds.

The Canadian government has recently announced its intention to limit the annual tax deduction for interest on investments to the amount of investment income (excluding capital gains) earned in the year. Excess interest payments will be characterized as capital losses or carried forward as a deduction against future investment income and capital gains. See DEPT. OF FINANCE, CANADA, *Budget Paper 25* (1981).

71. Bonds can, of course, generate capital gains and losses through changes in the prevailing interest rate. But the anticipated income from bonds is usually from interest income, not capital appreciation.

on the basis of their respective fair market values. But as a practical matter such an approach is unattractive, because the values of those intertwined rights are virtually unknowable before disposition. Also, taxpayers frequently do not know their total acquisition costs in the year of purchase because the total depends on the amount of interest paid during the term of the loan, a period that is often unfixed or changed.

The realization system could achieve an administratively feasible and theoretically defensible result if the current deduction for interest paid to acquire a nondepreciable asset were limited to the amount of current income generated by that asset, the excess interest being added to the taxpayer's basis in the asset. In the two polar cases—all income generated by capital appreciation and no income generated by capital appreciation—that rule would approximate the correct theoretical result. The rule would also produce an essentially correct result in intermediate cases, but only when the taxpayer's annual rate of return on his investment equals the rate of interest he is paying on his loan.⁷² Because economic forces in a perfectly rational economy would equal-

72. Assume, for example, that *A* purchases an intangible asset with a 10 year life for \$100. Assume also that it produces an annual yield of \$10, half in current royalty income and half in capital appreciation. Assume finally that *A* is paying \$10 per year interest on a 10-year loan, the proceeds of which were used to buy the intangible asset. In a theoretically correct system, *A*'s annual interest payments would be allocated between the right to annual royalties and the right to capital appreciation on the basis of the fair market value of each of those rights. Those rights presumably would be valued by discounting the income streams that each was expected to produce. Since the two expected income streams are the same for all years, they have equal value. Thus, half of each interest payment would be allocated to the royalty income and be currently deductible and half would be allocated to capital accumulation and be capitalized. The identical result is obtained by limiting the interest deduction to current realized income.

Under less stylized facts, a theoretically correct result would not be reached by limiting the interest deduction to current realized income. Assume, for example, that *A* paid only \$8 annual interest on his loan, with the result that *A* would have net income each year of \$2. Since the net royalty income would be taxable currently and the net capital appreciation income would not be taxed until realized, the capital appreciation income would have a higher fair market value than the royalty income. Thus more than half of the \$8 interest payments should be allocated to capital appreciation.

As a further variation, assume that *A* was paying \$10 annual interest but that *A*'s loan was for only five years. Under the normal rules for acquisition costs other than interest, each of the five interest payments made on the loan should be allocated over the 10 year life of the asset. Assuming for simplicity a straight line method of allocation, then only one-tenth of the \$10 interest payment made in the first year should be allocated to income earned in that year. Arguably one-tenth of the interest payments made in later years should also be allocated to the first year, although tax accounting rules generally prohibit taking a deduction for interest until the interest has been paid. Even if interest paid in later years can be allocated to the first year, the total interest allocated to that year would not exceed five-tenths, or one-half, of the annual interest payment. Since half or more of that portion of the payment is attributable to the capital appreciation income stream, no more than one-quarter of the \$10 interest payment (\$250) made in the first year should be deductible as a cost of the royalty income.

ize average rates of return on investment and average interest rates, it is likely that the circumstances of the real world will tend somewhat in that direction.⁷³ Even if the result in intermediate cases is a crude approximation of the theoretically correct result, it is far more accurate than the result of the UID.⁷⁴

D. *Fairness of Tracing in a Realization System.*

1. *Fairness in Theory.* A Haig/Simons income tax would permit taxpayers with accumulated wealth to minimize their taxes by financing their nondeductible purchases with saved rather than borrowed dollars. As illustrated by the Ant/Grasshopper example, this result is fair so long as taxpayers with accumulated wealth have paid tax in a prior period on the income out of which that wealth was saved.⁷⁵ The tracing rules proposed here provide a similar advantage to taxpayers with accumulated wealth, but only if the wealth is held in the form of unappreciated assets. Taxpayers with unrealized gains would be precluded from obtaining a tax advantage that should be enjoyed only by those whose accumulated wealth arose from income already taxed in a prior period.

2. *Fairness in Practice.* Because of the restrictive view of taxable capacity inherent in an ideal tax on realized income, fairness issues under that tax can never be resolved incontrovertibly on a theoretical basis. The practical consequences of tracing, therefore, are an important part of the fairness argument on its behalf. The tracing rules proposed above⁷⁶ would automatically solve three practical problems that cannot be solved under the UID, the only practical alternative to tracing, except through ad hoc remedial legislation. Such legislation is inconsistent with the UID ideal.

(a) *Sham transactions.* Most law students learn of the tax policy problems created by the special status of interest payments by studying *Knetsch v. United States*.⁷⁷ The taxpayer in *Knetsch* sought to create a tax shelter for himself by purchasing a deferred annuity bond from the

73. Economists routinely make this dubious assumption about the real world.

74. The assumption that economic forces at work in the real world tend to equalize rates of return and interest rates is similar to the one made in most of the methods of depreciation that are not intended as an investment subsidy. For example, straight line depreciation assumes that the income generated by an asset will be earned in equal annual amounts over the useful life of the depreciable asset. For accelerated depreciation that intentionally mismatches income and costs, the timing problem for interest payments is beyond the scope of this article.

75. See text accompanying notes 29-33 *supra*.

76. See text accompanying notes 49-51 *supra*.

77. 364 U.S. 361 (1960).

Sam Houston Life Insurance Co. and by paying for the bond by borrowing from the company. He then satisfied his obligation to pay interest on his loan by borrowing further from the insurance company, using his expectancy under the annuity bond as security for the loans. Because interest payments were currently deductible and the expectancy on the deferred annuity bond was not taxable until realized, the taxpayer showed a substantial paper loss on the transaction, which he sought to use to offset his income realized from other sources. The Supreme Court held that the taxpayer was not entitled to deduct the interest paid to the insurance company, despite unambiguous language in the tax code to the contrary.⁷⁸ The Court based its decision on the controversial ground that the transaction was a sham.⁷⁹

The sham transaction doctrine has proved useful to the Internal Revenue Service in controlling outrageous abuses of the interest deduction. But this ad hoc doctrine creates its own set of problems, because tax theory does not specify when it should be applied.⁸⁰ The tax shelter problem illustrated by *Knetsch* would not arise in a realization system that adopted the proper tracing rules. Because the loan in *Knetsch* was a purchase-money loan, interest on the loan would become part of the cost of acquiring the deferred annuity bond and would not be deductible currently. The taxpayer would exclude those costs from his tax base in later years under the tax code's cost-recovery rules for annuity contracts—that is, the cost could be used to offset annuity income when he begins to receive annuity payments under his deferred annuity bond.⁸¹

By requiring the taxpayer to capitalize his interest payments, the tracing rules would accurately match the deduction for the interest payments with the income they helped generate. Thus, the tracing rules would destroy the *Knetsch* tax shelter on a principled basis and would, incidentally, destroy analogous tax shelter schemes built on the timing differential between deferred unrealized gains and interest deductions under the UID.⁸²

78. *Id.* at 367-69. I.R.C. § 163(a) then, and now, permitted a deduction for "all interest paid or accrued within the taxable year on indebtedness." See note 3 *supra*.

79. 364 U.S. at 365-66. Of course the transaction had no economic substance, and the court reached the correct result. But it reached that result only through a forced interpretation of the statute. See Blum, *Motive, Intent, and Purpose in Federal Income Taxation*, 34 U. CHI. L. REV. 485, 517-18 (1967).

80. For a collection of cases raising the sham issue, see S. SURREY, W. WARREN, P. MCDANIEL & H. AULT, *FEDERAL INCOME TAXATION: CASES AND MATERIALS* 561-64 (1972).

81. See I.R.C. § 72 (permitting a portion of each annuity payment to be treated as a return of capital).

82. In an attempt to destroy the tax benefits of tax motivated straddle transactions, Congress recently required taxpayers engaging in most commodity transactions to capitalize their interest

(b) *Construction period interest payments.* Many commentators have attacked the indefensible tax shelter opportunities created by a current deduction for interest paid on a construction loan prior to the completion of the construction.⁸³ They have argued correctly that in a realization system the UID mismatches construction period interest payments with the income those payments help generate.⁸⁴ Commen-

payments and other carrying charges incurred in order to purchase or hold the commodities. I.R.C. § 263(g) (added by Economic Recovery Tax Act of 1981, § 502, 95 Stat. 327). This provision is consistent with the theory of the interest deduction advanced in this article. The tracing problems that will arise in enforcing this section would be substantially eliminated by the adoption of a tracing requirement for all interest payments.

83. See, e.g., W. ANDREWS, BASIC FEDERAL INCOME TAXATION 468-69, 669 (2d ed. 1979).

84. I.R.C. section 189 requires individual taxpayers to capitalize their construction-period interest payments over a 10 year period. (Section 189(c) applies the 10 year period to nonresidential property after 1981 and to residential property, except low-income housing, after 1983). In theory, the payments should be capitalized over the useful life of the constructed asset, but the 10 year rule is arguably fairer and easier to administer in a tax system that permits a current deduction for most interest payments. For an explanation of the congressional reasons for adopting I.R.C. § 189, see STAFF OF THE JOINT COMMITTEE ON TAXATION, 94TH CONG., 2D SESS., GENERAL EXPLANATION OF THE TAX REFORM ACT OF 1976 25-26 (Comm. Print 1976), reprinted in S. SURREY, W. WARREN, P. MCDANIEL & H. AULT, FEDERAL INCOME TAXATION, 192-94 (2d ed. Supp. 1979).

The table below illustrates the significance of the construction period interest issue for many taxpayers. It shows the pattern of deductions under a UID and under the tracing rules proposed in section IIIA for interest paid on a loan that finances the construction of an asset placed in service three years after interest payments begin on the construction loan. For simplicity, the table assumes that the taxpayer computes his depreciation deductions using the straight line method of depreciation.

ANNUAL INTEREST DEDUCTIONS ON FIVE YEAR LOAN USED TO ACQUIRE
FOUR YEAR MACHINE WHEN DEPRECIATION BEGINS THREE YEARS
AFTER YEAR OF FIRST INTEREST PAYMENT

Year	Depreciation Deduction for \$80 Purchase Price	Depreciation Deductions for Interest Payments																	
		Year 1			Year 2			Year 3			Year 4			Year 5			Total Deductions		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C			
1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8
4	20	2	2	0	2	2	0	2	2	0	2	2	8	2	0	0	30	28	28
5	20	2	2	0	2	2	0	2	2	0	2	2	0	2	4	8	30	32	28
6	20	2	2	0	2	2	0	2	2	0	2	2	0	2	2	0	30	30	20
7	20	2	2	0	2	2	0	2	2	0	2	2	0	2	2	0	30	30	20

This table assumes a business machine costing \$80 with four-year-useful life, being depreciated under the straight line method, with depreciation beginning three years after the first interest payment. Column (A) under each year and under total deductions represents the allowable interest deductions on the assumption that the allowable deduction with respect to an interest payment may not exceed total interest already paid on the loan. Column (B) represents allowable interest deductions on the assumption that no depreciation deduction is allowable with respect to an inter-

tators have failed to notice, however, that mismatching occurs whenever interest payments constitute either a capital cost or an inventory cost. Construction period interest is merely a prominent example of that mismatching.

The tracing rules proposed above would eliminate the tax shelter opportunities created by the mismatching of construction period interest payments with the income they help generate. The tracing rules do not distinguish between construction period and postconstruction interest payments because the tax-significant purposes of construction period and postconstruction interest payments on the same loan are necessarily identical. Interest payments on any loan financing the acquisition of an asset become part of the taxpayer's basis in that asset, recoverable under the tax system's cost-recovery mechanisms. Taxpayers would usually recover their construction period interest payments through depreciation deductions over the useful life of the constructed asset.

(c) *Inflation*. Under inflationary conditions, much of what lenders and borrowers usually characterize as interest might be better characterized as prepayment of principal. Consider, for example, a borrower who takes out a three-year loan of \$10,000, paying 14% annual interest, when the annual rate of inflation is 10%.⁸⁵ In this situation, a substantial portion of the borrower's nominal interest payments are compensation to the lender for his loss caused by the borrower repaying the \$10,000 principal in dollars of reduced value. Only a small fraction of each periodic payment constitutes a rental fee for the use of borrowed money.⁸⁶

In a realization system that systematically adjusts tax obligations for inflation, the borrower would match the prepayment-of-principal component of his nominal interest payments with the cancellation of indebtedness income he realized when he paid off his loan obligation in devalued dollars.⁸⁷ In theory, the prepaid principal would exactly off-

est payment until that interest has been paid. Column (C) represents the allowable interest deductions resulting from a UID.

85. The definition of inflation is partly a function of the index used to measure it. Indices of inflation inherently measure average changes in the purchasing power of currency.

86. See R. MUSGRAVE & P. MUSGRAVE, *supra* note 13. The difficulties that economists have struggled with in specifying the "real" interest role are recounted in McIntyre, *supra* note 18, at 1186-87. Economists estimate that despite high nominal interest rates in recent years the real rates have been very low, even negative. See *How Inflation Erodes the Income of Fixed-Rate Lenders*, 11 REAL ESTATE REV. 43, 50, reprinted in BROOKINGS GENERAL SERIES REPRINT 372 (1981).

87. Assume for example that a taxpayer with a three year loan of \$10,000 pays annual interest of \$1,400 and the annual inflation rate during the three year term is 10%. Under an indexing

set the cancellation-of-indebtedness income whenever market forces, in establishing the interest rate, had accurately predicted the true rate of inflation. An unforeseen inflation rate would produce a windfall gain either for the borrower or for the lender.

In the real world the tax system determines tax obligations in nominal dollars unadjusted for inflation. This computational method gives the borrower two advantages he would not enjoy in an inflation-proof tax system. First, he is not taxed on the cancellation-of-indebtedness income arising from the repayment of his loans in devalued dollars. Second, he is not forced to characterize any of the nominal interest payments as prepaid principal, which would reduce his current deduction. Neither of these advantages can be eliminated easily, for in real world situations the rental fee and the prepayment-of-principal components of nominal interest payments are difficult to distinguish.⁸⁸

The proposed tracing rules would play an important role in limiting the second of the tax advantages just described. Under a tracing system, if a loan had financed personal consumption, the prepayment-of-principal component would provide the borrower with no tax benefit because there would be no interest deduction.⁸⁹ Similarly, the prepayment-of-principal component of interest paid on a loan used to acquire an asset would become part of the borrower's cost basis in the acquired asset, and would be deductible only through the tax system's cost-recovery mechanisms.⁹⁰ This capitalization requirement, by delaying the deduction for interest payments, would have the salutary effect of reducing the improper tax benefit obtainable under the UID for the prepaid principal component of interest. The following example illustrates this effect.

A, a taxpayer, purchases a business asset for \$1,000, financing the purchase completely with a ten-year commercial loan. Assume that *A* pays annual interest on his loan of 14% and that the expected and actual inflation rate is 10% for all relevant periods. If the asset purchased is land, a nondepreciable asset, then *A* would capitalize his interest

mechanism only \$400 per year of the nominally interest payment is characterized as interest and \$1,000 is characterized as nondeductible payment of principal. Finally, under the hypothesized indexing mechanism the taxpayer's payment of what is nominally principal is also indexed so that in year three he is treated as having paid only \$7,000 in satisfaction of his loan. Under these facts the taxpayer has cancellation of indebtedness income of \$3,000 in year three which exactly offsets the \$3,000 of nominal interest that was nondeductible.

88. McIntyre, *supra* note 18, at 1186-87.

89. This conclusion would be subject to the proposed tracing rules giving the taxpayer the benefit of the doubt in appropriate cases.

90. This article does not discuss the timing of the deduction for interest payments made in years following the year in which the taxpayer used the borrowed money to acquire a depreciable asset.

payments and receive no tax benefit for them until he disposed of the land. When he ultimately sold the land, the improper benefit he would then obtain from a deduction for the prepaid principal component of interest would offset the improper detriment he would suffer from the use of historical cost, unadjusted for inflation, as his basis in the land. Under the UID, he would get the improper benefit when the interest was paid and would not suffer the offsetting improper detriment until the land was sold.

If *A* in the above example purchased a depreciable asset with his \$1,000 loan proceeds, he could recover his nominal interest payments over the useful life of the asset. To the extent that he recovered the prepaid principal component of his interest payments through depreciation, he would be getting an improper benefit, though generally a smaller benefit than he would get under the UID.⁹¹ He would also be suffering an improper detriment from the use of historical cost, unadjusted for inflation, as his basis for depreciation. Under the straight-line method of depreciation, the timing of the improper benefit from the deduction for the prepaid component of interest would be coordinated with the improper detriment from the use of unadjusted cost as the basis for depreciation. The UID would not coordinate the improper benefit with the improper detriment.

E. *Some Economic Effects of Trading in a Realization System.*

An unwanted but unavoidable consequence of an ideal realization system is a tax bias in favor of investments that produce economic income in the form of unrealized appreciation. The UID substantially increases this bias, for it allows taxpayers who use borrowed funds to purchase appreciating assets to deduct their interest payments when made, rather than when they realize the income those payments helped generate. This mismatch of the timing of deductions and income makes it economically attractive for taxpayers to invest in appreciating assets even when the expected return on those assets is less than the projected interest payments.⁹² The *Knetsch* case illustrates the tax shel-

91. For nondepreciable assets, the deductibility of the interest payments would be postponed until the time that the gain on the borrower's "cancellation of indebtedness" income is realized, thereby eliminating the timing advantage otherwise resulting from inflation.

92. Assume, for example, that *T*, a taxpayer in the 50% tax bracket, purchases vacant land with \$1,000 of borrowed funds. Assume also that the land yields an annual deferred gain of \$90 and that *T* takes annual interest deductions of \$100. After six years, *T* would have a real loss of \$60 on the transaction. Under a UID, however, *T* would have received annual tax reductions of \$50 with a discounted value of \$240 (assuming a 10% discount rate). That benefit would be offset in part by the tax on the nominal income in year five of \$400, which would have a discounted value of \$137. The net tax benefit of \$103 would more than offset the real loss of \$60.

ter opportunities created by such a mismatch.⁹³ The proposed tracing rules would eliminate the mismatch, and thereby prevent the economic waste that the UID stimulates.

Tracing also tends to reduce the bias in favor of borrowing over drawing down assets which results from the combination of a UID and a realization rule. A realization system, regardless of its treatment of interest, encourages taxpayers holding appreciated assets to finance their purchases by borrowing rather than by disposing of their appreciated assets, because disposing of such assets triggers the realization of gain and borrowing historically does not.⁹⁴ By reducing the effective cost of borrowing below the market rate of interest, a UID increases the bias against disposing of appreciated assets and introduces a new bias against disposing of unappreciated assets.⁹⁵

The bias against drawing down assets resulting from a UID has undesirable economic consequences for two reasons. First, by inducing taxpayers to continue to hold assets they would sell in a world without taxes, the bias arguably reduces the efficiency of the market as an allocation device in some instances. The effect is especially critical when investment in productive resources is distorted.⁹⁶ In addition, by in effect subsidizing taxpayers who borrow for consumption purposes, the bias tends to favor consumption over investment, an undesirable outcome whenever total societal investment is inadequate.

During inflationary periods the economic gains to society from tracing will increase substantially. By permitting taxpayers a current deduction on the portion of their interest payments that represents prepayment of principal, the UID gives taxpayers a tax incentive to spend money, especially on consumption goods, consumer durables, and assets whose yield comes in the form of capital appreciation. The tax

93. See notes 77-79 *supra* and accompanying text.

94. See Popkin, *supra* note 63, for a challenge to that traditional treatment of borrowing.

95. Ironically, commentators favoring a UID would make neutrality between borrowing and drawing down assets the decisive issue in the choice between a UID and a tracing system. See note 11 *supra*.

96. The tax bias against drawing down appreciated assets created by a realization rule probably is benign in some instances, although economists typically argue to the contrary. For example, society has little or nothing at stake when the potential tax on unrealized gains discourages taxpayers from shuffling their stock portfolios, because the identity of the owner of the stock of a publicly traded corporation has no obvious effect on the net income produced by that corporation.

To the extent that the tax cost of realizing gains mitigates the tendency of a realization system to stimulate overinvestment in assets producing unrealized income, it adds to the efficiency of the economy. See McIntyre, "How Serious a Problem is Capital Gains Lock-in?," 12 TAX NOTES 1492 (1981). The tax bias produced by a UID, however, is neither benign nor helpful, because it stimulates consumption, not investment, and increases the attractiveness of investing in assets producing unrealized gains without reducing the tax disincentive against disposing of profitable investment assets.

incentive for such purchases tends to exacerbate inflation, both by stimulating an already overstimulated demand and by reducing the effectiveness of higher interest rates as an inflation control mechanism. In contrast, tracing would prevent taxpayers from getting a current deduction for interest on loans that financed such purchases. It would thereby eliminate the undesirable effects of the UID.

IV. THE IMPORTANCE OF TRACING IN TAX SYSTEMS THAT TAX ACCORDING TO INCOME SOURCE

Source distinctions are endemic in all real world tax systems, despite the Haig/Simons admonition against them. Although the types of source distinctions vary considerably among national tax systems, all governments provide for special treatment of capital gains,⁹⁷ imputed income from home ownership,⁹⁸ and the foreign income of their nationals.⁹⁹ The United States, for example, provides preferential treatment for capital gains,¹⁰⁰ an exemption for imputed income from home ownership,¹⁰¹ and a tax credit for taxes paid to foreign governments on foreign source income.¹⁰² The merits of these source distinctions are beyond the scope of this article.¹⁰³ Whatever their merits, they should be limited to net income from the favored sources, rather than gross income. The tracing rules set forth in Section III would play an indispensable role in confining source preferences to net income.

A. *Capital Gains.*

All existing tax systems, except those that exempt capital gains entirely, defer the taxation of capital appreciation income until that in-

97. For a general discussion of alternative treatments of capital gains, see R. GOODE, *supra* note 6, at 176-86.

98. For a survey of national attempts to tax imputed income from home ownership, see Merz, *Foreign Income Tax Treatment of the Imputed Rental Value of Owner-Occupied Housing: Synopsis and Commentary*, 30 NAT'L TAX J. 435 (1977) (reporting that 42 countries make some attempt at taxing the imputed rental value of personal residences).

99. For a general discussion of alternative methods of taxing foreign income, see UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, *TAX TREATIES BETWEEN DEVELOPED AND DEVELOPING COUNTRIES* 39-44, U.N. Doc. 57/ECA/110 (1969) [hereinafter cited as *TAX TREATIES*].

100. I.R.C. § 1202 (excluding 60% of net gains from income).

101. No tax code provision established this exemption. Rather, the imputed income has been excluded from the tax base through custom and administrative inaction. At one time the exclusion was justified on the constitutional ground that imputed income was not realized for purposes of the sixteenth amendment. See, e.g., *Helvering v. Independent Life Ins. Co.*, 292 U.S. 371, 379 (1934) (dicta).

102. I.R.C. §§ 901-908.

103. A tax system must necessarily administer its tax on foreign income and imputed income differently, even if it decides to impose uniform burdens on such income.

come has been realized.¹⁰⁴ Most systems then tax the realized capital gains at either a reduced rate or, equivalently, exempt a portion of the gains from the income base.¹⁰⁵ In combination with the UID, these preferences create dramatic tax shelter opportunities for borrowers, as the following example illustrates.

Consider *T*, a taxpayer in the 50% tax bracket, who purchases an appreciating asset with \$1,000 of borrowed money. Assume that over a three-year period the asset appreciates at a 10% annual rate to \$1,331, and that *T* then sells the asset for that amount. Assume also that *T* pays annual interest of \$100 on his loan. *T* therefore realizes gross income of \$331 on the purchase and sale of the asset, and has paid total interest of \$300. Under the proposed tracing rules he realizes net income of \$31 in the third year from the whole transaction. Assuming a preferential capital gains rate of 20%, he will pay \$6.20 in tax on his gain in that year.

In contrast, under a UID system, *T*'s capital gain would have been \$331, resulting in a tax of \$66.20. He also would have taken annual interest deductions of \$100 against his ordinary income, for a total tax savings of \$150.¹⁰⁶ The net tax on the whole transaction would have been negative \$83.80. In addition, because his interest payments were deductible before his capital gains were realized, he will enjoy a cash flow advantage as well.¹⁰⁷

The above example may understate the tax benefits of the UID. Higher interest rates, higher tax rates on ordinary income, longer holding periods, and lower capital gains rates all magnify those benefits. In effect, a UID creates a negative income tax for high bracket taxpayers who borrow to finance the purchase of appreciating assets.¹⁰⁸ No tax system should intend such a result.

104. At one time Canada considered accrual taxation of gains on publicly traded securities. See Shoup, *The White Paper: Accrual Accounting for Capital Gains and Losses*, 18 CANADIAN TAX J. 96 (1970).

105. The United States once did both. With progressive rates, the relationship between a preferential rate and a partial exemption will not be the same for all taxpayers. See Wetzler, *Capital Gains and Losses*, in COMPREHENSIVE INCOME TAXATION 115 (J. Pechman ed. 1977).

106. The \$150 total is the sum of the deductions for three years of \$100 multiplied by the 50% tax rate.

107. For an example of this deferral benefit, see note 92 *supra*.

108. See Halperin, *Capital Gains and Ordinary Deductions: Negative Income Tax for the Wealthy*, 12 B.C. INDUS. & COM. L. REV. 387 (1971). See also S. SURREY, W. WARREN, P. MCDANIEL & H. AULT, FEDERAL INCOME TAXATION: CASES AND MATERIALS 450 (Supp. 1979).

B. *Imputed Income From Home Ownership.*

Many tax analysts believe that an income tax based on Haig/Simons principles would tax as consumption the economic benefit obtained by homeowners from living rent free in their homes.¹⁰⁹ This economic benefit would also be taxable in the realization system described in section III, because that system determines taxable consumption according to Haig/Simons principles. Some governments have actually made half-hearted attempts to tax imputed income from home ownership.¹¹⁰ The United States has never seriously considered taking that step, probably because of the obvious political and administrative obstacles.¹¹¹

The question arises how a tax system that omits imputed income from the tax base for administrative reasons should treat interest payments on home mortgages. In the pure Haig/Simons system described in Section II, interest payments are excluded from the tax base because the payments do not enter into the valuation of the homeowner/taxpayer's assets at the end of the year and, because the payments finance the acquisition of an asset, they do not constitute a consumption expense.¹¹² Similarly, in the ideal realization system the taxation *vel non* of imputed income has no effect on the deductibility of mortgage interest. As with all interest paid on a loan financing the purchase of an asset (including a personal residence), the payments constitute an acquisition cost to be added to basis.¹¹³

The question therefore becomes whether it is more consistent with Haig/Simons principles simply to exclude imputed income from home ownership from the tax base or to tax the imputed income through some theoretically imperfect method. For an imperfect realization system based on Haig/Simons principles, such as that found in the United States, the answer to this "second best" question is clearly the latter.

At a minimum, such a tax system should classify personal residences as nondepreciable property, thereby denying homeowners the deductions for depreciation that arguably should have been permitted if the in-kind benefits from home ownership had been taxable under an

109. See, e.g., R. GOODE, *supra* note 6, at 117; W. Hellmuth, *supra* note 6. For a suggestion to the contrary, see McIntyre & Oldman, *Taxation of the Family in a Comprehensive and Simplified Income Tax*, 90 HARV. L. REV. 1573 n.120 (1977).

110. See note 98 *supra*.

111. Congress considered taxing imputed income early in the history of the income tax. See E. SELIGMAN, *THE INCOME TAX*, 439, 448-49 (1911).

112. See text accompanying note 22 *supra*. These reasons for excluding home mortgage interest payments from the tax base are independent from the question of the tax treatment of imputed income.

113. See text accompanying notes 43-44 *supra*.

ideal realization system.¹¹⁴ The effect of this classification would be to deny taxpayers a current deduction for home-mortgage interest.¹¹⁵ As a further refinement, homeowners, regardless of whether they are mortgagors, should be required annually to reduce the basis in their homes by the amount of depreciation that would have been allowed if these in-kind benefits had been taxable, without receiving a compensating reduction of income.¹¹⁶ This refinement would substantially reduce the tax advantage homeowners enjoy over renters.¹¹⁷

For an otherwise pure Haig/Simons system that omits the in-kind benefits of home ownership from the tax base, the "second best" question is more complex. As a practical matter, only two treatments of mortgage interest are worth considering. One is to continue the policy of a pure Haig/Simons system of permitting a deduction for home mortgage interest. The effect would be to exclude both the in-kind benefits of home ownership and the income sources traced to home mortgage interest from the tax base. The alternative, which this article recommends, is to tax the imputed income indirectly, at least in some situations, by denying all taxpayers the right to deduct home mortgage interest.

The choice between the two approaches turns on the ability of each to treat fairly three groups of taxpayers—homeowners with large mortgages, homeowners without a mortgage or with a relatively small mortgage, and renters—because the relative tax burden on these groups is principally affected by the choice.

Some commentators argue that the "second best" case for denying a deduction for interest traceable to home mortgages is a weak one because such a rule, in their view, is fair to renters in comparison to homeowners with large mortgages, but unfair to homeowners with large mortgages in comparison to other homeowners. Whether the fairness in the former situation outweighs the unfairness in the latter depends, they contend, on a complex "second best" calculation¹¹⁸ that

114. I.R.C. § 167(a) now achieves this result by limiting depreciation deductions to "property used in the trade or business" or "property held for production of income."

115. See Section III.C. *supra*.

116. For a discussion of the use of basis adjustments for taxing imputed income indirectly, see Epstein, *The Consumption and Loss of Personal Property Under the Internal Revenue Code*, 23 STAN. L. REV. 454, 457-59 (1971).

117. Homeowners would still receive a timing advantage over renters because homeowners would not be taxed on their imputed income until they sold their home. Indirect taxation through basis adjustments would be inconsistent with the rollover of gains permitted under I.R.C. § 1234, and, a fortiori, the exclusion of those gains for certain taxpayers under I.R.C. § 105.

118. See R. MUSGRAVE & P. MUSGRAVE, *supra* note 13, at 256-58; Shoup, *Deduction of Homeowner's Mortgage Interest, Interest on Other Consumer Debt, and Property Taxes, Under the Indi-*

economists are unable to make.¹¹⁹ Their position is intuitively appealing; if home mortgage interest is included in the tax base, all homeowners would enjoy an in-kind benefit from home ownership, but only those homeowners with mortgages would suffer a compensating penalty from a denial of the mortgage interest deduction. This argument is flawed, however, in much the same way the argument against treating interest like other rental payments is flawed.¹²⁰

Consider two taxpayers, *W* and *M*, each earning an annual salary of \$30,000 and each holding a \$50,000 money market certificate paying interest at an annual rate of 10%. Assume that each buys a \$50,000 personal residence, *W* financing his purchase by drawing down his money market certificate and *M* financing his by taking out a \$50,000 home mortgage at an annual interest rate of 10%. Assume also that the houses produce in-kind annual net income of \$5,000. In a pure Haig/Simons system, *W* and *M* each have a taxable income of \$35,000 and would both bear the same tax burden. In a Haig/Simons system that excluded imputed income from the tax base but otherwise conformed with the proposed rules, the burdens of *W* and *M* would still be the same. *W*'s only taxable income would be his \$30,000 salary. Although *M* would have a \$30,000 salary plus the \$5,000 income on his money market certificate, *M* would get a deduction of \$5,000 for his mortgage interest payment because that interest, under the proposed tracing rules, constitutes a cost of holding the money market certificate.¹²¹

As an alternative example, consider two taxpayers, *A* and *G*. *A* has a salary income of \$30,000 and an interest income of \$5,000 from a \$50,000 money market certificate. *G* has a salary income of \$35,000. A pure Haig/Simons system would impose the same tax burden on *A* and *G*. Now assume that *A* and *G* each purchases a home for \$50,000, *A* financing the purchase by cashing in his money market certificate and *G* taking out a \$50,000 home mortgage. A Haig/Simons system that excluded imputed income from the tax base and denied homeowners a

vidual Income Tax: The Horizontal Equity Issue, 27 CANADIAN TAX J. 529 (1979); White & White, *supra* note 10, at 5-6.

119. For a suggested approach to this computation, see C. SHOUP, PUBLIC FINANCE 45-47 (1969).

120. White and White, for example, discuss the economic consequences of physical tracing on the one hand and a UID on the other. They do not address the consequences of the tracing system discussed in Section II. See White & White, *supra* note 10, at 5.

121. This tracing rule simply removes a trap for the unwary because in a Haig/Simons system that adopts a strict physical tracing rule, a tax-sophisticated *M* would finance his house purchase by drawing down his money market certificate and would then use his borrowed funds to purchase an identical certificate.

deduction for home mortgage interest would impose a greater burden on *G* than *A*, because *G* has a taxable income of \$35,000 and *A* has a taxable income of only \$30,000, even though both would have \$30,000 to spend after the home purchase. This difference in burdens, however, does not justify the fear that denial of a deduction for home mortgage interest would favor homeowners with no mortgage or with a relatively small mortgage over other homeowners.

The above example is virtually identical to the Ant/Grasshopper example.¹²² The only difference is that the consumption expense in the Ant/Grasshopper example is a vacation; in the above example it is a house. A vacation and a house are analogous because when the tax system excludes the in-kind benefits of home ownership from the tax base, the effect of the exclusion is to treat home ownership as a consumption expense—not as a cost of acquiring an income producing asset.¹²³ Thus the lesser burden on *A* is the normal consequence of an income tax that allows taxpayers to liquidate their savings without incurring tax liability on their potential income from those savings lost by the liquidation.

C. *Foreign Income and the Interest Deduction Source Rules.*

Many countries tax their nationals—corporations and individuals—on their worldwide income, but a nation's claim to exclusive tax jurisdiction stops at its borders. To avoid multiple taxation of income arising from transnational business operations, most countries acknowledge that primary tax jurisdiction over foreign source income belongs to the country in which the income was generated. This doctrine is often implemented through the mechanism of the foreign tax credit.¹²⁴ Although the rules vary, generally countries using the foreign tax credit permit their nationals to credit some or all of the income taxes paid to foreign governments.¹²⁵

The United States tax code permits nationals to use the foreign tax credit to offset taxes otherwise due on their foreign source income. But it imposes a limitation on the credit in order to prevent taxpayers from

122. See text preceding note 29 *supra*.

123. Because of the problems of measuring the dollar value of the annual benefits to owners from consumer durables, consumption tax advocates have concluded that the purchase of such assets should be treated as a current consumption expense and the yields should be excluded from the base of the consumption tax. See, e.g., TREASURY DEPARTMENT, BLUEPRINTS FOR BASIS TAX REFORM 121-22 (1977). The same logic applies for an income tax that generally includes consumption as a component of the tax base but does not tax the in-kind benefits from ownership of consumer durables.

124. E. OWENS, THE FOREIGN TAX CREDIT 2-3 (1961).

125. See TAX TREATIES, *supra* note 99, at 40-41.

using the credit to reduce their taxes on income arising in the United States.¹²⁶ To compute the limitation on the credit, nationals must multiply their tentative United States tax liability by a fraction: the numerator is their total net income from foreign sources and the denominator is their total net worldwide income.¹²⁷ In applying this formula, taxpayers obviously must distinguish between domestic source and foreign source net income.¹²⁸

Taxpayers must know the source of their interest payments in order to reduce their gross foreign source income—defined in some detail in the United States tax code¹²⁹—to net foreign source income. Neither the tax code nor general tax-accounting rules provides guidance to taxpayers in determining the source of their interest payments.¹³⁰ In tax accounting the question does not arise, because taxpayers are permitted to deduct their interest payments currently without establishing a link between those payments and the income they helped generate.

To fill the statutory void, the Treasury Department issued detailed source rules in early 1977¹³¹ which link interest payments made during the taxable year with the book value of the taxpayer's assets held during that year.¹³² Under the Treasury's linking formula, a taxpayer computes his interest payments allocable to foreign sources by multiplying his total interest payments for the taxable year by a fraction: the numerator is the book value of assets held by the taxpayer outside the

126. For an explanation of the limitation on the credit, see UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, UNITED STATES OF AMERICA: INCOME TAXATION OF PRIVATE INVESTMENTS IN DEVELOPING COUNTRIES 21-26, U.N. Doc. ST/ESA/39 (1976).

127. I.R.C. § 904. This limitation is called the "overall limitation," in that it applies to the overall income from foreign sources and is not applied on a country to country basis—the rule employed by most other countries.

128. Taxpayers must determine the source of their income in dozens of situations. Besides the limitation on the credit, the most important purpose of the source rules is in determining income of nonresident individuals and corporations subject to tax in the United States. See, e.g., I.R.C. §§ 871, 881.

129. I.R.C. §§ 861-864.

130. I.R.C. § 861(b) states, in relevant part, that from the gross income items specified in § 861(a) "there shall be deducted the expenses, losses and other deductions properly apportioned or allocated thereto and a ratable part of any expenses, losses, or other deductions which cannot definitely be allocated to some item or class of gross income."

131. The regulations were issued on Jan. 6, 1977. 42 Fed. Reg. 1195 (1977). For a practitioner-oriented review of the regulations, see Fuller & Granwell, *The Allocation and Apportionment of Deductions*, 31 TAX LAW. 125 (1977). For a general introduction to the conflict over the regulations, see Kresge, *Allocation, Apportionment of Deductions to U.S. Income: Analyzing the Prop. Regs.*, 40 J. TAX. 42 (1974).

132. The Treasury's source rule also contained many special rules that can only be explained as concessions to political exigencies. See R. McIntyre, Comments of Tax Reform Research Group on Proposed Regulations Dealing with Allocation and Apportionment of Deductions Between Domestic and Foreign Source Gross Income, Dec. 16, 1976 (unpublished comment submitted to Treasury Department).

United States and the denominator is the book value of all his assets worldwide.¹³³

The following example illustrates, in a simplified setting, the consequences of the Treasury's assets formula source rule. It dramatizes the rule's deficiency by positing a situation in which none of the taxpayer's gross income arises in the country in which his assets are located. In more typical situations—when taxpayers have at least some assets in the country in which they are earning income—the results under the Treasury's rule accidentally overlap with the results from a rule that matches interest deductions with the income they helped generate.

Assume that the Transnational Bank Company, a New York corporation, borrows one million dollars at 10% interest in the United States credit market, and relends the money at 12% interest to a customer residing in Brazil. Assume further that the bank's headquarters are in New York and it has no fixed assets outside the United States. Assume finally that the bank's net income from United States operations is \$400,000.¹³⁴ Under the Treasury's interest deduction source rule, the \$100,000 in interest payments made by Transnational on the one million dollars relended in Brazil are considered a United States source deduction because all of Transnational's assets are located within the United States. Under the source rules for gross income, the \$120,000 received from the Brazilian customer would be foreign source gross income.¹³⁵ Thus, Transnational would report net foreign income of \$120,000 and net United States source income of \$300,000.

This mismatching of deductions with gross income improperly limits the tax jurisdiction of the United States by permitting the bank to offset taxes due on its United States source income with a credit for taxes paid to a foreign government. As a further illustration, assume that Transnational pays a Brazilian withholding tax of 25% on its \$120,000 Brazilian income. The United States tax code would permit Transnational to take a foreign tax credit for the taxes paid to Brazil subject to the limitation formula described above. Applying a proper interest deduction source rule, Transnational would have net income from Brazil of only \$20,000—\$120,000 of gross income minus the \$100,000 cost of earning the income. Assuming a United States tax rate

133. Treas. Reg. § 1.861-8(e)(2) (1977).

134. For simplicity, the example assumes that no problems arise in reducing gross income from United States sources to net income.

135. Generally, the source of gross interest income is the place of residence of the borrower. See I.R.C. §§ 861(a)(1), 862.

of 50%, the limitation on the foreign tax credit would be \$10,000.¹³⁶ Using the Treasury's assets formula, however, the limitation is \$60,000.¹³⁷ This limitation allows the entire Brazilian withholding tax of \$30,000 to be credited. The foreign tax credit, therefore, cancels out the United States tax liability on all of the Brazilian source net income and on \$40,000 of the United States source income.¹³⁸

Although the Treasury thought that its assets formula would properly link interest payments with the income they helped generate, its reasoning was faulty. The Treasury accepted the theory of some UID advocates that because loan proceeds are fungible, interest on a loan cannot be traced to purchases made with the loan proceeds. Burdened with this theory the Treasury reasoned that a cost unrelated to any particular item of income must be a cost of all past and present income, as well as all future income that has been and may be generated by expenditures made by the taxpayer.¹³⁹ This conclusion left the Treasury in a quandary, because no one can possibly know either the amount of potential gross income from a taxpayer's expenditures or the source of

136. Under a proper source rule for interest deductions the limitation would be computed as follows:

Tentative U.S. Tax (50% of \$500,000)	=	250,000
Net Foreign Source Income	=	20,000
Net World-wide Income	=	500,000
Limitation $(250,000 \times 20,000 \div 500,000)$	=	10,000

137. Under the Treasury's assets formula the limitation would be computed as follows:

Tentative U.S. Tax (50% of \$500,000)	=	250,000
Net Foreign Source Income	=	120,000
Net World-wide Income	=	500,000
Limitation $(250,000 \times 120,000 \div 500,000)$	=	60,000

138. Assuming U.S. net income of \$400,000, the normal U.S. tax, computed at a 50% rate, would be \$200,000. With the improper limitation on the credit, however, the Treasury would collect only \$180,000, or \$20,000 less than its due. That \$20,000 tax reduction is equivalent to an exemption of \$40,000 for a taxpayer in the 50% bracket.

139. Treas. Reg. § 1.861-8(e)(2)(i)-(ii) (1977) contains the collection of buzz words which passes for the theoretical foundation of the Treasury's interest deduction source rule:

Interest—(i) *In general.* The method of allocation and apportionment for interest set forth in this paragraph (e)(2) is based on the approach that money is fungible and that interest expense is attributable to all activities and property regardless of any specific purpose for incurring an obligation on which interest is paid. This approach recognizes that all activities and property require funds and that management has a great deal of flexibility as to the source and use of funds. Normally, creditors of a taxpayer subject the money advanced to the taxpayer to the risk of the taxpayer's entire activities and look to the general credit of the taxpayer for payment of the debt. When money is borrowed for a specific purpose, such borrowing will generally free other funds for other purposes and it is reasonable under this approach to attribute part of the cost of borrowing to such other purposes. . . .

(ii) *Allocation of interest.* Except as provided in subdivisions (iii) and (iv) of this subparagraph, the aggregate of deductions for interest shall be considered related to all income producing activities and properties of the taxpayer and, thus, allocable to all the gross income which the income producing activities and properties of the taxpayer generate, have generated, or could reasonably have been expected to generate.

that gross income. The Treasury was forced, therefore, to seek some measurable quantity that could serve as a proxy for both total potential gross income and the source of that potential income. It believed that the fair market value of the taxpayer's current assets would be the best available proxy.¹⁴⁰ But to simplify the administration of its source rule, it decided that interest payments should be allocated ratably to the book value of the taxpayer's assets.¹⁴¹

A tax code that adopts the tracing rules advocated in this article would eliminate the source of deduction problem that the Treasury Department has wrestled with unsuccessfully. These tracing rules match interest payments with the income they helped generate—the fundamental requirement for a theoretically defensible source rule. Because taxpayers would not be permitted during the current taxable year to deduct interest payments allocated to future income, the tax authorities would not have to make fanciful guesses about the source of that future income. Instead, the payments would be capitalized and would be linked in later years with the income they helped generate. The tax system's cost-recovery mechanisms would then take over to allocate the appropriate offsets. More generally, the tracing rules determine the character of interest payments, and the source rule applicable to payments of that character controls the deduction of the interest payments.¹⁴²

V. CONCLUSION

This article makes three departures from prior inquiries into the nature of interest payments. First, the assumption that interest usually constitutes a current expense—what some economists call “negative income”—must be rejected.¹⁴³ Rather, one should recognize that many and probably most borrowers contract to pay interest in order to acquire income producing assets or consumer durables. Thus interest usually constitutes a capital expenditure, and its deductibility should be governed generally by the tax rules designed for such expenditures. Second, one must repudiate the fungibility fallacy: the persistent idea that the fungibility of money precludes the tracing of loan proceeds to their tax-significant use. Indeed, most loans are of the purchase-money

140. See Treas. Reg. § 1.861-8(e)(2), T.D. 7456, 1977-1 C.B. 200, as amended by T.D. 7749, 1981-10 I.R.B. 27.

141. Treas. Reg. § 1.861-8(e)(2), T.D. 7456, 1977-1 C.B. 200, as amended by T.D. 7749, 1981-10 I.R.B. 27.

142. For example, interest payments attributable to the production of inventory goods would be linked with the gross receipts earned on the sale of the inventory.

143. R. MUSGRAVE & P. MUSGRAVE, *supra* note 13, at 256-57.

type and are not truly fungible. More importantly, the tracing of fungible loan proceeds presents a formidable administrative problem because the tax code makes tracing a condition for deductibility in only a few, selected cases. When all loan proceeds must be traced, and tracing produces broad tax benefits, the borrower becomes anxious to demonstrate the tax-significant purpose of an interest payment. He becomes the willing ally of the tax administration in enforcing the tracing rules.

Finally, this article defends the tax advantage that savers would enjoy over those without savings in an income tax system that rejects the UID. Inherent in an income tax is an economic bias in favor of current consumption over deferred consumption, a bias exemplified by the so-called "double tax" on savings. Those who complain of the double tax generally recognize that they are arguing to replace the income tax with an entirely different type of tax such as an expenditure tax.¹⁴⁴ The less known corollary of the famous double tax on savings, however, is the bias in favor of financing consumption by drawing down savings rather than by borrowing, because those who draw down savings avoid the second leg of the potential double tax on those savings. Commentators who argue for eliminating that feature of an income tax by adopting the UID should realize that they are not arguing merely for a special status for interest payments; they are challenging the income tax itself.

144. McIntyre, *supra* note 18, at 1187.