

REPLACING THE INCOME TAX WITH A PROGRESSIVE CONSUMPTION TAX

By Daniel N. Shaviro

Daniel N. Shaviro is a professor of law at NYU Law School. He is grateful for comments on earlier drafts by David F. Bradford, Stuart L. Brown, Jonathan Forman, Fred Goldberg, Diane L. Rogers, David A. Weisbach, and participants at workshops at the Tax Forum, the American Enterprise Institute, and Northwestern University Law School.

Shifting from an income tax to a consumption tax would offer major simplification advantages. Even if Congress created as many preferences and other special rules as under the existing income tax, the massive set of complications that relate to realization and to the taxation of financial transactions would largely be eliminated. The main (though not the only possible) reason for opposing such a shift is the concern that it would require reducing progressivity. This article argues, however, that the capacity of a consumption tax to achieve progressivity comparable to that of an income tax is widely underestimated.

In addition, this report discusses the choice between use of the origin basis and the destination basis in taxing cross-border transactions. A consumption tax can use either method, but an income tax is practically compelled to use the origin basis. Use of the destination basis would eliminate transfer pricing issues, although in their place it would create various problems that an origin-basis tax avoids, such as the need for border adjustments (e.g., tax rebates for exports). Contrary to popular perceptions, however, use of the destination basis would not constitute an export subsidy, and thus ought not to be banned under the General Agreement on Tariffs and Trade.

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I. Introduction

Fundamental tax reform is always in the air, although rarely to be spotted on the ground. Many would agree that "our tax system is a disgrace . . . complicated, inefficient, and unfair,"¹ reflecting the difficulties of measuring and taxing income along with "the political process that has created and feeds this monstrous [set of laws]."² While the flaws in our political process seem ineluctable, fundamental tax reform is clearly an option to consider — whether just to scrape off the barnacles and start over, or on the view that some other approach might fare better even given politics.

Unfortunately, the prospects for fundamental reform anytime soon appear dim, if only because of the political difficulty of buying voter support by associating it with an overall tax cut at a time when budget deficits and the long-term U.S. fiscal gap are so large. Still, conceivably at some point its chance will come, and when and if that happens, tax experts should be ready.

One important aspect of being ready is knowing what fundamental tax reform ought to look like. The Tax Reform Act of 1986, for all its warts, owed what

¹Edward J. McCaffery, *Fair Not Flat: How To Make The Tax System Better and Simpler* 1 (2002).

²Michael J. Graetz, *The Decline (and Fall?) of the Income Tax* 7 (1997).

coherence it had to widespread support for comprehensive income taxation. Since 1986, however, there has been a significant shift, at least among academics in the broader community of tax specialists. Tax academics increasingly, though by no means uniformly, support replacement of the income tax with a progressive consumption tax. Whether this is the right way to go is clearly a matter of opinion, and not to be dictated from behind a mantle of claimed academic expertise. Recent academic work does, however, suggest that in some key respects, the income versus consumption tax choice has at times been misunderstood. That misunderstanding gets in the way of permitting the progressive consumption tax approach to receive due consideration in other sectors of the tax specialist community. I therefore aim in this article to draw on recent academic work that I suspect is underappreciated outside the academy, in the hope of laying to rest what I consider mistaken ways of thinking about the issues presented. I hope to contribute to a new consensus favoring progressive consumption taxation — although that would have to turn in part on issues that this report does not discuss.

The literature on income versus consumption taxation could fill many rows of library shelves, and I see no point to trying to recapitulate all of it here. For example, several of the main arguments for a consumption tax emphasize its more favorable treatment of saving, which might be lauded on neutrality grounds, or based on positive externalities that are attributed to saving. Because those arguments are so familiar I do not discuss them here. Likewise, much could be and has been said about which base, income or consumption, offers a better horizontal measure of well-being or ability to pay. This topic also seems not to need a fresh discussion here.

My premise instead is twofold. First, a consumption tax could offer enormous simplification advantages that are less disputable than the usual debate fare. Those advantages are great enough to suggest that, to decide against realizing them, one would need significant grounds for otherwise preferring an income tax. Second, for many people a key reason, perhaps the key reason, for sufficiently preferring an income tax is the concern that consumption taxes cannot be progressive enough.

For that ground for preferring an income tax to have any chance of being persuasive, two initial premises in its favor would have to be granted. The first is that a real-world income tax actually can succeed in taxing wealthy savers, in the manner of a theoretically pure Haig-Simons income tax, despite all of the inevitable gaps that start with the realization requirement. The second necessary premise is that the burden or economic incidence of the tax on saving really does fall on the wealthy rather than being, say, passed on to workers, as a recent econometric study concluded.³ For

³See Casey B. Mulligan, “Capital Tax Incidence: Fisherian Impressions from the Time Series,” National Bureau of Economic Research Working Paper 9916 (2003).

argument’s sake, I accept the pro-income-tax view of these issues here, on the ground that even if they are correct, a pro-income-tax conclusion regarding progressivity does not necessarily follow. I should also note that for the most part, my arguments in this report, rather than being original, will draw on the tax policy literature of the last 15 years.⁴ That may make it overly familiar to some, but will not, I hope, prevent it from being of interest to others.

For concreteness, and because I consider it a meritorious proposal that has garnered too little attention, I will emphasize David Bradford’s X-tax, a proposal that resembles the far more prominent Hall-Rabushka “flat tax” except that it has progressive rates even beyond the zero rate bracket.⁵ After describing its main features, including possible alternatives to some of the structural features that Bradford advocates, and its key advantages as compared to current law, I will turn to two big issues that it raises as a progressive consumption tax (that is, in common with other similar proposals).

The first, more fundamental, issue is the significance of its being a consumption tax rather than an income tax. If the two systems are similarly progressive, is there any problem with ceasing to tax income? While noting several grounds on which one might reasonably argue for an income tax, I will aim to dispel several that I believe are misplaced. In particular, if one misunderstands the significance of exempting “capital income” and not taxing wealth until it is spent, one may erroneously conclude that a consumption tax cannot be adequately progressive after all. Consider a super-rich individual such as Bill Gates. Can a consumption tax really make him pay enough if his “capital income” is exempt and he never spends more than a small fraction of his vast wealth? In fact, exempting “capital income” has a much smaller effect than one might initially think on those such as Gates who build huge fortunes, and his wealth bears the consumption tax even before it is spent. Those criticisms therefore mean less than meets the eye, and less still if we compare a progressive consumption tax, such as the X-tax, to a realization-based tax rather than a pure Haig-Simons income tax.

The second issue is more technical, yet not unimportant. The current income tax applies on an origin basis in that it taxes American businesses on their exports and allows them to deduct or capitalize the amounts they pay to foreign businesses for imports. That creates transfer pricing and related administrative and compliance problems for the U.S. tax system. As I will

⁴See sources cited in note 38 *infra*.

⁵The other leading design for a progressive consumption tax is a spending or accessions tax that looks somewhat like a personal income tax, as modified to have an unlimited deduction for savings among other key adjustments. See, e.g., Nicholas Kaldor, *An Expenditure Tax* (1955); William D. Andrews, “A Consumption-Type of Cash Flow Personal Income Tax,” 87 *Harv. L. Rev.* 113 (1974); David F. Bradford and the U.S. Treasury Tax Policy Staff, *Blueprints for Tax Reform* (2d ed. 1984); McCaffery, *supra* note 1.

show, while an income tax, as a practical matter, pretty much has to use the origin basis, a consumption tax can use either the origin basis or the destination basis, under which payments from foreigners are not included and payments to foreigners are not deducted.

Destination-basis taxation is widely viewed as an export subsidy — except among those schooled in international trade economics, who understand that its incentive effects, regarding cross-border trade, are identical to those of origin-basis taxation. The mistaken belief that destination-basis taxes are export subsidies might give them a political advantage in Congress, except for the relationship to their probable banning (other than when used in value-added taxes) under the General Agreement on Tariffs and Trade (GATT). Violating the GATT by adopting a destination-based consumption tax would rightly raise serious concerns if not for the fact that any such ban is wholly misguided and thus could be challenged (and, one hopes, renegotiated if necessary) without raising any valid concerns about protectionism or trade war. I will argue, therefore, both that a destination-based X-tax or other progressive consumption tax ought to be seriously considered and that the feasibility of using the destination basis adds to the relative appeal of consumption taxation.

The above arguments concerning consumption taxation and the destination basis may both seem to rely on abstract or theoretical considerations in lieu of what we can directly observe. In fact, they are no more “theoretical” than the views they would replace. It is merely a theory, for example, that an individual we observe paying a tax is the one who actually bears the tax. And we need a theory of economic incidence to motivate caring about who pays. After all, why should anyone care how much tax Bill Gates pays unless one believes that his paying the tax transfers net societal resources from him to people who are less well-off?

It may be worth noting some other important topics that this article does not consider. First, shifting from an income tax to a consumption tax would raise major transition issues that I have written about extensively elsewhere⁶ but do not address here. Second, switching to a consumption tax while other countries retained their income taxes might pose coordination problems between the tax systems for cross-border transactions. Third, switching the principal tax system (apart from payroll taxes) to consumption would raise the question of whether the welfare system should be changed as well, because the distributional issues that taxes and transfers raise are at the very least similar. I also do not discuss estate tax issues. While all of these issues are important, clarifying our thinking about tax reform is an important first step no matter what. Even if any of those topics affected one’s views about switching to consumption taxation, it would still be worth knowing that one otherwise had this preference, or at least considered it plausible. That understanding might, for ex-

⁶See Daniel N. Shaviro, *When Rules Change: An Economic and Political Analysis of Transition Relief and Retroactivity* (2000).

ample, affect one’s view of well-designed consumption-tax-style rules in the income tax, such as tax preferences (from an income tax standpoint) for retirement saving.

The remainder of this article proceeds as follows. Section II describes the X-tax, with several variations, while also more briefly describing alternative progressive consumption tax prototypes. Section III discusses income and consumption taxation. Section IV discusses origin- and destination-basis taxes, along with the GATT. Section V offers a brief conclusion.

II. Progressive Consumption Tax Prototypes

A. Basic Design of the X-Tax

To provide a sense not just of how the X-tax works but of what it does, I will back into it circuitously, by starting with related taxes that are better understood and showing what revisions would turn them into the X-tax. I also will settle for a sketchy general overview of the X-tax, rather than exploring the design issues in detail, as both David Bradford⁷ and David Weisbach⁸ have recently and capably done.

Suppose we had a comprehensive retail sales tax (RST) that, unlike actual RSTs, applied at a uniform rate to all market consumption. It would apply, like the current income tax, to sales of food and other necessities, and also to services sold to consumers, but not to transactions along the chain of production in which one business sells a good or service to another business as an input for ultimate sales to consumers.

RSTs are relatively easy to evade, however, so most countries with broad-based consumption taxes use value-added taxes (VATs) instead. Under a subtraction-method VAT, interbusiness sales, instead of being ignored, result in an inclusion for the seller and a deduction for the buyer.⁹ To keep the equivalence to an RST (compliance aside), suppose the inclusion and deduction were at the same uniform tax rate and that a business with net deductions got a refund from the government, computed at that rate. The following example may help to show the equivalence.

Example 1: Suppose a timber company harvests a tree and sells it to a baseball bat company for \$40. The baseball bat company sells it to a Little League player for \$100, not counting tax. Under a 25 percent RST, there would be no tax on the interbusiness transaction and a \$25 tax on the

⁷See, e.g., David F. Bradford, “Blueprint for International Tax Reform,” 26 *Brooklyn L. Rev.* 1449 (2001); Bradford, “Treatment of Financial Services Under Income and Consumption Taxes,” in Henry Aaron and William Gale (eds.), *Economic Effects of Fundamental Tax Reform* (1996); Bradford, “Addressing the Transfer-Pricing Problem in an Origin-Basis X-Tax.”

⁸David A. Weisbach, “Does the X-Tax Mark the Spot?,” 56 *SMU L. Rev.* 201 (2003). See also Weisbach, “Ironing Out the Flat Tax,” 52 *Stan. L. Rev.* 599 (2000).

⁹Most actual VATs use the invoice and credit method rather than the deduction method, but sometimes those are equivalent.

retail sale. Under an equivalent 20 percent VAT,¹⁰ the timber company would charge the baseball bat company \$50, but the true price would still be \$40 after taking account of the \$10 tax on the timber company and the \$10 refund to the baseball bat company. Moreover, the government's net revenue at this stage would still be zero, just as under the RST. Selling the bat to the consumer for \$125 would then yield the same \$25 tax as under the RST, leaving everyone in the same position under both taxes except that the government would have a better audit trail under the VAT.¹¹

VATs, like RSTs, permit no deduction of salaries paid to workers, who likewise pay no VAT on their salaries because they are not classified as businesses. Modifying the VAT to provide for inclusion and deduction of salaries, while retaining the uniform tax rate, makes no difference apart from the administrative, for exactly the same reason as switching from the RST to the VAT. Once again the net revenue effect of the change is zero, as shown by the following example.

Example 2: Recall the timber company that in Example 1 was selling a tree to the baseball company for \$50 pretax under a 20 percent VAT. Suppose that, under the VAT, it was paying a lumberjack \$30, which was neither included nor deducted, leaving \$10 for the timber company's owner to take home after paying this salary plus \$10 of VAT. If the salary was includable and deductible, and was \$37.50 before tax, everyone would be in exactly the same position as under the VAT. The worker would take home \$30 after paying a 20 percent tax. The timber company would have receipts of \$50 and deductions of \$37.50, leaving the owner with \$12.50 of net receipts, or \$10 after paying tax at 20 percent. Note as well that the owner's economic position would be unaffected by her paying herself a salary that was included and deducted at the same tax rate.

This design difference, like that between the RST and the VAT, is trivial if one leaves aside its administrative effects, which here are a negative rather than a

¹⁰The reason for the nominal rate difference between 25 percent on the RST and 20 percent on the VAT is that, following conventional practice, the former is assumed to be tax-exclusive (i.e., tax is levied on the pretax price) while the latter is assumed to be tax-inclusive (i.e., tax is levied on the after-tax price).

¹¹Suppose the baseball bat company tried to keep its retail sale off the books to avoid the tax. Under the RST, that might be the end of the matter. Under the VAT, if it was deducting the payment to the timber company, it might have to explain why the baseball bat, if not sold, was not on hand. If it did not deduct the payment to the timber company, the government would get net revenue from the timber company on the interbusiness transaction (unless that was evaded as well), leaving it with some, rather than none, of the overall revenue due.

positive because workers now must file tax returns.¹² There is one potentially big reason for doing it, however. Suppose that, in this system, we want to tax individuals under progressive rather than flat rates. We now can apply those rates to the salaries. A reasonable approach might be to have the marginal rate of tax on businesses equal the highest marginal rate that applies to individuals, thus largely avoiding business-level "reasonable compensation" issues except insofar as they relate to family groups.¹³

If the only additional tax rate that we introduce is the zero-rate bracket that workers get if allowed an exemption amount, we now have the Hall-Rabushka flat tax, sometimes called a two-tier consumption tax or two-tier VAT.¹⁴ We also have something that looks much like a broad-based income tax, but with two big differences. First, under an income tax various business outlays, though included by their recipients, would be capitalized by the payers and deducted only gradually or later. A machine, for example, would get economic depreciation rather than expensing, and costs of acquiring inventory would be capitalized until the inventory was sold. That is why even a flat-rate income tax would seemingly have to include and deduct salaries. VAT treatment would be equivalent to providing expensing for salary outlays, rather than requiring them to be capitalized when appropriate under income tax norms. Second, under an income tax, some proceeds of financial transactions, such as the payment and receipt of interest, are typically included and deducted, while under the flat tax (as well as the X-tax) the proceeds of financial transactions generally are ignored.

Only one further step is needed to convert the flat tax into a variant of the X-tax. That is to have multiple rate brackets, rather than just one, above the zero-rate bracket that is created by the exemption amount. One could, for example, have the same rate brackets as current law, or for that matter steeper graduation. The main constraint is that one may be reluctant to create individual rates above the flat rate applied to businesses, because that would make the actual or deemed payment of salary unduly tax-significant.

Two further refinements merit attention here because of their potential significance. The first concerns the choice between origin-basis and destination-basis taxes. Under an origin-basis tax, such as the current U.S. income tax, receipts from foreigners are generally includable, while outlays to foreigners may be deducted or capitalized, just like those to residents, if otherwise appropriate. By contrast, under a destination-

¹²See Weisbach, "Does the X-Tax Mark the Spot?," *supra* note 8. One possible advantage of having workers file tax returns would be that it would facilitate offering deductions for their employee business expenses (or for other items such as charitable contributions).

¹³Reasonable compensation issues might still arise when, say, the owner of a business paid salaries to his children to expand his household's benefit from lower rate brackets. Those issues exist under the current income tax as well.

¹⁴See Weisbach, "Ironing Out the Flat Tax," *supra* note 8.

basis tax, receipts from foreigners are not included and outlays to foreigners are not deducted.

A destination-based system, while counterintuitive for those of us who are used to the current U.S. income tax, is generally used in other countries' VATs. While I defer a fuller discussion of origin- and destination-based taxes until section IV, two key points are worth mentioning here. First, the big advantage of using the destination principle (although it also has disadvantages) is that it eliminates transfer pricing issues. If the U.S. company and the French company are related parties and the price that one purports to pay the other therefore lacks economic significance, we need not try to determine the "true" arm's-length price, as under the current U.S. income tax, because that amount has no tax consequences (since it is not included or deducted). Second, the GATT generally bars the use of the destination principle on the ground that it is an export subsidy. That, however, is subject to an exception permitting its use in "indirect taxes" such as VATs.¹⁵ The flat tax and X-tax, however, would apparently be classified as direct taxes that are subject to the GATT ban on destination-based taxes as ostensible export subsidies. Presumably for that reason, the Hall-Rabushka flat tax is origin-based, although it could easily be adapted to use the destination principle. The X-tax could likewise be done either way, although Bradford has recently suggested using the origin principle with a refinement (discussed in section IV) to reduce the tax stakes associated with transfer pricing issues.

A second refinement in Bradford's recent discussions of the X-tax concerns the use in a VAT of expensing for capital items such as depreciation and inventory. He notes that that leads to anomalous results when tax rates change from year to year. Suppose, for example, that a business spends \$100 for inventory at the end of Year 1, when the tax rate is 30 percent, and sells the inventory for \$100 at the beginning of Year 2, when the tax rate is either 20 or 40 percent. The deduction from this break-even transaction yields a tax refund of \$30, whereas the inclusion yields a tax of either \$20 or \$40. Income tax accounting would have avoided that result by "matching" the deduction with the inclusion in Year 2. To achieve that result under the X-tax without departing from the consumption tax idea of providing the economic equivalent of expensing, Bradford has suggested the use of income-tax-style accounting in terms of when deductions are allowed, along with an annual deduction for the product of unrecovered basis and the applicable interest rate.

B. Simplification Potential

It is difficult to overstate the magnitude of the tax simplification that would result from adopting a pure form of the X-tax, especially in the simplest version, in which it uses the destination principle and expensing. To be sure, problems would remain. To name a few:¹⁶

¹⁵See Victoria P. Summers, "The Border Adjustability of Consumption Taxes, Existing and Proposed," *Tax Notes Int'l*, June 3, 1996, p. 1793 at 1795.

¹⁶See, e.g., Weisbach, "Does the X-Tax Mark the Spot?" *supra* note 8, for a fuller treatment of these issues.

- The distinction between personal and business outlays would be just as hard to resolve in theory and apply in practice as under current law.
- Issues of household taxation would remain, such as defining the proper unit for applying the marginal rate structure, determining whether adjustments such as personal exemptions were appropriate, and policing supposed salary payments to children.
- Likewise, the case for (and against) allowing various personal deductions, such as for charitable contributions, medical expenses, and state and local tax payments, would generally be the same as under current law, and any that were allowed would raise similar legal and compliance issues to those under current law.
- Issues of tax exemption, such as those for charitable organizations, would remain.
- While much of pension tax law could disappear, on the ground that all savings would now get the tax benefit of deferral, ERISA-type protections might still be needed regarding employer plans. Also, one could argue that myopic workers would still need encouragement to save for retirement, such as that provided by tax-favored employer plans.¹⁷
- The removal of financial transactions from the tax base would require addressing cases in which they were "bundled" with other transactions, such as when one buys a car on the installment basis.¹⁸ Also, special rules would be needed for financial institutions, which are compensated through what look like financial transactions for providing services to consumers.¹⁹
- Given the real money that was at stake in determining tax liabilities, enforcement and auditing would of course remain necessary.

Lest that list seem too discouraging, however, one should keep in mind all the tax issues in current tax practice that would disappear. The debt-equity distinction, and all other tax issues raised by financial instruments and innovation, would be gone, as would the complicated interest deduction rules for individuals and businesses. One could also eliminate the existing corporate and partnership tax rules, including the rules

¹⁷See Weisbach, "Ironing Out the Flat Tax," *supra* note 8; Michael Graetz and Daniel Halperin, "Comprehensive Tax Reform and Employee Benefits: The Case for Employer-Based Pensions and Health Insurance," in Dallas Salisbury (ed.), *Tax Reform: Implications for Economic Security and Employee Benefits* (1997).

¹⁸See David F. Bradford, "Addressing the Transfer Pricing Problem," *supra* note 7.

¹⁹An example would be administering an individual's checking account, in exchange for compensation that took the form of paying a below-market interest rate for the use of the funds in the checking account. See Bradford, "Treatment of Financial Services Under Income and Consumption Taxes," *supra* note 7, for a discussion of how financial institutions might be taxed if financial transactions were excluded from the tax base.

for distributions to owners, corporate acquisitions and reorganizations, and the like. The distinction between capital gains and ordinary income would disappear, as would the array of disallowance rules (such as for passive losses and excess capital losses) that respond to the realization requirement. Many foreign tax rules, such as those limiting foreign tax credits and deferral of foreign-source income, would disappear as well.²⁰

In sum, therefore, whether or not individuals could actually file postcard tax returns, they certainly would face nothing like they do today. Business tax practice would also be greatly simplified. Tax practitioners who are reading this can consider, whether with satisfaction or horror, how much of their own practice and that of their colleagues would be eliminated. As a law professor, I find it instructive to consider what would happen to the tax curriculum. In illustration, suppose a law student takes an introductory income tax course while getting a J.D. degree, and then enrolls in a tax LL.M. program such as that at NYU (where I teach). If her interests are limited to U.S. income taxation, her overall set of tax courses might look, in a typical case at NYU, something like this:

Course	Credits
Basic Income Tax (as a J.D.)	4
Corporate Tax	4
Partnership Tax	3
Foreign Tax I	3
Property Transactions	4
Timing Issues	3
Financial Instruments	2
Tax Policy (required at NYU)	2
Additional elective (e.g., Advanced Corporate)	3
Total	28

What would be left of all this under the X-tax? I am inclined to think that a three-credit basic tax course, plus a two-credit advanced course on business tax issues and the two-credit tax policy class, would be more than ample so far as the above courses are concerned. If Congress enacted an X-tax that, like many VATs today, had exemptions and special rates, then probably a three-credit course on that would be important. However, that would still leave the number of credits at 10 or so. The proportionate effect on tax practice might be similar, because the above courses really are designed to cover the range of main issues that practitioners face.

In one sense, comparing the X-tax to current law is unfair, because only the latter reflects nine decades of political machinations. Most of the above curriculum, however, has less to do with pork-barrel tax politics than with the structural needs of a realization-based

²⁰See Weisbach, "Does the X-Tax Mark the Spot?," *supra* note 8.

income tax. It seems likely, therefore, that the X-tax would permit immense simplification even if Congress continued to enact targeted tax benefits (or did the same things through direct spending).

One point should be conceded *against* the simplification advantages of a consumption tax, however. That concerns the effect of tax preferences on administrative complexity. In many VAT systems, the "zero-rating" of particular consumption goods creates difficulties that I gather are not dissimilar to those associated with tracing interest expense under the existing income tax. So tax preferences might, on balance, create worse complexity than under the current income tax law, but the rest of the picture, and above all the dominant structural issues associated with realization, entity taxation, and financial transactions would be much better.

C. Other Progressive Consumption Taxes

Although this article emphasizes the X-tax, it is worth noting three other approaches that would combine progressive rates with the use of a consumption tax. The first is a cash flow or consumed income tax. In practice, that would apply to individuals in much the same way as a conventional income tax, but with an unlimited deduction for savings (and inclusion of borrowing), presumably through designated accounts administered by financial institutions. The fullest study of such a system is in *Blueprints for Basic Tax Reform*, first published by David Bradford and the U.S. Treasury tax policy staff in 1976, and a flawed version of it, the USA Tax, was prominently proposed by Sens. Sam Nunn and Pete Domenici in 1995.²¹ In general, this system would involve additional complications for individuals, relative to the X-tax, such as those relating to the use of designated savings accounts, although it would not require monitoring the distinction that the X-tax draws between disregarded financial transactions and other transactions.

Second, one could in theory tax consumption through a progressive earnings or wage tax, resembling the payroll tax but with progressive rates. The problem, however, is defining "wages" broadly enough. A wage tax, in an economist's definition of "wages" as all returns to work effort, is equivalent to a consumption tax, apart from possible differences in their transition effect on preexisting wealth when first introduced.²² In practice, however, it is hard to enforce a sufficiently broad definition of "wages." For example, if Warren Buffett makes a lot of money in the stock market because of the effort and skill that he puts into picking stocks, his extra returns are earnings or wages in the economist's sense, but would be hard to

²¹The major flaws in the USA tax included its failure to tax borrowing (i.e., dissaving) and its treatment of transition issues. See, e.g., Alvin Warren, "The Proposal for an 'Unlimited Savings Allowance,'" *Tax Notes*, Aug. 28, 1995, p. 1103; Louis Kaplow, "Recovery of Pre-Enactment Basis Under a Consumption Tax: The USA Tax System," *Tax Notes*, Aug. 28, 1995, p. 1109.

²²See Alan J. Auerbach and Laurence J. Kotlikoff, *Dynamic Fiscal Policy* 79 (1987).

identify as such, rather than as returns on his financial investment in stocks, in a practical system that taxed earnings or wages. Accordingly, no such system has been prominently proposed for implementing a progressive consumption tax.

Third, Michael Graetz has recently proposed combining a conventional, flat-rate VAT with an income tax solely on people earning more than, say, \$75,000 per year. The idea would be to deliver tax simplification by “perhaps removing as many as 100 million families from the income tax rolls,”²³ while avoiding what Graetz believes would be the actual and perceived unfairness of eliminating income taxation of the wealthy. The proposal would fail, however, to simplify the taxation of businesses and the wealthy that today consumes those extensive social resources, and thus is less appealing than the X-tax or cash flow tax unless one agrees with Graetz regarding the indispensability of income taxation for actual or perceived fairness as to wealthier individuals.

D. Significance of Simplification

The previous two sections suggested that a progressive consumption tax, such as the X-tax or a cash flow tax, can achieve considerable simplification relative to the existing income tax — not just through a one-time scraping away of all the barnacles that Congress has encrusted on the system through the years, but by abandoning conceptual difficulties and planning opportunities that naturally accompany a realization-based income tax. That is not, however, alone sufficient to support shifting to a progressive consumption tax. After all, there is more to good tax policy than just achieving simplicity. A uniform head tax would be simpler still, yet presumably is undesirable.

In assessing the complexity of the current income tax, however, one should keep in mind how much of it results from implementing and defending distinctions, such as those between realized and unrealized income or debt and equity, that are as arbitrary under a Haig-Simons norm as under a consumption tax norm. It is hard to understand, for example, why one’s current tax burden should depend on the changes in risk position that are associated with an actual or deemed realization,²⁴ or why the tax treatment of those investing in a corporate enterprise should depend on the debt versus equity classification of various capital inflows that sometimes differ only infinitesimally. To defend the entire complicated structure, one must show that the income tax approach is sufficiently more equitable than the consumption tax approach to be worth all of this complexity even though its underlying distributional aims end up being achieved only imperfectly.

While the academic debate is full of lengthy musings concerning the relative abstract desirability of income

versus consumption as a tax base,²⁵ surely the most fundamental concern goes to progressivity. Most of us would agree that Bill Gates and Warren Buffett should pay more tax than the average reader of this article, who should pay more tax than a homeless person. Both income and consumption taxation implement that basic idea, albeit in different ways. Much of the appeal of an income tax rests on the view that only it can achieve sufficiently steeper taxation of a Gates or a Buffett. I therefore evaluate that concern in section III.

III. Income Taxation vs. Consumption Taxation

A. Rate Adjustments to Match Progressivity

An income tax is generally more progressive than a consumption tax with the same rate structure. The reason is simple: While both taxes reach current consumption, only the income tax reaches saving. Given that savings rates rise with lifetime income levels,²⁶ it follows that a well-functioning income tax will generally be more progressive than a comparably well-functioning consumption tax, as measured by lifetime income, if they have similar rate structures.

A consumption tax can match the progressivity of an income tax as long as its rates are sufficiently more graduated to offset the differences between the tax bases.

This point contains the seeds of a simple solution to the problem (if viewed as such), however. A consumption tax can match the progressivity of an income tax as long as its rates are sufficiently more graduated to offset the differences between the tax bases. What is more, a consumption tax that matched the progressivity of a given income tax, and also raised the same revenue over time, would only *nominally* have generally more graduated (and higher) rates. In effect, by taxing returns to saving, the income tax imposes, in present value terms, an increasingly steep rate on cur-

²⁵Leading articles in this tradition include, e.g., William D. Andrews, “A Consumption-Type or Cash Flow Personal Income Tax,” 87 *Harv. L. Rev.* 1113 (1974); Alvin C. Warren, “Fairness and a Consumption-Type or Cash Flow Personal Income Tax,” 88 *Harv. L. Rev.* 931 (1975); and Warren, “Would a Consumption Tax Be Fairer Than an Income Tax?,” 89 *Yale L.J.* 1081 (1980). I have argued elsewhere that income and consumption alike can only be reasonably supported as tax bases on the ground that they imperfectly measure some deeper underlying attribute. See Daniel N. Shaviro, “Endowment and Inequality,” in Joseph Thorndike and Dennis Ventry (eds.), *Tax Justice Reconsidered: The Moral and Ethical Bases of Taxation* (2002).

²⁶See, e.g., Peter Mieszkowski and Michael J. Palumbo, “Distributive Analysis of Fundamental Tax Reform,” in George R. Zodrow and Peter Mieszkowski (eds.), *United States Tax Reform in the 21st Century* 149 (2002); Joseph Bankman and Barbara H. Fried, “Winners and Losers in the Shift to a Consumption Tax,” 86 *Georgetown L.J.* 539, 551 (1998), and sources cited at 551 n.32.

²³Michael J. Graetz, *The Decline (and Fall?) of the Income Tax* 265 (1997).

²⁴See, e.g., Daniel N. Shaviro, “Risk-Based Rules and the Taxation of Capital Income,” 50 *Tax L. Rev.* 643 (1995).

rent earnings as the time when the earnings will be consumed grows more deferred.²⁷

One could say, therefore, that the choice is simply one of how we achieve progressivity through steeper rates. The income tax raises effective rates on work effort as the time of consumption grows more deferred, thereby on average targeting high-earners because they generally save a higher percentage of their earnings. The consumption tax must compensate for that to match the overall progressivity of the income tax by more directly imposing high tax rates on high earners without regard to their consumption patterns. The result at the end of the day is that a consumption tax roughly matches the progressivity of an income tax by taxing high-earning nonsavers more, and high-earning high savers less, than the otherwise comparable income tax.

Looking ahead a bit, one can see why it is hard for a consumption tax to match the progressivity of an income tax for individuals such as Bill Gates or Warren Buffett. Consumption of all their earnings is so deferred that a very high rate would be needed to match the average impact that a comprehensive income tax would have on them over time. Imposing such a high rate on the very highest earners would be awkward under the X-tax structure, which makes it convenient to have a match between the business tax rate and a top individual tax rate that applies to more people than just the likes of Gates and Buffett.²⁸

Before examining that issue further, however, it is important to nail down the point that a consumption tax with steeper nominal rates can roughly match the progressivity of an income tax, just as it can raise the same revenue. It is a point that many readers may be inclined to reject, on the ground that they view a consumption tax as exempting substantial wealth that an income tax reaches. Raising the tax rate on items that remain in the tax base may fail to do the job if the wealth that distinguishes a Bill Gates or a Warren Buffett, and to a lesser extent high earners below the dynastic level, is affirmatively exempted from any burden under a consumption tax approach. Accordingly, that view, which I believe to be erroneous — as suggested by recent academic literature that unfortunately has failed to win broader notice or acceptance — needs to be addressed.

I am familiar with two main grounds for the view that a consumption tax cannot match the progressivity of an income tax through simple rate adjustments by reason of the items that it exempts. The first is that it exempts “capital income,” thereby imposing no tax burden on holders of capital such as Gates and Buffett. The second is that it fails to reach unconsumed wealth, thereby exempting megafortunes that will never be

spent, or at least not by the members of generations who now hold them.

Each of those arguments presupposes that the consumption tax is not levied, like the hypothetical progressive wage tax I discussed above, at the point when a Gates or Buffett is generating his enormous wealth. That restrictive assumption is fair enough, because the tax would be hard to implement with a sufficiently broad definition of “wage.” Even as applied to a “postpaid” consumption tax such as the X-tax, however, I believe the arguments are largely mistaken for the reasons I discuss next.

B. Do Consumption Taxes Exempt ‘Capital Income’?

1. Significance of key differences between the X-tax and the current income tax. To evaluate the claim that a consumption tax would largely fail to reach Bill Gates or Warren Buffett because it exempts “capital income,” it is useful to rely on a concrete comparison. Suppose we are comparing the original X-tax (the version with expensing), to the existing, and admittedly quite imperfect, income tax. The two main differences between those taxes, other than that the existing income tax is shot through with preferences and dispreferences from a Haig-Simons standpoint, are twofold. First, the X-tax generally disregards financial transactions. For example, it exempts dividends, makes interest neither includable nor deductible, and generally exempts capital gains and losses on financial assets. Second, the original X-tax provides expensing in lieu of income tax accounting for capital outlays, such as buying a machine or acquiring inventory.²⁹ The claimed exemption of capital income would therefore have to result from either or both of those features.

We can start with financial transactions. Exempting dividends merely accomplishes corporate integration and still leaves corporate income bearing a tax at the corporate level, as the X-tax would do — indeed, more effectively than the current income tax with its realization-based opportunities for corporate tax sheltering — leaving aside for the moment the consequences of expensing. It is easy to see that corporate integration does not exempt business income if there is an effective company-level tax. At the most, its adoption may reduce the progressivity of the tax system if nothing else changes and thus require an offsetting adjustment (such as to tax rates) if progressivity is to be constant, but that is quite different from the exempt-income scenario.

The X-tax treatment of interest has similar implications, except that here deductions as well as inclusions are being eliminated. The inclusion and deduction of interest expense is a wash if the borrower and lender have the same marginal tax rate. In our current income tax, of course, when companies raise capital through transactions denominated “borrowing,” the company often can use the interest deductions while the investor

²⁷See, e.g., Kenneth L. Judd, “Capital Income Taxation with Imperfect Competition,” 92 *Am. Econ. Rev.* (2002).

²⁸The idea is to make salary payouts by the business to owners a matter of tax indifference apart from the tax advantage (which is meant to be generally available) of using up the lower rate brackets.

²⁹The revised X-tax, with its use of income tax accounting plus an interest allowance on unrecovered basis, is meant to be equivalent to expensing when the tax rate is constant.

is tax-exempt and thus indifferent to interest inclusion. So the current system — or even a more broad-based income tax with tax-exempt investors — may actually do worse than the X-tax in ensuring that business income is taxed once. Under a prominent tax reform proposal, the comprehensive business income tax (CBIT) that the Treasury Department described in a 1992 study,³⁰ companies' interest payments would have been made excludable and nondeductible, as under the X-tax. This rightly raised no concern that the Gateses and Buffetts of the world would henceforth be effectively tax-exempt.³¹

That brings us to the expensing of business outlays. While lay voters might be a lot less suspicious that the wealthy were being exempted than in the case of ignoring financial transactions, those who are sufficiently conversant with the tax system to know some tax economics may be more suspicious. Among those individuals, there is a "common perception that consumption taxation eliminates all taxes on capital income,"³² which may sound as if Bill Gates and Warren Buffett are off the hook.

The underlying intellectual basis for that belief comes from the Cary Brown theorem, which shows that expensing an investment outlay is sometimes equivalent to exempting the yield from the investment.³³ The following is a simple illustration:

Example 3: X can invest whatever cash she has available at a 10 percent annual pretax rate of return. If the investment yield is explicitly exempted, then her investment of \$100 out of pocket in Year 1 yields \$110, both before and after tax, in Year 2.

Now suppose the yield is nominally taxable in Year 2 but that she can expense the outlay in Year 1 with a 50 percent tax rate applying in both years. In Year 1 she now can invest \$200 at an out-of-pocket cost of \$100 given the value of the

deduction. In Year 2 she gets \$220 before tax and is left with \$110 after tax. The result is identical to that under yield exemption.

Among the key assumptions to keep in mind here are (1) constant tax rates, including refundability of expenses in excess of receipts as needed to receive the full tax benefit of the deduction, and (2) the ability to "scale up" the investment, as from \$100 to \$200 in the above example, without any diminution to the rate of return. The second assumption is considerably more plausible if one is thinking about financial instruments, such as bonds, offered in capital markets than if one is thinking about specific business opportunities, which often face declining rates of return.

Two distinct aspects of the Cary Brown theorem should be distinguished. The first concerns the effect of expensing on rates of return. In the above example, X's after-tax return of 10 percent matches her pretax return even if she does not scale up her investment in response to the tax. If she invested a gross \$100 with or without the cash flow tax, it would cause her to make a \$5 profit on a net outlay of \$50, rather than a \$10 profit on a net outlay of \$100.

The second point concerns the scaling up. Will X actually do that? Under the neoclassical economic assumptions of perfect information, complete markets, and rational behavior in pursuit of consistent preferences, the answer is clearly yes.³⁴ X apparently wanted to invest \$100, despite any downside economic risk, so she will do what she wanted even though it requires scaling up her gross or nominal investment. Rather than insist that she will do this, however, it is enough for our purposes to note that the cash flow tax will not be equivalent to yield exemption in practice unless she does so. Failure to scale up completely would mean the cash flow tax reduced her gain or loss and thus (for society as a whole) aided people who lost their economic bets by taxing those who won.

The Cary Brown theorem is nonetheless widely accepted as establishing the equivalence of cash flow taxation to yield exemption when its objective conditions are met.³⁵ Moreover, I am unaware of any instance in which advocates (or foes) of consumption taxation have expressed doubt about whether cash flow taxation really achieved a desired yield-exempt result despite the possibility that investors either were unable to scale up their investments to wash out the effects of the tax or simply failed to do so (presumably because of some departure from rational behavior in the

³⁰See U.S. Department of the Treasury, *Integration of the Individual and Corporate Tax Systems: Taxing Business Income Once* (1992).

³¹Exempting capital gains and losses on financial assets involves additional complications. Those gains and losses presumably reflect changes in the value of expected future cash flows from the assets, presumably from businesses other than in the case of pure bets. I discuss taxation of the risk element of pure bets *infra*. Under an X-tax, one could extend the business classification to instances in which, say, a broker, dealer, trader, or business analyst made money in the form of capital gains. The business would then be taxed on its net cash flows, and other businesses allowed to deduct their payments to it. See Bradford, "Treatment of Financial Services Under Income and Consumption Taxes," *supra* note 7, for a discussion of taxing financial institutions such as banks.

³²R. Glenn Hubbard, "Capital Income Taxation in Tax Reform: Implications for Analysis of Distribution and Efficiency," in Zodrow and Mieszkowski (eds.), *supra* note 26, at 90.

³³See Cary Brown, "Business-Income Taxation and Investment Incentives," in *Income, Employment, and Public Policy: Essays in Honor of Alvin H. Hansen* 300, 301 (1948).

³⁴I ignore for this purpose the "general equilibrium" question of how X would respond to holding, as a taxpayer who is affected by fluctuations in government receipts, a stake in all investments made by other taxpayers. On this issue see Louis Kaplow, "Taxation and Risk Taking: A General Equilibrium Perspective," 47 *Nat'l Tax J.* 789 (1994).

³⁵See, e.g., Deborah A. Geier, "The Myth of the Matching Principle as a Tax Value," 15 *Am. J. Tax Pol.* 17, 42-43 (1998); Christopher H. Hanna, "The Virtual Reality of Eliminating Tax Deferral," 12 *Am. J. Tax Pol.* 449, 451-459 (1995); Calvin H. Johnson, "Soft Money Investing Under the Income Tax," 1989 *U. Ill. L. Rev.* 1019, 1022-1207.

neoclassical economic sense). Cash flow taxation underlies the design of consumption taxes (in particular VATs) around the world, as well as U.S. consumption tax proposals.

The Cary Brown theorem has quite reasonably won widespread acceptance — in particular from income tax advocates, who often use it to criticize consumption taxation in general or the expensing of particular items in the existing income tax. For a long time, however, the common assumption was that it applies to all “capital income” — whatever that is — and therefore shows that the capitalists who presumably earn capital income, such as Gates and Buffett, would be effectively exempt under a consumption tax.

2. Distinguishing the components of ‘capital income.’

a. A meaningless or overbroad category? Before exploring what “capital income” is, in relation to how the Cary Brown theorem illuminates the effect of a consumption tax on the likes of Bill Gates and Warren Buffett, it is useful to recall John Maynard Keynes’s famous comment that “the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist.”³⁶

Regarding thinking in terms of a category called “capital income,” the responsible defunct economist may be none other than Karl Marx. In the Marxian view of the world, there were distinct economic classes with clear but differing relationships to the means of production, in particular the capitalists who owned the means and the workers who supplied the labor.³⁷ The influence of that simplistic and rigidly dichotomous deconstruction of the economic world (capitalists work, after all, and workers possess at least human capital) was not limited to people who subscribed to Marx’s economic theories or political aims. Decades of prominent conflict between “capital” and organized labor encouraged that mode of thinking as well. Even today, when the term “capitalist” has lost much of its vogue, it may still seem natural to equate taxing rich people with taxing “capital” or the “income from capital.”

In fact, however, it is hard to assign any fundamental economic meaning to the term “capital income.” Suppose I save or borrow money, which I use to rent a storefront, buy some cooking equipment and food supplies, and open a restaurant. If I get rich because I am a good cook, am I earning income from “capital”?

³⁶John Maynard Keynes, *The General Theory of Unemployment, Interest, and Money* 383 (1964 ed.).

³⁷Marx did not invent this terminology, of course. For example, Adam Smith, though far less rigidly dichotomous, discusses the division of the “produce of labour” between the labourer and the holder of the “stock which advanced the wages and furnished the materials of that labour.” Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations* 55 (1976 ed.).

Would it matter if I incorporated the restaurant and paid myself a salary? Or if I did not actually cook, but merely had an eye for cultural trends and for ingratiating myself with the people who make or break new restaurants? Or if I was just lucky, like the winning bettor in a horse race? Along those lines, does Bill Gates have predominantly “capital income” merely because he has chosen to take his profit mainly in the form of stock appreciation, rather than salary other than stock options?

Invested resources bring, or are associated with, an economic return for many reasons. The investor may be getting compensated for various things, such as forgoing current consumption and alternative investment choices, and for accepting some set of upside and downside risks. Moreover, the return may reflect the input of the investor’s labor, whether in choosing the investment or operating it. Rather than treating “capital income” as a coherent category, therefore, one should look at the components for which people are compensated and ask how the Cary Brown theorem applies to each.

b. Recent academic analysis of how the components of ‘capital income’ are taxed. That is exactly what recent academic literature has done. The literature to which I am referring has grown so extensive that, for academic readers, I risk both tedium from its familiarity and inadvertent offense to those whose work I fail to cite.³⁸ Unfortunately, in part because an abstract and at times mathematical style of presentation that made good sense from the standpoint of academic readers but was offputting to some others, work that was breaking down abstractions to increase their practical relevance seems to have invited dismiss-

³⁸A key insight in this literature first appeared in Evsey D. Domar and Richard A. Musgrave, “Proportional Income Taxation and Risk-Taking,” 58 *Q. J. Econ.* 388 (1944). For an important early statement in the legal literature, see Joseph Bankman and Thomas Griffith, “Is the Debate Between an Income Tax and a Consumption Tax a Debate About Risk? Does It Matter?,” 47 *Tax L. Rev.* 377 (1992). The analysis was earlier foreshadowed in Alvin Warren, “Would a Consumption Tax Be Fairer Than an Income Tax?,” 89 *Yale L.J.* 1081, 1108 (1981). Key aspects of the analysis were formalized in Louis Kaplow, “Taxation and Risk Taking: A General Equilibrium Perspective,” 47 *Nat’l Tax J.* 789 (1994). A similar analysis was independently developed in David Bradford, “Consumption Taxes: Some Fundamental Transition Issues,” in Michael J. Boskin (ed.), *Frontiers of Tax Reform* 128-130 (1996), and shortly thereafter received a fuller and more prominent analysis in William M. Gentry and R. Glenn Hubbard, “Distributional Implications of Introducing a Broad-Based Consumption Tax,” in James M. Poterba (ed.), *Tax Policy and the Economy*, vol. 11 at 4-9 (1997). Other early treatments include Alvin C. Warren Jr., “How Much Capital Income Taxed Under an Income Tax is Exempt Under a Cash Flow Tax?,” 52 *Tax L. Rev.* 1 (1996), and Noel B. Cunningham, “The Taxation of Capital Income and the Choice of Tax Base,” 52 *Tax L. Rev.* 17 (1996). For an important recent extension, see David A. Weisbach, “Taxation and Risk-Taking with Multiple Tax Rates,” University of Chicago Law School, John M. Olin Program in Law & Economics Working Paper No. 172 (2d series).

al outside its core readership (if it was even noticed) as pie-in-the-sky theorizing.

The starting point for the analysis in this literature can be set forth as follows. The return on an investment, whether it is made through the vehicle of a financial instrument, can be broken down into the following components:

1) *The pure risk-free return to waiting*, compensating the investor for deferring consumption of the economic claim that was being invested.

2) *An inflation premium*, compensating the investor for expected price inflation during the investment period.

3) *Adjustments for risk*, in the form of a risk premium, increasing the expected return *ex ante*, to the extent that the return was considered uncertain, followed by an actual risky gain or loss *ex post*.

4) *Inframarginal returns*, or those above generally available market levels, compensating the investor for having a good idea that was not generally known. A more colloquial definition would be special opportunities or big scores. This category can conveniently be expanded to include all of the investor's labor inputs to the investment, although economically the investment is not inframarginal to the extent that what is merely the investor's generally available market wage is commingled with her other returns.

So far this is totally conventional financial economics, describing real world phenomena, albeit in abstract terms. The next step was simply to analyze each component from a straight Cary Brown standpoint that is quite uncontroversial. The analysis, with some reframing and additional commentary, went as follows:

1) *Risk-free return to waiting*. Here the Cary Brown analysis clearly applies (for example, one could simply reuse my illustration of the Cary Brown theorem using X's \$100 investment). Accordingly, this return is exempted by a cash flow consumption tax unless we reject the long-conventional scaling-up argument, whereas an income tax reaches this return. This is exactly what one might expect, given the longstanding consumption tax argument that people should not be tax-penalized for preferring later consumption.³⁹ Before one starts equating this with "capital income" or the wealth of a Bill Gates or a Warren Buffett, however, one should keep in mind that historically the real riskless return, if deduced from the rate on short-term Treasury bills (perhaps the most riskless widely available asset as to which there is substantial data) has been less than 1 percent per year.⁴⁰ So this seemingly trivial amount, to anticipate the rest of the analysis a bit, is all that the abstract difference between income and consumption taxation really boils down to, suggesting that the differences (other than the administrative in practice) are much less significant than people have generally thought.

³⁹See, e.g., Andrews, *supra* note 25.

⁴⁰See Bradford, "Consumption Taxes: Some Fundamental Transition Issues," *supra* note 38 at 129.

2) *Inflation premium*. In a cash flow consumption tax, the tax on the inflation premium, like that on the risk-free return to waiting, is eliminated under the Cary Brown theorem. In the basic example I offered in the previous section, it made no difference to what extent the Year 2 payoff reflected an inflation premium rather than a real return. The literature has nonetheless mainly viewed the treatment of inflationary gain as *not* an element of difference between income and consumption taxation. The basic argument is that a normative income tax would use indexing (both for basis and interest payments) to wash out the effects of inflation and that the current failure to do that mainly reflects mere administrative considerations.⁴¹ Moreover, even if the tax on merely inflationary gain increases the current tax system's progressivity,⁴² that could be adjusted for in the rates. No one really thinks that eliminating the inflation tax would mean we were taking the bulk of Bill Gates's and Warren Buffett's true economic returns out of the tax base.

3) *Risk adjustments*. Here is where the academic literature may really have lost out on persuading non-hardcore readers, for reasons of style that had little to do with the actual merits of the argument of interest here — that is, that adopting a consumption tax would *not* lead to the effective exemption of huge fortunes that an income tax reaches. To show this, I first run through the standard argument (hoping that skeptical readers can suspend their impatience with the approach) and then comment on what we should really make of it.

Suppose that, in the absence of an income tax, X, who has savings of \$200, would invest \$100 in a risk-free asset earning a 2 percent return and \$100 in a risky asset with an expected return of 10 percent, composed of a 50 percent chance of earning 30 percent and a 50 percent chance of losing 10 percent. In a year, therefore, X would have either \$232 or \$192, depending on the risky outcome.

Now suppose instead that we have a 50 percent flat-rate income tax in which losses are fully refundable at the 50 percent rate. If X makes exactly the same investment decisions as above notwithstanding the tax, then she ends up after tax with either \$216 or \$196. It therefore looks as if the income tax has reached both the *ex ante* risk premium (since the risky asset has an expected after-tax return of only 5 percent) and the actual after-tax risky outcome. It is at this point, how-

⁴¹Some features of the existing income tax, such as accelerated depreciation and the lower capital gains rate, might be considered partial indirect responses to the lack of indexing aimed at mitigating the taxation of nominal or inflationary gain. See Yoram Margalioth, "The Case for Tax Indexation of Debt," 15 *Am. J. Tax Po.* 205 (1998).

⁴²The failure to index for inflation might function as an indirect wealth tax that increases progressivity, except that it also may aid tax planning by increasing the divergence between taxable income and economic income. An example would be using loans that pay market-rate nominal interest (exceeding the real interest rate), perhaps with associated tax arbitrage so that nothing really happens economically, to shift taxable income to tax-exempts.

ever, that the academic literature asks why we should expect X to ignore the existence of the income tax in making her investment choices. (We assume here, just as in the Cary Brown scenario, that additional risky assets offering the same return remain available.)

Suppose X responded to the existence of the income tax by investing her entire \$200 portfolio in the risky asset.⁴³ Now she would end up with \$260 before tax and \$230 after tax if the risky outcome was favorable, or \$180 before tax and \$190 after tax if it was unfavorable. She ends up in almost the same place as if the income tax did not exist. The only difference is that she is \$2 worse off whether the investment wins or loses. That reflects the unavoidable tax on the risk-free rate. Had she invested her entire \$200 portfolio in the risk-free asset, she would have earned \$4 before tax and paid \$2 of tax. Apparently, then, due to portfolio adjustments, an income tax fails to affect either *ex ante* risk premiums or *ex post* risky outcomes.

Some further refinements help to make the story complete. One involves assuming that if people need to place more than 100 percent of their portfolios in risky assets to get where they want after tax, they can simply borrow at the risk-free rate. A second is assuming that the government takes the other side of those risk-increasing transactions by trading risky assets for risk-free ones, so that the overall asset composition in the society can remain the same and market risk premiums can thus remain the same.⁴⁴

By now, however, some readers may be past the point of incredulity. The questions they may ask include the following: What about the fact that our actual income tax does not have flat rates and full loss offsets? Do people really adjust in this way to the existence of the income tax? Could they do so even if they wanted to? For example, who besides the government can borrow at the risk-free rate?⁴⁵

All those objections are well worth raising. They challenge the conclusion — albeit often expressly disclaimed in the academic literature — that the existing income tax entirely fails to reduce expected risky returns *ex ante* or offset risky outcomes *ex post*. The extent to which the above hypothetical scenario holds or fails to hold is well worth researching, and the findings might affect our policy views.

The objections have little or no effect, however, on how an income tax differs from a consumption tax in its treatment of risk.⁴⁶ That may be hard to appreciate initially, “probably because we are accustomed to

⁴³We need not think of X as adjusting her portfolio in response to the tax, but rather as investing in the first instance given the tax. Her investment in the non-tax world is merely a description of her preferences, not of something that she actually did, given that she has never lived in a nontax world.

⁴⁴See Kaplow, “Taxation and Risk-Taking,” *supra* note 34.

⁴⁵The proposed role of the government as counter-party to make the story complete seems even more question-begging — as Kaplow, *supra* note 34, expressly recognized.

⁴⁶See Bradford, “Consumption Taxes: Some Fundamental Transition Issues,” *supra* note 38 at 129; Gentry and Hubbard, *supra* note 38 at 7.

seeing risk and waiting intertwined.”⁴⁷ Or perhaps we are too used to thinking about consumption taxation in terms of yield exemption, which would leave untouched the risky pretax outcome of any set of investment choices. And that in turn may reflect acceptance of the Cary Brown theorem’s apparent lesson about consumption taxation without recognition that it relies on almost the same scaling-up assumption. The only difference between the two is that, in the income tax hypothetical, the investor alters the composition of her gross portfolio, shifting it toward risky assets, rather than simply making it nominally larger.

In sum, there is no adequate basis for assuming that people will actually scale up their pretax risky investments in response to a cash flow consumption tax but not an income tax.

That may be marginally more difficult, not only in terms of decisional complexity, but also when one must in theory borrow at the risk-free rate to put more than 100 percent of one’s net portfolio in the risky asset. However, that problem is to some extent an artifact of the abstract and simplified hypothetical, with just two assets, that I used to illustrate the underlying idea. In real world financial markets, one may be able to invest more riskily as an offset to borrowing somewhat riskily, unless one was already at a corner holding the riskiest assets available. In any event, however, reliance on the problem of riskless borrowing to support a claim of significant differences between how an income tax and a consumption tax treat risk would seem to require considerably more support.

Or consider the lack of full loss offsets in the actual income tax, assumed away (as are progressive positive rates) in the hypothetical. When taxpayers cannot overcome these problems — for example, by investing via diversified corporations that are unlikely to have an overall loss — they indeed face an expected tax on making risky investments. The tax system, by taxing gains at a higher rate than that (if any) at which it reimburses losses, in effect says “heads we win, tails you lose” to risky investors. That, however, is not a function of income taxation but rather of the rate structure. The Cary Brown scenario likewise relied on flat rates and full loss offsets and would leave investors under a cash flow consumption tax bearing an expected tax that they could not eliminate through portfolio adjustments if the assumed rate structure were modified.

In sum, there is no adequate basis for assuming that people will actually scale up their pretax risky investments in response to a cash flow consumption tax but not an income tax. Accordingly, one cannot easily justify the view that portfolio adjustments eliminate the tax on the risk in one case but not the other. It makes more sense to assume that people will similarly — whether in full, not at all, or somewhere in between —

⁴⁷See Bradford, “Consumption Taxes: Some Fundamental Transition Issues,” *supra* note 38 at 129 (footnote omitted).

eliminate the tax on risk in both the income tax and the consumption tax, because their incentives to do so are the same in both cases and the systems do not seem to involve major or important differences in information. Thus, whether or not one accepts the conclusion that an income tax fails to tax the risk element in capital income, one should accept — barring some powerful demonstration to the contrary that has not yet been made — that it is basically equivalent in this respect to a cash flow consumption tax.

A real-world example may help to drive home the point that a consumption tax reaches risky returns if an income tax does. Rather than thinking about hypothetical risky financial instruments that can be scaled up as one likes, suppose we think about Bill Gates and Microsoft. Although, as I discuss next, this example fits best into the inframarginal category, no doubt there was an element of luck and therefore risk in his astonishing success story. Perhaps he would not be guaranteed to end up where he is now if we could set the clock back to 1975 (when he founded Microsoft) and make him try to do the same thing all over again. Still, it would be absurd to imagine that, had a cash flow tax been in place in 1975, he would have scaled up his investment, keeping constant the expected rate of return, in a manner that we are assuming he did not under the actual income tax. And without that scaling up, a cash flow tax would not leave Microsoft or Gates in a tax-exempt position regarding the enormous profits of the former or the enormous wealth of the latter.

4) *Inframarginal and labor returns.* Inframarginal returns or big scores cannot be scaled up in response to a tax. By definition, they are unique and finite opportunities, well worth exploiting in full whether one is taxed or not. For example, Bill Gates's great idea, if we think of Microsoft that way, was worth exploiting in any event. There is no reason to think that he would have made only half of a Microsoft if not for the income tax, or two equally profitable Microsofts in response to a cash flow tax.

The conclusion here is fundamentally the same if we think of a Gates or a Buffett as earning a return to work effort rather than as grabbing money that was sitting there on the table for them given their abilities and opportunities. One has only so much time and so many good ideas. And the ability to work harder or longer and earn more before tax, thus ending up with the same after-tax return as if there had been no tax, does not make one effectively tax-exempt. Under the existing income tax or any cash flow tax, it is equally true (if job opportunities are good enough) that one can pay the tax on one's first job by taking a second job. But that is not the same as scaling up a financial bet, because one loses leisure and could have taken the second job even if there were no tax.

Once one accepts that a special opportunity, such as running a great restaurant or founding Microsoft, cannot be scaled up Cary Brown-style in response to a cash flow tax, it becomes clear that expensing does not leave one effectively yield-exempt. That component of "capital income" therefore is subject to a cash flow consumption tax, just as it is subject to income tax. The

question of interest, therefore, in assessing the capacity of a consumption tax with steeper nominal rates to match the progressivity of an income tax, is to what extent these big scores (or extraordinary returns to labor) are behind the creation of enormous fortunes.

Perhaps all that need be said on this point is that neither Bill Gates nor Warren Buffett earned his wealth by investing in short-term Treasury bonds. That is not how great fortunes are made. So the real foundations of their wealth — earning enormous profits through some combination of luck and skill that permitted them to exploit limited opportunities — are within the reach of a cash flow consumption tax, no less than an income tax. Moreover, to broaden one's perspective a bit, highly profitable companies in general are doing more than just the equivalent of holding short-term Treasury bonds. For example, they may hold valuable intangible property that enables them to earn high returns up to a certain scale of activity, but without the ability to keep going at the same rate of return. So they would not be made effectively tax-exempt by expensing either.

On the other hand, it is true that imposing an income tax on the riskless rate of return to the Gates and Buffett fortunes, for the long period when we might expect them to remain unspent, might have an impact that would require steep consumption tax rates to replicate. (More on that shortly.) But then again, this is not to say how steep the rates would need to be if we are comparing a progressive consumption tax to the actual income tax, or indeed any practical income tax that is realization-based, given the opportunities for planning that such a tax inevitably offers to the wealthy.

C. A Consumption Tax and Unconsumed Wealth

1. The underlying concern about unconsumed wealth.

The second big reason for widespread doubt that a consumption tax can match the progressivity of an income tax by simply upping the degree of nominal rate graduation goes to the issue of unconsumed wealth. Consider again the expensing version of the X-tax, or equally the cash flow tax, but analogizing them this time to a retail sales tax (which has an equivalent base albeit flat rather than graduated rates). It may seem that such a tax, by falling only on current consumption, entirely fails to reach unconsumed wealth. It is hard to imagine Bill Gates or Warren Buffett, or even perhaps their heirs, ever consuming their entire fortunes. Indeed, in a world in which you can eat only so many meals a day and be in only one place at a time, those individuals may have a hard time consuming enough to match the annual accretions to their wealth (even at a modest rate of return). A progressive consumption tax may therefore seem inherently inadequate regarding the very rich, because much of their fortunes will never, it seems, be levied on at all.⁴⁸

⁴⁸From this perspective, one could perhaps argue that an income tax is likewise inadequate, because it reaches only a percentage (dictated by the statutory rate) of the accretion to existing wealth. Indeed, the annual tax payment by a wealthy individual under a retail-sales-tax-style consumption tax will exceed that under a Haig-Simons income tax with the same rates if she is "spending down" her fortune.

This intuitively compelling — though, I will argue, mistaken — viewpoint can also be stated in terms of a simple horizontal comparison. Suppose that Taxpayers A and B both spend \$100,000 in a given year, and thus pay the same current-year consumption tax. A, however, has spent everything she owns, whereas B earned \$1 million and (ignoring the tax) still has \$900,000 in the bank. Since B is presumably better off, hasn't the consumption tax erred by taxing her no more than A this year?

Whether one states the problem that way or in terms of Gates and Buffett, however, the error is the same. It involves confusing current-year cash payments of tax with the economic incidence of a tax. The latter is what matters if our concern goes to how the tax system actually affects people. To establish this point, I start with the easy case in which any wealth that is not consumed in Year 1 will be spent the next year. In this setting it is hard to disagree that the consumption tax taxes B more than A, to the same extent as it would have had if B spent the entire million dollars in Year 1. I then consider the more complicated case in which consumption of the saved wealth is deferred indefinitely.

2. Burden of a consumption tax on unspent wealth with one-year deferral. To show that a consumption tax reaches unspent wealth in the simple case in which the consumption is deferred for only one year, I will expand the above example with A and B. Purely for arithmetical convenience, suppose that the consumption tax rate is 50 percent on a tax-inclusive basis such as that which the existing income tax uses. Thus, for example, if under the cash flow tax you withdraw \$200,000 from a qualified savings account, you must pay \$100,000 of tax and you get to spend \$100,000 on consumption. That is equivalent to a 100 percent rate as computed under the tax-exclusive method (excluding the tax paid from the base on which the tax is computed) such as that which most or all retail sales taxes use. Also for arithmetical convenience, suppose that the interest rate is 10 percent. (We can ignore for these purposes the distinction between various components of the interest rate, along with scaling-up issues.)

Applying those tax and interest rates to the above example, A presumably earned \$200,000, spent \$100,000 on consumption, and paid \$100,000 of tax. B apparently earned \$1.2 million, spent \$100,000 on consumption, paid \$100,000 of tax, and put \$1 million in the bank. After a year, B's bank account has grown to \$1.1 million. Because she is now required, under the stated assumption, to spend the money at this point, she gets to consume \$550,000 and pays \$550,000 of tax. A, meanwhile, pays nothing further in Year 2 regarding his Year 1 earnings.

Given the tax consequences in Year 2, it is misleading to compare the burden of the consumption tax on A as compared with B based solely on their tax payments in Year 1. A full account of Year 1 cannot reasonably omit the fact that B, but not A, ends the year with a deferred tax liability. What is more, B did not reduce her tax burden by deferring most of her tax payment to Year 2.

Even consumption tax critics generally accept that a consumption tax is neutral regarding the timing of one's consumption.⁴⁹ That is another way of saying that B did not reduce her tax burden by deferring most of her consumption for a year. Had she spent her entire \$1.2 million of earnings in Year 1, she would have paid \$600,000 of tax at that time. By saving \$1 million until Year 2, she deferred \$500,000 of that tax, but the deferred amount grew at a market interest rate of 10 percent to \$550,000. She thereby failed to reduce the present value of her tax liability by deferring it.

Income tax lawyers are accustomed to thinking of deferral as a tax benefit. The point about the typical income tax deferral that they have in mind, however, is that it causes the present value of one's tax liability to decline. For example, if you hold a building with a basis of \$1 million and a value of \$10 million, deferring the tax on the \$9 million of built-in gain reduces the present value of that tax no matter what later happens to the building's value. (If you paid tax on \$9 million today, you would get a basis step-up that would reduce your tax liability by the same \$9 million at some point in the future.) Even within the existing income tax, charging market interest on the deferral would eliminate this tax benefit. This is actually done in at least one setting,⁵⁰ and proposals to address problems caused by the realization requirement would apply the approach more broadly.⁵¹ What makes those proposals potentially effective, in reducing tax planning and economic distortions associated with the realization requirement, is that deferral is only a benefit insofar as it reduces the present value of one's tax liability.

I have made this point enough times in conversations with sophisticated practitioners to anticipate the response, "That's all very well, but I still think B should pay the tax in Year 1." Suppose, however, that B, while required to pay the full \$600,000 in Year 1, had borrowed \$500,000 at the same 10 percent interest rate and thus had the same net cash flows as in the example with deferral. We do not ordinarily think of people as escaping their income tax liability if they borrow to pay the tax.

Perhaps one's concern goes to deferral's effect on the government, rather than on X. Suppose, however, that under the consumption tax with deferral, the government issued a \$500,000 bond in Year 1, which it repaid in Year 2 by forwarding B's \$550,000 tax payment to the bondholder. It as well as X would then face identical net cash flows with and without the deferral.

At this point one might perhaps resort to second-order considerations. If we relax the assumption of a monolithic 10 percent interest rate, is B deferring the tax at the proper interest rate? The rate she implicitly

⁴⁹See, e.g., Liam Murphy and Thomas Nagel, *The Myth of Ownership: Taxes and Justice* 101 (2002).

⁵⁰See Internal Revenue Code section 453A(c).

⁵¹See, e.g., Alan Auerbach and David Bradford, "Generalized Cash Flow Taxation," *J. Pub. Econ.* (forthcoming).

bears, by paying half of the amount in her bank account in Year 2 rather than an extra \$500,000 in Year 1, is equal to the interest rate she earns on the full million dollars in the bank account. So she is deferring her tax at the same interest rate as that which she is earning on the portion that she keeps. About the most one can argue is that the government is being forced to share her default risk.⁵² Or do we think the government will end up doing something different in the immediate tax payment case than in the deferral case? That is certainly possible — for example, if government decisionmakers care about current-year budget deficits, albeit without looking even one year down the road. It is difficult, however, to see how this leads to any inference of systematic differences between systems in which B's taxes over time have the same present value.

Because B derives no benefit, and the government no detriment, from her deferring \$500,000 of tax for a year, it should be clear that the tax liability she bears in Year 1 is the full \$600,000 that she would pay at that time if the consumption tax took the form of a "prepaid" wage tax. Accordingly, her unspent wealth bears the full tax economically even though it has not yet been paid. To be sure, as a result of the deferral B has \$1 million in the bank. She also, however, has a \$500,000 deferred liability.

Wealth is worth only what it can buy; otherwise, it might as well be play money from the board games Monopoly or Life. Given the tax, she can buy only \$500,000 worth of consumer goods. The tax's consequent reduction of her consumption potential — that is, of the real value of her nominal million dollars of wealth — gives force to the observation that she has already borne the tax economically.

All this, however, is under the convenient assumption that wealth can be saved, and the consumption tax thereby deferred, for only a year. What if we make the deferral indefinite, by recognizing that someone like Bill Gates is unlikely ever to spend all of his wealth and that even his heirs (if he leaves it to them) are unlikely to spend it all at any discernible point in the foreseeable future? Was the assumption of just a one-year deferral crucial to the conclusions I suggest above — or do they hold even with indefinite deferral?

3. Is indefinite deferral different than one-year deferral? The previous section's assumption of only one year of deferral was meant to make the analysis more intuitively credible by making the delay in tax collection seem trivial so long as the present value of the saver's tax liability was unaffected. Indefinite deferral undermines any such sense that the delay is trivial. As far as the actual analysis in the previous section is concerned, however, lengthening the period of deferral, and even making it potentially unlimited, makes no difference.

For example, assuming constant tax rates,⁵³ the present value of a saver's tax liability regarding saving grows at the rate of return on the saving no matter how long the period of delay. Even an indefinite deferral consists, after all, of a set of one-year deferrals. Moreover, indefinite delay has no effect on the point that savers are affected immediately in the sense that what they can buy with their wealth has been reduced. In a real sense, therefore, they are less wealthy even if no tax payment is imminent. Moreover, even if one made them pay the tax sooner, there is no reason to doubt that, so long as they remained wealthy, they would be able to borrow the amount of the extra tax liability. That would enable them to keep the same amount in their bank accounts as under the postpaid consumption tax approach, with the only difference lying in the substitution of explicit private debt for the amount that, under the postpaid approach, they would effectively owe the government.

Perhaps indefinite deferral raises the prospect that the government, even though in theory it could borrow against the present value of its deferred revenues from savers, will in practice be likely to look elsewhere when it needs to raise taxes. That, however, is a rather speculative and second-order argument that would require greater specification of how the government decides on tax policy changes. In that regard, one plausible theory is that savers would do worse politically if payment of their accrued consumption tax liabilities was deferred, because they would nominally look wealthier. In any event, it seems strained to suggest that a consumption tax cannot be adequately progressive, simply on the theory that the government will be tired of waiting for tax revenues that wealthy savers have accrued economically but not yet paid.

There is one other sense, however, in which indefinite deferral might be thought to challenge the analysis in the prior subsection. Perhaps it might lead one to suspect that something other than deferred consumption is going on when people, or dynastically rich families, hold their wealth indefinitely. Critics of consumption taxation sometimes take that tack, arguing that reliance on the deferred tax that will be paid when consumption finally occurs misses the full significance of wealth.

A good example of that line of argument can be found in a recent book on tax policy by legal philosophers Liam Murphy and Thomas Nagel:

It should be obvious that wealth is an independent source of welfare, quite apart from the fact that some of it may be consumed later. As

⁵³In fact, tax rates are probably more likely to increase than decline over time, given the enormous fiscal gap, which (before enactment of the 2003 tax cuts) I estimated at \$74 trillion. See Daniel N. Shaviro, "The Growing U.S. Fiscal Gap," 3 *W. Econ. J.* 1 (October-December 2002). The main source of the fiscal gap is unfunded future Social Security and Medicare benefits, which I have predicted will lead to substantial political pressure for tax increases sometime in the next 10 to 15 years. See Daniel N. Shaviro, *Who Should Pay for Medicare?* (March 2004).

⁵²See Michael Knoll, "Financial Innovation, Tax Arbitrage, and Retrospective Taxation: The Problem With Passive Government Lending," 52 *Tax L. Rev.* 199 (1997).

Henry Simons famously put it, in 1938, ‘In a world where capital accumulation proceeds as it does now, there is something sadly inadequate about the idea of saving as postponed consumption.’ Commentators typically mention such factors as security, political power, and social standing.⁵⁴

The authors then reject claims they attribute to consumption tax advocates that “savings and wealth are subsidiary to consumption and derive their value entirely from it,” apparently on the ground that wealthy people motivated by pure benevolence rather than narrow self-interest often leave their wealth, unconsumed, to their heirs.⁵⁵

Murphy and Nagel are undoubtedly correct that people value wealth not only for what it can buy but because while it remains unconsumed, it may give them security, political power, and social standing. And they are likewise correct that much wealth is never consumed in any direct or tangible sense by the accumulator, but instead is left to the heirs (or to causes the accumulator values) for reasons that may include at least an admixture of benevolence. The problem with their raising those points in relation to the income versus consumption tax choice, however, is that in this setting the points are non sequiturs.

Why does wealth offer security, political power, and social standing? The answer must be because of its value — that is, because of what it can be used to buy. As I showed in the one-year example, and as holds equally in a multiyear example, a postpaid consumption tax affects what the wealth one holds can be used to buy. It is no different in that regard than an arm’s-length liability that one incurs to defray the cost of a prepaid tax. Even when wealthy people make bequests to their heirs from motives of benevolence, a postpaid consumption tax affects the benefits they are conveying — that is, the amount that the heirs can buy. Murphy and Nagel fail to recognize that savings and wealth are indeed subsidiary to consumption in that they derive their value entirely from that potential use, whether its exercise is proximate or not. That ability to buy things is, after all, the difference between real money and play money from board games such as Monopoly and Life.

Accordingly, the argument that a consumption tax fails to reach the indirect benefits of wealth-holding, because wealth means more than simply the opportunity to consume later, is a non sequitur. It appears to rest on money illusion, or the mistaken belief that a dollar has inherent value, rather than being worth what it can buy.⁵⁶

⁵⁴Murphy and Nagel, *supra* note 49 at 115.

⁵⁵*Id.* at 115-116.

⁵⁶Another example of money illusion relates to inflation. In Keynesian theory, money illusion may lead workers to focus on changes in their nominal wages, rather than their real or inflation-adjusted wages, thus resisting reductions in the former more than in the latter.

D. Other Arguments for Income Taxation

The previous two sections of this article rebutted widely held beliefs that a consumption tax exempts too much “capital income” or unspent wealth to match the progressivity of an income tax, even if its nominal tax rate structure is suitably adjusted. My broader aim was to suggest that the huge potential simplification advantages of a consumption tax are well worth capturing if the only significant objection concerns progressivity.

I make no claim, however — even if the above arguments are accepted — to have disposed of other possible grounds for favoring income taxation. The following is a brief list of what I consider some of the stronger arguments that could be made in favor of income taxation:

- There might be political reasons why, in practice, switching to a consumption tax would lead to a reduction in the progressivity of our fiscal system.
- One could argue that as between two individuals with the same lifetime earnings, the one who saves more is likely to be better off. A rich recent “behavioral economics” literature has probed the reasons for pervasive lapses in rational behavior, such as saving too little out of impatience or lack of foresight.⁵⁷ An income tax would burden savers more than nonsavers with the same lifetime earnings, thus arguably redistributing to the worse-off, albeit creating undesirable disincentives to save. On the other hand, one could instead respond to suboptimal saving by inducing or compelling people to save more, as Social Security and Medicare do by creating retirement benefits that one cannot consume in advance.⁵⁸
- Relatedly, to the extent that people lack foresight and cannot or do not “smooth” their consumption between high-earning and low-earning periods, a “snapshot” measure such as their wealth at a given moment may be more informative about the tax burdens they should bear than a long-term measure such as their lifetime earnings. An income tax effectively includes a wealth tax (because it reaches at least the riskless return to wealth), whereas a consumption tax is effectively a tax on lifetime earnings.

Also, as noted above, despite the theoretical possibility of making rate adjustments, it is difficult to match through a reasonably designed consumption tax the burden that a well-functioning income tax can impose on huge fortunes that are saved for a long time. Suppose, for example, that the billion-dollar Gates fortune (to lowball it rather drastically) is likely to be saved forever. Suppose further that the real annual

⁵⁷See, e.g., Hersh M. Shifrin and Richard H. Thaler, “The Behavioral Life-Cycle Hypothesis,” in Richard H. Thaler (ed.), *Quasi-Rational Economics* (1991).

⁵⁸See Shaviro, *Making Sense of Social Security Reform*, (2000); Shaviro, *Who Should Pay for Medicare?*, *supra* note 53.

risk-free return to waiting is 1 percent (\$10 million per year as applied to the hypothetical Gates fortune) and that the only difference between an income tax and a consumption tax concerns taxing that return.

Under those stylized assumptions, a comprehensive 40 percent income tax would raise \$4 million per year forever from the hypothetical Gates fortune — seemingly no great shakes, given the size of the underlying fortune. But if the real riskless rate is actually just 1 percent per year, and if 1 percent is therefore the proper discount rate to use in valuing a set of cash flows, then this flow of income tax revenues has a present value of \$400 million, or 40 percent of the entire hypothetical Gates fortune. That no longer seems quite so trivial, or so easily made up through higher consumption tax rates that fall short of the stratosphere and that can reasonably be applied (as is convenient under the X-tax) as a broadly applicable business tax rate.

Stylized though that example is, it helps to show that even if all an income tax uniquely reaches is the real riskless return to waiting, and even if that return is fairly low, the impact on very wealthy people can be substantial if they disproportionately save for long periods. A couple of responses are in order, however. First, it is not clear to what extent an actual realization-based income tax, which almost inevitably offers numerous tax-planning opportunities, can succeed in taxing the very wealthy on their durable holdings. Second, an income tax that did succeed in so burdening the very wealthy might be criticized as imposing unduly steep tax rates, from the standpoint of economic efficiency on highly deferred consumption. So the high-end redistribution, to the extent conditioned on consumption, might be questioned on other grounds even if one liked the distributional result.

IV. Eliminating Transfer Pricing Problems

A. Overview

If a consumption tax were adopted, one of the major potential simplification opportunities, not emphasized in sections II and III of this article, would concern cross-border transactions between related parties. It is widely recognized that transfer pricing regarding those transactions is one of the big administrative and compliance problems in income tax practice, growing in importance as economic production becomes ever more globally integrated. As it happens, transfer pricing problems could easily be eliminated under a consumption tax, although not as easily under an income tax.

My reasons for not emphasizing that point in the preceding sections were threefold. First, severe though the administrative and compliance problems associated with transfer pricing may be, they seem unlikely to play a dominant role in determining whether a consumption tax ought to be adopted. Second, switching to a consumption tax would merely make possible the elimination of transfer pricing issues. Whether that change ought to be made would be a separate question, because it would have further implications. Third, the issues associated with the above

change are complicated and widely misunderstood, suggesting that they ought to be discussed separately.

The points I will make in this section are as follows:

1) The tax system of a geographically limited jurisdiction can use either the origin basis or the destination basis in taxing cross-border transactions. Under the origin basis, taxes are imposed on goods and services produced within the taxing jurisdiction, while under the destination basis they are imposed on goods and services consumed within the taxing jurisdiction. The origin basis, but not the destination basis, requires determining the amounts paid to or received from foreigners in cross-border transactions, thus leading to transfer pricing issues when the transactions are between related parties. Use of a destination-basis tax would therefore offer a huge administrative advantage by eliminating transfer pricing issues, although it has competing disadvantages that relate to observing domestic consumption and to transition issues when the tax rules change.

2) A consumption tax can use either the origin basis or the destination basis. Thus, while VATs generally use the destination basis, both the Hall-Rabushka flat tax and David Bradford's most recent X-tax proposal would use the origin basis. As a practical matter, however, an income tax may have to use the origin basis. Thus, if one considers the destination basis administratively preferable, one advantage of shifting from the existing income tax to a consumption tax is that it newly makes possible the use of that method.

3) Despite the administrative differences between origin- and destination-basis taxes, in one key sense they are equivalent. Both are neutral in their treatment of cross-border transactions relative to purely domestic transactions. Many people, however, mistakenly believe that destination-basis taxes offer export subsidies. While that misunderstanding might seem to aid U.S. enactment of a destination-basis consumption tax, it contributes as well to an associated political disadvantage. Under the GATT in its current form, a progressive consumption tax such as the X-tax would likely be classified as including an illegal export subsidy, even though the GATT exempts VATs from this ban on use of the destination basis.

4) Whether or not a consumption tax such as the X-tax ought to use the destination basis in view of the administrative tradeoffs, that use ought not to be barred by the GATT, because the destination basis does not favor exports. One could argue that the GATT does not actually bar the X-tax from using the destination basis, but the argument is hard to make textually. So a modification of the GATT might be necessary.

B. Origin-Basis and Destination-Basis Taxes

1. Comparison to residence and source-based taxation. As noted above, an origin-basis tax is imposed on domestic production, while a destination-basis tax is imposed on domestic consumption. Some confusion may arise, however, between these concepts and those of residence-based and source-based taxation. The two sets of concepts are related but distinct.

Starting with residence and source, the United States taxes all U.S. citizens and residents, as defined under

its rules, on their worldwide income, albeit with sourcing rules for foreign tax credit purposes. It also taxes nonresidents on their income earned within the United States. Under the existing U.S. income tax, all of these computations are done on the origin basis, but residence and source are the concepts that determine which persons and transactions are taxable or foreign-tax-creditable. The choice between the origin and destination basis concerns a distinct issue: How the tax consequences to a concededly taxable person of a concededly taxable transaction are measured.

In illustrating the distinction between the origin and destination basis, it is best to start by leaving residence and source out of the picture, or, more precisely, to assume they coincide (as happens when all local business activity is by residents). When they coincide, a cross-border transaction can take either of two forms. In an export transaction, a U.S. firm sells something to a foreign firm for ultimate consumption abroad, while in an import transaction a foreign firm sells something to a U.S. firm for ultimate consumption here. The following examples show how origin-basis and destination-basis taxes apply to each:

Example 4 — EXPORT: A U.S. manufacturer sells a widget for \$100 to a foreign retailer. The widget is then sold to a foreign consumer for \$150. No matter which method is used, U.S. tax could be imposed only on the U.S. manufacturer and only on the first transaction.

Origin-Basis Tax: The U.S. manufacturer must include in its tax base the \$100 received from the foreign retailer.

Destination-Basis Tax: The U.S. manufacturer excludes its receipt of \$100 from the tax base. In actual practice, this might involve the manufacturer's paying the tax and explicitly passing it on to the foreign retailer (or consumer in the absence of a middleman), who then must apply for a rebate. Or the tax might be directly rebated to the exporter at the border.

The result under the origin-basis tax reflects that \$100 of production occurred in the United States, because origin-basis taxes are imposed on domestic production. The result under the destination-basis tax reflects that no consumption occurred in the United States, because destination-basis taxes are imposed on domestic consumption.

Example 5 — IMPORT: A foreign manufacturer sells a widget for \$100 to a U.S. retailer. The widget is then sold to a U.S. consumer for \$150. No matter which method is used, U.S. tax may be imposed only on the U.S. retailer or consumer, and the \$150 from the purely domestic transaction is includable in the tax base.

Origin-Basis Tax: The U.S. retailer may deduct the \$100 paid to the foreign manufacturer. (Under an income tax, it would show up as basis for inventory rather than as a current deduction if the widget had not yet been sold.)

Destination-Basis Tax: The U.S. manufacturer cannot deduct or otherwise recover its payment to the foreign manufacturer.

The result under the origin-basis tax, a net tax base increase of only \$50, reflects that only \$50 of production (the retailer's markup) occurred in the United States. The result under the destination-basis tax reflects that a full \$150 of consumption occurred here.

Now suppose we return to the ideas of residence and source. The above examples can be treated as applying the independently determined residence rules, such as those in the existing U.S. income tax, to determine who is a U.S. person and who is a foreigner. Source comes into the picture as follows. A U.S. person that is active abroad calculates its worldwide income on the origin basis (because we have an origin-basis tax). When it imports or exports a good or service between its domestic and foreign branches, it has an imputed cross-border transaction that is treated on the origin basis solely for purposes of sourcing the income realized regarding other persons. A foreign person that is active in the U.S. similarly computes its U.S.-source income on the origin basis, similarly imputing transactions as needed between its U.S. and foreign branches.

In principle, one could have a tax system that applied to residents on a worldwide basis (but with sourcing rules for some particular purpose, such as foreign tax credits) and to foreigners on a domestic-source basis, but that in both cases applied the destination basis rather than the origin basis. Figuring out how that would work is probably a lot more trouble than it is worth for our purposes. Just as a quick illustration, however, suppose that we had a national retail sales tax that applied (1) to U.S. citizens and residents on all of their worldwide consumption, subject to a foreign tax credit for taxes that they paid to foreign countries on their foreign source consumption, and (2) to foreigners visiting the United States, on their consumption here. Then we would have the same general approach to residence and source as under the current income tax, but applying on the destination basis and thus regarding where consumption, rather than economic production, occurred.

2. National production versus national consumption. From the above it may sound as if an income tax must use the origin basis, which offers a measure of domestic production, and as if a consumption tax must use the destination basis, which offers a measure of domestic consumption. However, because the actual relationship between the tax base and the choice between origin and destination basis is more complicated, that issue is best deferred until section IV.C. below. For now, it is enough to note that over the long run, national production can be assumed to equal national consumption.⁵⁹ The point is simply a restatement of that dis-

⁵⁹For this purpose, national production and consumption are defined in terms of a country's residents, who are assumed not to migrate in either direction. (Migration is typically ignored on the ground that it remains relatively minor.) The equivalence also ignores source-based taxation of foreigners'

(Footnote 59 continued on next page.)

cussed in section III, to the effect that one can reasonably treat all wealth as ultimately to be consumed.

Leaving aside special cases such as conquest and foreign aid, it would be clear in a world without international trade that what the people of a nation get to consume, apart from the natural resources that they find on hand, is whatever they produce. Adding in international trade merely means they get to trade some of their own production for that of other people. They still must produce to consume. If they run a favorable balance of trade by exporting more than they import, it simply means they have claims on foreigners for future consumption. A trade surplus indicates that claims against foreigners for future goods have increased (a type of national saving), while a trade deficit indicates that those claims have been reduced (dissaving). Both a trade surplus and a trade deficit are therefore only temporary phenomena, bound to be reversed at some point in the future.

The common view that we “win” trade competition by exporting more than we import overlooks the point that if we did not wish to accumulate claims on foreigners for future consumption, we could simply give them everything they wanted for free. We could “beat” the Japanese in car and stereo production, for example, by giving them as much of our production as they were willing to take. That would mean, however, that we were doing all the work while they were getting to do all the consuming. So the point of trade competition, if anything, is really that we are better off if the Japanese value our production and will pay for it, just as any individual is better off if his production has economic value to prospective payers. Also, as with other saving, if we produce more than we consume now, we should be able to consume more than we produce later.

The long-term equivalence between national production and national consumption will recur later regarding the common view of destination-basis taxes as export subsidies. For now, however, it underlies the point that origin- and destination-basis taxation are imposed, over the long run, on essentially the same long-term tax base, suggesting that in theory “they are economically indistinguishable”⁶⁰ over time once in place and that they may prove interchangeable in practice.

3. Administrative differences between origin-basis and destination-basis taxes. No matter how similar in theory, origin-basis and destination-basis taxes pose different sorts of administrative and compliance issues

production or consumption in a given jurisdiction. Obviously, there is no reason why the amount that foreigners produce while in the United States (or any other country) must equal the amount that they consume while there. This point as well, however, is relatively minor, not just as a minor part of the whole but also on the ground that it is difficult to make foreigners bear local taxes (whether on their production or their consumption), other than through the granting of foreign tax credits by their governments, if world markets are competitive.

⁶⁰David F. Bradford, “Blueprint for International Tax Reform,” 26 *Brooklyn J. Int’l. L.* 1449, 1452 (2001).

in practice. The great vice of an origin-basis tax is its requiring determination of the price paid in cross-border transactions (those between residents and nonresidents of the taxing jurisdiction). This is especially problematic, as all tax practitioners with experience of transfer pricing issues well know, when the resident and nonresident parties are related, as with domestic and foreign companies in a multinational group of commonly owned corporations. At a minimum, transfer pricing consumes substantial tax-planning, compliance, and administrative resources, while also giving multinationals an inefficient tax advantage if the tax savings from shifting income from high-tax to low-tax jurisdictions is great enough. David Weisbach argues that the lack of tax symmetry (the foreign party need not report the same item that the domestic party is including or deducting) makes origin-based systems “not workable (except at high cost) because they create terrible avoidance problems.”⁶¹

David Bradford has shown that the transfer pricing problem in an origin-basis X-tax could be addressed by making all inbound cash flows between commonly controlled corporations includable and all outbound cash flows deductible.⁶² If tax rates were constant, that would be equivalent to exempting all purely financial flows (such as capital investment flowing one way and dividends flowing back), leaving any extra cash flows in exchange for goods or services to be included or deducted on balance. The beauty of the proposal is that — again, assuming constant tax rates over time — it leaves the related parties indifferent as to whether a given payment is labeled a dividend or part of the transfer price of a good or service. With tax rate changes over time, however, one needs to monitor claimed transfer prices and apply an arm’s-length standard, like that of current law, after all (so that taxpayers cannot shift payments between high-tax and low-tax years). So the advantage of the Bradford proposal is simply that the transfer pricing stakes have been reduced, from the full tax rate multiplied by the transfer price to merely the spread between tax rates in different years.

A destination-basis tax avoids transfer pricing issues by making payments to nonresidents nondeductible, and those received from foreigners excludable or rebatable. It substitutes, however, a vice of its own, involving the need for border controls. If payments received from foreigners are excluded, then one must verify the payments’ character as such. If tax rebates to exporters or foreigners are used in lieu of exclusion, as is typical under existing VATs, the compliance burdens may be great enough to impose a serious burden on cross-border trade.⁶³ Moreover, the borders must be

⁶¹Weisbach, “Does the X-Tax Mark the Spot?,” *supra* note 8 at 212.

⁶²David F. Bradford, “Addressing the Transfer-Pricing Problem in an Origin-Basis X Tax” (2003).

⁶³Vito Tanzi, *Taxation in an Integrating World* 52 (1995). See also Mihir A. Desai and James R. Hines, *Value-Added Taxes and International Trade: The Evidence* 3 (2002) (suggesting that delay in providing rebates may significantly burden cross-border trade).

monitored to ensure that incoming consumer goods are taxed. That includes the “tourism problem” that arises when residents consume while they are abroad, making their consumption hard for the local authorities to observe even with border controls.⁶⁴

A further disadvantage of the destination basis pertains to transition issues, including both the shift to such a tax from our existing origin basis income tax and any tax rate changes over time while the new system is in place. When the rate of a destination-basis tax increases (including from zero on its initial enactment), residents who have been net exporters up to the time of the rate change generally lose, because the rate increase lowers the after-tax value of the imports that their positions can be used to buy.⁶⁵ Trade patterns can be inefficiently distorted if people see the change coming and thus, for example, accelerate imports to precede the anticipated effective date of a newly enacted destination-basis tax.

There is no need to resolve here whether the administrative or transition issues make an origin-basis or a destination-basis tax preferable on balance. Clearly, however, the significance of transfer pricing problems makes a destination-basis tax potentially desirable, and well worth considering as a policy option if otherwise feasible. As I discuss next, shifting from income to consumption taxation would indeed make use of the destination basis newly feasible.

C. Compatibility With Destination Basis

It is widely recognized that a consumption tax can use either the origin basis or the destination basis. The practical necessity for an income tax to use the origin basis is implicitly recognized through universal practice, though little discussed. The reason for this difference can be explained in a couple of different ways.

Again, use of the destination basis results in taxing the value of current consumption from cross-border transactions. A consumption tax can nonetheless also use the origin basis because of the long-run economic equivalence between national consumption and national production, along with the irrelevance under a consumption tax of interim saving (as from net exports) and dissaving (as from net imports).

By contrast, under an income tax, the origin basis starts in the right place as a measure of national production (synonymous for these purposes with income). One cannot easily go in the other direction and get to the income tax from use of the destination basis, because the long-term equivalence of national consumption and national production is insufficient, given that the burden of an income tax depends on the sequence of consumption expenditure (that is, to what extent it is deferred through saving or accelerated through dissaving).⁶⁶

⁶⁴See Bradford, “Blueprint for International Tax Reform,” *supra* note 7 at 1454.

⁶⁵*Cf.* Bradford, “Blueprint for International Tax Reform,” *supra* note 7 at 1461-1462.

⁶⁶An approach like that in Auerbach and Bradford, *supra* note 51, might make a destination-basis income tax feasible, however.

Lest all this sound too theoretical, one can illustrate it more tangibly through the example of a U.S. business — say, a liquor merchant — that simultaneously pays \$1 million to foreign winemakers for bottles that it holds at year-end as inventory, and gets \$1 million from foreign consumers who buy bottles of Jack Daniels. Under a consumption tax, whether we ignore both the outlay and the receipt (as under the destination basis) or deduct the former and include the latter (as under the origin basis), we get the “right answer” of zero tax base for the year. Under an income tax, by contrast, both cash flows must be taken into account (barring some more complicated method of adjustment) so that the taxpayer, who must capitalize its inventory costs until sale, will have net taxable income for the year (assuming the basis of the Jack Daniels bottles was less than \$1 million). The problem with using the destination basis under the income tax therefore resembles that (discussed in section II.A. above) with having an income tax in which payments to workers are ignored at both the business and individual levels, rather than with being deducted or capitalized by the former and included by the latter.

D. Cross-Border Trade Incentives

One possible political advantage to proposing a destination-based consumption tax is that many people view it as an export subsidy because of the exemption or rebate for exports, and thus believe it may enhance the international “competitiveness” of American firms. As noted above, the existence of that view is bad news as well as good news politically, because if it were true then the GATT objection would be harder to overcome without starting a trade war. But because the view that destination-based taxes are export subsidies is erroneous, it ought to be exposed as such.

The result of the export exemption or rebate in a destination-basis tax is confinement of the tax base to national consumption. Accordingly, anyone who believes that it results in an export subsidy ought also to believe that all U.S. sales tax jurisdictions, when they exempt goods that are sent to consumers who reside elsewhere, are illegally burdening interstate commerce in violation of the Commerce Clause. In fact, it is the broader application of sales taxes to outside consumers (at least, assuming use taxes on inbound consumption) that would burden interstate commerce and thus, unless the courts got badly confused, be held to violate the Commerce Clause. Similarly, under a destination-based tax in which imports are fully taxed without a deduction for the amounts paid to outsiders, the *absence* rather than the presence of an export rebate would make the tax protectionist.⁶⁷

There are many things economists disagree about, but this is not one of them. Rather, there is universal consensus among international trade and tax policy specialists that, as a matter of theory, destination-basis

⁶⁷Martin Feldstein and Paul Krugman, “International Trade Effects of Value-Added Taxation,” in Assaf Razin and Joel Slemrod, *Taxation in the Global Economy* 264 (1990).

taxes are neutral rather than favoring exports.⁶⁸ In practice, moreover, the empirical evidence suggests that destination-based taxes may actually tend to burden and discourage exports (as well as imports), apparently because countries often impose higher tax rates on their export sectors and are slow in rebating the tax collected on exports.⁶⁹ (This might suggest a further argument for use of the origin basis, if its use tends in practice to discourage trade less, but it rests on implementation details that countries using the destination basis could try to change.)

How can a tax exemption or rebate for exports avoid being an export subsidy? And why isn't it one in the context of a destination-based tax, when the United States has repeatedly (and with good justification) been held to violate the GATT via its serially adopted DISC/FSC/ETI export subsidy provisions in the existing (origin-basis) income tax? The answer lies in the destination-based tax's treatment of imports and in the circular nature of trade — that is, the fact that exports are traded for imports. As Mihir Desai and James Hines explain:

It is useful to think of a country exporting a commodity and subsequently importing the same commodity. With a smoothly functioning [destination basis] VAT there would be no tax consequence of such a round trip [relative to wholly domestic production and consumption], since the VAT that is rebated at export would be reimposed at import. A destination-based VAT is a tax on net imports (imports minus exports), and since [the requirement of long-term] trade balance implies that net imports equal zero in present value, the VAT neither encourages nor discourages exports. Tariffs are taxes imposed on gross imports, so they encourage both exports and imports by making circular trade costly.⁷⁰

In short, given the treatment of imports, the export exemption or rebate avoids imposing a double tax uniquely on international trade. Not providing the export exemption or rebate would be akin to generally imposing either a prepaid consumption tax on wages or a postpaid consumption tax on consumer spending, but then imposing *both* of these taxes on people whose earnings result from exports.

E. The GATT and Destination-Based 'Direct' Taxes

The GATT bars "exemption, remission, or deferral specifically related to exports" solely in the case of "direct taxes."⁷¹ It defines direct taxes as "taxes on

wages, profits, interests, rents, royalties, and all other forms of income, and taxes on the ownership of real property."⁷² Indirect taxes are defined as "sales, excise, turnover, value added, franchise, stamp, transfer, inventory and equipment taxes, border taxes, and all taxes other than direct taxes and import charges."⁷³

What might be the reason for this distinction between direct and indirect taxes? Considered from a theoretical perspective, it is incoherent. I know of no sound economic basis for distinguishing between the two, although a naïve underlying incidence theory may be at work. Perhaps the implicit idea is that if I pay the tax I bear, it is direct, whereas if someone else collects and remits it, it is indirect. Thus, one might think that surely workers bear their wage taxes, which they pay themselves, so those taxes are direct; whereas surely consumers bear sales taxes, which are remitted by retailers, so those taxes are indirect.

Even if one stipulates to the incidence claims, however, one must identify who "really" pays in the first instance. Does income tax withholding make the income tax indirect? Does the sales tax become direct because retailers tend to state it as a separate charge? Answering those questions is difficult because the underlying inquiry is too murky to be better specified.

There nonetheless is a way to make sense of the GATT's distinction, based on the range of taxes that were familiar at the time. Income taxes, conventionally classified as direct, are always origin-based, with the consequence that an exemption or rebate for exports would economically be a subsidy. VATs are generally destination-based, and retail sales taxes similarly tax home consumption rather than home production (via exemptions for outbound use, along with use taxes for inbound goods). It was well understood that these taxes did not provide export subsidies. So the taxes that happened to be known as "indirect" could in fact exempt exports without creating an economic subsidy. In short, it is reasonable to conclude that the GATT distinguishes between direct and indirect taxes because that happened to give the right answer at the time it was negotiated, without requiring a more convoluted analysis of when (given the treatment of imports) an export exemption is a subsidy.

The adoption of a destination-basis X-tax, if defined as a direct tax, would put an end to this neat little pattern whereby the direct versus indirect distinction happened to give the right answer. Is the X-tax a direct tax, however? While that would be a legal question of first impression,⁷⁴ the text of GATT would make it difficult to reach a contrary conclusion. The crux of the problem lies in the deduction and inclusion of wages, which distinguishes the X-tax from conventional VATs and makes it unmistakably a tax on wages.⁷⁵

⁶⁸See, e.g., European Coal and Steel Community, *Report on the Problems Raised by the Different Turnover Tax Systems Applied Within the Common Market* (1953); Charles McLure, *The Value-Added Tax: Key to Deficit Reduction* (1987); Gene M. Grossman, "Border Tax Adjustments: Do They Distort Trade?," 10 *J. Int'l Econ.* 117 (1980).

⁶⁹See Desai and Hines, *supra* note 63.

⁷⁰Desai and Hines, *supra* note 63 at 6.

⁷¹General Agreement on Tariffs and Trade (including Uruguay 1994), Article 13, Agreement on Subsidies and Countervailing Measures, Annex 1, Illustrative List of Export Subsidies, (e).

⁷²*Id.* at note 56.

⁷³*Id.*

⁷⁴Summers, *supra* note 15 at 1795.

⁷⁵See, e.g., Stephen E. Shay and Victoria P. Summers, "Selected International Aspects of Fundamental Tax Reform Proposals," 51 *Miami L. Rev.* 1029, 1054 (1997).

Perhaps this conclusion could be avoided through a heavily purposive interpretation of the relevant language. Suppose we think of the underlying intent as one of avoiding true economic subsidies for exports, and think of the direct versus indirect distinction as merely a means to that end. We cannot substitute the deemed intent for the actual language, or pretend that the latter is not there, but perhaps we have leeway to interpret ambiguities in light of that purpose.

Along those lines, perhaps one could argue that a tax that is equivalent to a VAT except for having a wage deduction and inclusion should still be classified as an indirect tax. After all, the only effect of the special treatment of wages is to provide the equivalent of a wage subsidy for people below the top bracket. This wage subsidy not only could be enacted and applied separately without violating the GATT, but is unrelated to any purpose underlying the GATT's ban on export subsidies. The exception for indirect taxes, one could argue, must be flexibly interpreted when new types of taxes arise, in light of its underlying purposes.⁷⁶ A final point could be that the wage tax is a distinct instrument, falling on workers, whereas the business-level tax would be the one for which issues of export subsidy would arise.

That argument would admittedly be a hard sell, given that the X-tax is not a VAT in common usage and that its wage tax component is part of a conceptually integrated whole. Still, perhaps the argument would have a chance given that the bottom line result is clearly correct. Even if one rejects it, however, that does not mean the adoption of a destination basis X-tax should be ruled out. As David Weisbach puts it (and one need not share his strong preference for the destination basis to accept the rest of what he says):

The usual response in the literature is to assume that the GATT is fixed and conclude that two-tier taxes must be origin-based. This seems to be the wrong response. An origin-based system would be significantly inferior to a destination-based system and the rules imposed by international law are crazy. The first response should be to renegotiate international law. The second response should be to ignore it and force a renegotiation. But we should not let ourselves be forced into design decisions that will impose significant costs on our population with no offsetting benefits to the international community.⁷⁷

V. Conclusion

Shifting from an income tax to a consumption tax would offer major simplification advantages. Even if Congress mucked about creating special rules to as great an extent as it has under the existing income tax, the complications that relate to realization and to the

⁷⁶See Weisbach, "Does the X-Tax Mark the Spot?," *supra* note 8 at 218.

⁷⁷*Id.* at 218-219. See also *id.* at 235 ("This dilemma seems crazy. We should not be punished because we want to make the tax system more progressive.")

taxation of financial transactions could largely be eliminated under a consumption tax. Moreover, as long as a consumption tax is levied at the individual level, rather than solely (as in the case of a retail sales tax) at the business level, it can achieve progressivity that is comparable to that under an income tax. All that this requires is nominally greater rate graduation. (I say "nominally" greater because nominal income tax rates could be viewed as failing to state the rising tax rate that applies to consumption as it is deferred.)

The capacity of a consumption tax to achieve progressivity comparable to that of an income tax is widely misunderstood for two main reasons. First, it purportedly exempts "capital income." If we think of highly wealthy individuals, such as Bill Gates or Warren Buffett, as earning primarily "capital income," it may seem that no degree of rate graduation could make up for the effects of exemption. However, "capital income" is something of a bogus category, relying on form (for example, the fact that Bill Gates is able to take his economic return largely through stock appreciation) and intermingling several distinct aspects of that return. Once we break it down into its components, the analysis changes significantly.

As recent tax policy literature has discussed, "capital income" can reasonably be decomposed into (1) the real risk-free return to waiting, (2) an inflation premium, (3) returns to risk, and (4) inframarginal and labor returns. The only difference in theory between an income tax and a consumption tax pertains to item (1), and appears historically to have been less than 1 percent per year.⁷⁸ Inframarginal and labor returns, which (along with luck) provide the bulk of Bill Gates's and Warren Buffett's returns, are included in both tax bases. The question of whether returns to risk are taxed is more complicated, but appears generally to be the same for income and consumption taxes.

Uniquely exempting the return to waiting under a consumption tax does not appear significant enough to justify the view that such a tax, unlike an income tax, cannot adequately reach wealthy individuals even if the rates are nominally more graduated. Not only has that return historically been low, but it does not even approach being the main source from which great fortunes are derived. One countervailing point should be noted, however. Even if the real return to waiting is only, say, 1 percent per year, levying an income tax on that return becomes significant if the underlying wealth is held for long enough. Suppose, for example, that a billion-dollar fortune were held forever, earning an annual risk-free return of \$10 million at the 1 percent rate. An annual income tax of \$4 million on the risk-free

⁷⁸The existing income tax also differs from a consumption tax (and a theoretically pure income tax) by including inflation premiums in the tax base. However, the inclusion is limited in practice because of the realization requirement and tax-planning opportunities that relate, for example, to the difference between real and nominal interest. In addition, few would argue that taxing inflation premiums is fundamental to the distinctive ability of an income tax to reach the likes of Bill Gates and Warren Buffett.

rate might initially seem trivial relative to the size of the fortune, but would, at the 1 percent discount rate, have a discounted value of \$400 million (40 percent of the fortune) if the fortune were held forever.

That may help to show why, at the very top of the societal wealth distribution, it is quite difficult to match the progressivity of a theoretically pure income tax through a consumption tax that, for administrative convenience, uses a single, widely applicable top rate both at the business level and for high-income individuals going well beyond the likes of a Gates or a Buffett. One should keep in mind, however, that that conclusion is considerably murkier if we think in terms of a real world income tax with realization rules.

The second common ground for doubting that a progressive consumption tax can adequately reach extremely wealthy individuals is more easily dismissed. It holds that wealthy people escape the burden of a consumption tax by deferring their consumption, and that advocates of that tax ignore the effects of unconsumed wealth on one's security, political power, and social standing. The argument overlooks the fact that what makes wealth valuable (whether or not one plans ever to consume it) is the real purchasing power that it commands. Otherwise, real money would be no different than play money from a board game such as Monopoly or Life. A consumption tax affects the purchasing power even of unspent wealth, and the burden it imposes generally is not reduced by deferring one's consumption. It thus should not be viewed as exempting wealth that is not currently spent.

All this is not to deny that one could reasonably prefer retention of an income tax to enactment of a progressive consumption tax. For example, one might believe that an income tax is more likely to be progressive in practice, or one might be swayed by the return-to-waiting point I noted above, and view the extra burden on long-held fortunes as worth the distortionary cost (as well as the complexity costs for the income

tax as a whole). My aim in this article is merely to influence the terms of the debate, although I should acknowledge that, to me, the case for shifting to a progressive consumption tax, if that becomes politically possible, appears compelling.

A final tax reform issue discussed herein relates to the choice between the origin basis and destination basis in taxing cross-border transactions. The tax base for an origin-basis tax is domestic production, while that for a destination-basis tax is domestic consumption. A consumption tax can use either method, but an income tax is practically compelled to use the origin basis, because of the need to capitalize some outlays, such as for durable equipment or inventory. The big advantage of using the destination basis is that it eliminates transfer pricing issues. It does, however, create problems that an origin-basis tax avoids, including the need for border adjustments (such as tax rebates for exports), the need for border controls, the difficulty of taxing consumption by one's nationals as foreign tourists, and transition problems when rates change.

A preference for the destination basis would provide an additional ground for favoring a shift to consumption taxation (albeit one that is unlikely to be decisive standing alone). However, thoughtful consideration of the choice between the origin and destination basis requires dismissing a popular canard, which is that the destination basis, because it exempts exports, offers an "export subsidy" that would favor countries using it in international trade competition. Economists universally recognize that the origin and destination methods are equivalent (administratively caused differences aside) in their incentive effects, once in place, on international trade. That suggests that a destination-basis consumption tax, even if it takes the form of a two-tier tax such as the X-tax or flat tax rather than being a conventional VAT, should neither be favored politically as a tool of trade war nor be subject to successful legal challenge under the GATT.

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