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A LIFETIME INCOME TAX

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Under current tax law, there can be considerable period-by-period divergence between a taxpayer's after-tax income and her desired or actual consumption. This divergence will cause the taxpayer to borrow. One can view such borrowing either as being incurred to fund consumption, or as being incurred to fund the taxpayer's income tax payments. If one takes the latter view, one can ask whether a good income tax law should force a taxpayer to borrow to pay her taxes. I answer the question in the negative, and propose a lifetime income tax that would eliminate the need for typical taxpayers to borrow to pay their income tax liabilities. Under such a regime, a typical taxpayer would reap an affirmative benefit over her lifetime, because she would be able to transfer borrowing from herself (a relatively inefficient borrower) to the government (a relatively efficient borrower).

My paper breaks new ground. Other scholars have, over the years, proposed a lifetime income tax structure, but they have done so exclusively to eliminate the "unfair" burden that annual income measurement imposes on taxpayers with volatile incomes. My paper differs in that it demonstrates that there can be great gains from a lifetime income tax — indeed, the proverbial free lunch — even for taxpayers without volatile incomes.

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I. INTRODUCTION

The federal income tax is assessed and collected annually. Each taxpaying unit¹ is required to measure and report its taxable income annually, and to compute and pay its tax liability annually. This is reasonable: in order for the federal government to be able to spend periodically, it must collect revenue periodically. What more natural tax period than the (taxable) year?² However, using the taxable year creates a potential problem. A snapshot of a given year may well present an incomplete picture of a taxpaying unit; a snapshot of a given year's taxable income may well present an incomplete picture of, for example, such taxpaying unit's "ability to pay" taxes. The

¹ What the appropriate taxpaying unit *should be* is a nontrivial question that is studiously avoided in this paper. Thus, I take the tack of assuming a taxpaying unit that is essentially identical to the one used in current federal income tax law, and fit my proposed lifetime income tax regime to such unit.

² Other tax periods are possible, of course. Academics have mused about the possibility of employing ever shorter tax periods, and in the limit of employing continuous-time taxation. See, e.g., Alan J. Auerbach, *Retrospective Capital Gains Taxation*, 81 AM. ECON. REV. 167 (1991). And they have mused about the possibility of employing ever longer tax periods, and in the limit of employing lifetime taxation. See, e.g., William Vickrey, *Averaging of Income for Income Tax Purposes*, 47 J. POL. ECON. 379 (1939).

reason is simple: occurrences outside of the given tax year, which the snapshot will generally miss, can have a profound effect on a taxpaying unit's true financial status.³

In this paper, I argue that certain "typical" occurrences outside of a given taxable year should be taken into account in determining a taxpaying unit's income tax liability for such year. These typical occurrences include *all* of the "typical" taxpaying unit's consumption (and consumption-related) expenditures.⁴ That is, the typical taxpaying unit will, over the course of its "life," choose to incur consumption expenditures according to some temporal pattern. Its choice will be subject to budget constraints. One such constraint is that the present value of its expenditures must equal the present value of its after-tax income.⁵ Another constraint is that the present value of its expenditures through any given date must be less than or equal to the present value of its after-tax income through such date plus its borrowing capacity as of such date. Thus, as of a given date, it may be a borrower (if the present value of its expenditures through such date is greater than the present value of its after-tax income through such date) or a lender (if the opposite is true). Indeed, I believe that early in its life, the typical taxpaying unit will be a borrower, since its expenditures on higher education, owner-occupied housing, and dependents will exceed its income. Later in life, it will become a lender, as productivity gains lead to wage increases and as dependents leave the nest.

³ The snapshot does not miss all noncontemporaneous occurrences. Thus, for example, income averaging, when permitted, causes a given taxable year's tax liability to be influenced by income earned in adjoining taxable years. Similarly, the ability to carry net operating losses or net capital losses backward or forward also causes a given year's tax liability to be influenced by income earned in adjoining taxable years.

⁴ I include in this category expenditures on higher education and expenditures on owner-occupied housing.

⁵ For purposes of this equality, I classify gifts and bequests made by a taxpaying unit, including gifts and bequests made to fund the higher education of such unit's children, as consumption expenditures. Hence, such gifts and bequests are included in the first term of the equality, and so must be funded out of after-tax income. This is generally in accord with current tax law. I do not need to make any similar classification of gifts and bequests received by a taxpaying unit. Nonetheless, under the lifetime income tax proposed in this paper, I would generally classify such gifts and bequests as taxable income, except to the extent that they are in amounts not in excess of the amounts received by a typical taxpaying unit to pay for its higher education. Obviously, this classification is generally not in accord with current tax law. However, it is in accord with my objective to concentrate a taxpaying unit's income tax payments in tax periods in which such unit has resources in excess of those required for typical consumption.

The current income tax regime, while providing modest allowances for certain consumption expenditures, including those on education, owner-occupied housing, and dependents, does not make a significant effort to conform the typical taxpaying unit's stream of consumption expenditures to its stream of after-tax income. In particular, under current law, the typical taxpaying unit will early in its life generally be both a borrower and a taxpayer (i.e., it will have positive income tax liability). Equivalently, but more provocatively, the typical taxpaying unit will early in its life generally find itself in the situation where it must borrow to meet its federal income tax liability.⁶ If this is indeed the case, one can argue that such unit has no real "ability to pay" taxes and should not be required to do so.

But I will not make this argument. Instead, I will simply propose an income tax regime that would not unnecessarily "compel" the typical taxpaying unit to borrow to pay income taxes. Like the current income tax, my lifetime income tax would be assessed annually. However, it would be assessed not on the basis of the income earned by the taxpaying unit in a given taxable year, but on the basis of the income earned by the taxpaying unit over the course of its entire life. Actual assessments would be calibrated so as to be positive only in taxable years during which such unit would not need to borrow to pay the tax. As a consequence, the typical taxpaying unit under the lifetime income tax would on average carry a smaller debt burden than it does under the current income tax (or than it would under any other more traditional income tax). That, without more, is surely an improvement over the existing tax regime.

It would be a hollow improvement, however, if the lifetime income tax imposed on the government an equal and offsetting detriment. But would a lifetime income tax be detrimental to the government since it would allow the typical taxpaying unit to "defer" certain income tax payments? The answer is yes: whenever a taxpaying unit is not compelled to borrow to pay a given amount of income tax, the government is effectively compelled to borrow an identical amount instead to make up its resulting revenue shortfall. Thus, borrowing by taxpaying units would be replaced by identical amounts of government borrowing. More accurately, explicit borrowing by taxpaying units would be replaced by identical amounts of implicit borrowing by such units, provided that revenue neutrality

⁶ I include within my definition of "borrow" an inability to repay prior borrowings. Thus, if the taxpayer has outstanding debt and cannot pay such debt down because she must pay income taxes, she has effectively borrowed to pay the income taxes.

was imposed to require taxpaying units (on average) to pay sufficient future income taxes to redeem the borrowing they have “transferred” to the government. But even assuming such revenue neutrality, it does not follow that a taxpaying unit would reap no benefit from the lifetime income tax. For when the lifetime income tax substitutes government borrowing for private borrowing, it substitutes an exceedingly efficient borrower for a relatively inefficient borrower. Thus, the lifetime income tax would allow the typical taxpaying unit to pay a (significantly) lower rate of interest on its implicit borrowing than it would generally be required to pay on explicit borrowing.⁷ This turns out to be a significant benefit indeed.

This paper is divided into three parts. Part II is an elaborate illustration that follows the life of a “typical” taxpaying unit, a family of four, and demonstrates the financial effect that different income tax regimes have on such a unit. I believe that it provides both ample motivation and ample justification for the lifetime income tax. Part III is more theoretical, and attempts to position the lifetime income tax within the framework of tax theory. In particular, it challenges the conventional interpretation of the “ability to pay,” it examines how the lifetime income tax might affect incentives, and it compares this conception of a lifetime income tax to lifetime income taxes proposed by other academics. Part IV is practical, and consequently addresses certain implementation issues. Among other things, it presents a more traditional single-year income tax regime that would achieve some or even most of the benefits of the lifetime income tax.

II. AN ILLUSTRATION

This is not an empirical paper. Rather, it is a paper based on upper middle class life as seen through my own (arguably) upper class lens. Of course, I neither believe nor intend to imply that the “typical” taxpaying unit lives an upper middle class life. However, I do believe that the typical taxpaying unit aspires to such a life, and that is enough. In a “land of opportunity,” where everyone is presumptively above average, the tax law can, and I believe should, be fashioned to accommodate, as best as possible, the efforts of those who struggle to attain an upper middle class life.

⁷ The government will almost surely be able to pay interest at a lower real interest rate than will the typical taxpayer, because lenders to the government know that government debt represents the ultimate diversified portfolio of debt, backed not just by the typical taxpayer’s assets and earning capacity, but by all taxpayers’ assets and earning capacities and moreover, in the event of disaster, by a printing press.

Purely to keep my illustration tractable, I make some simplifying assumptions. First, I assume that my taxpaying unit faces no inflation. Accordingly, I need not adjust income and expenditure accounts for inflation.⁸ Second, I assume that taxpaying units are confronted not with a taxable year, but rather with a taxable five-year period. Accordingly, I can divide a unit's life into twelve rather than sixty periods, and so can comfortably fit such life onto a table that does not consume an entire page.⁹

My illustration will focus on a "typical" taxpaying unit consisting of two adults and two children, henceforth a "family." This choice is purely illustrative; any other taxpaying unit would (with obvious modifications) serve. My family will commence its tax existence at that moment when the first of the two adults enters college. Since persons aspiring to an upper middle class life generally attend better schools, I assume that each adult will attend a good second-tier college. I arbitrarily assume that the average cost of such a college is 30,000 per annum for four years (e.g., tuition of 20,000 and room and board of 10,000). I further arbitrarily assume that exactly half of this cost is typically borne by a student's parents and that the remainder is typically funded by a loan that the student will repay out of her future income. Thus, during the college years, each adult in this typical family will borrow 60,000; the family as a whole will borrow 120,000.

My first five-year tax period begins with commencement from college, and hence runs from age 23 through 27, based on the age of the first adult in the family to enter the workforce. I assume that both newly-minted graduates immediately enter the workforce, one at a starter wage of 35,000 and the other at a starter wage of 33,000. I assume that the higher wage earner remains in the workforce during the entire tax period and that his wage increases linearly to 39,000 during such period. I assume that the lower wage earner remains in the workforce for three years and that her wage increases linearly to 35,000 during those three years. After three years, the lower wage earner temporarily exits the (paid) workforce due to the arrival of a child. Aggregating the family's wages during the tax period yields income of 287,000. See Table 2.

But the family also has expenses. If I assume that the cost of food, clothing, shelter, and medical care for a young couple living just

⁸ If there were inflation, the illustration would be messier, but the results would be the same.

⁹ Relaxing this assumption would make my tables larger, but would not have any substantive effect.

above the poverty level is 15,000 per annum, my couple with its aspirations of upper middle class living should be expected to spend at least twice that amount, or 30,000 per annum, not just on better food, clothing, shelter, and medical care, but also on such additional items as transportation (a used car or two) and entertainment. Moreover, if I assume that the cost of food, clothing, shelter, and medical care for a young couple with a child living just above the poverty level is 18,000 per annum, my couple should be expected to spend at least twice that amount, or 36,000 per annum, not just on better food, clothing, shelter, and medical care, but also on such additional items as educational toys and daycare. Aggregating the family's various expenditures during the tax period yields outflows of 162,000. See Table 1.

During the second five-year tax period (age 28 through 32), I assume that the adult working for wages at the beginning of the period continues to work for wages and that his wage increases linearly from 40,000 to 44,000. In addition, I assume that the other adult remains outside the (paid) workforce, in part due to the arrival of a second child. Thus, during this tax period, the family has aggregate income of 210,000. See Table 2. Offsetting this income are the usual expenditures. In particular, if I assume that the cost of food, clothing, shelter, and medical care for a young couple with two children living just above the poverty level is 20,000 per annum, my family should be expected to spend at least twice that amount, or 40,000 per annum. If it does so, its expenditures during this tax period will total to 200,000. See Table 1.

During the third tax period (age 33 through 37), the adult working for wages at the beginning of the period continues to do so; his wage increases linearly from 45,000 to 49,000. In addition, the adult not working for wages at the beginning of the period reenters the workforce on a part-time basis once the younger child begins kindergarten; for her labor, she initially receives a wage of 10,000, which increases linearly to 14,000 by the end of the period. Aggregating the family's wages during the tax period yields income of 295,000. See Table 2. As for the family's expenditures, per the dictates of the American Dream, it will purchase a starter residence, which I assume will cost 200,000. Obviously, such purchase will occasion savings on rent. However, I assume that the costs incurred first to fill (with appliances, furniture, etc.) and then to maintain a residence will more than offset such savings. Moreover, other expenditures may change in nature (e.g., diapers will be replaced by bicycles), but are unlikely to change much in amount. Accordingly,

40,000 per annum will continue to go towards the basics. See Table 1.

During the fourth tax period (age 38 through 42), the productivity of the full-time wage earner continues to improve; accordingly, his wage rises from 50,000 at the beginning of the period to 54,000 at the end. Meanwhile, the part-time wage earner increases her participation in the workforce; as a result, her wage jumps to 20,000 at the beginning of the tax period and then rises linearly to 24,000 at the end. Aggregating the family's wages during the tax period thus yields income of 370,000. See Table 2. As for basic expenditures, these continue apace at 40,000 per annum. In addition, the family trades its starter residence for a nicer second residence at an additional cost of 100,000. See Table 1.

During the fifth tax period (age 43 through 47), each adult continues to enjoy annual productivity increases and concomitant wage increases, the first seeing his wage rise from 55,000 to 59,000, the second seeing her wage rise from 25,000 to 29,000. Thus, aggregate income reaches 420,000. See Table 2. Basic expenditures, meanwhile, begin to decline. In the second year of this tax period, the family's first child goes to college; in the fourth year of the tax period, the second child follows suit. Thus, non-education expenditures decline from 40,000 in the first year, to 36,000 in the second and third years (as the family becomes a three-person household), to 30,000 thereafter (as the family becomes a two-person household). On the other hand, the family will incur education expenditures. To calculate these, I assume that the parents treat their children in the same way in which they themselves were treated: accordingly, they pay one-half of each child's annual 30,000 college expenditure (recall there is no inflation in my model). Thus, education costs of 60,000 with respect to the older child and 30,000 with respect to the younger child are incurred during this tax period. See Table 1.

During the sixth tax period (age 48 through 52), each adult reaches peak productivity, and thus ceases receiving annual wage increases. For the primary breadwinner, his wage tops out at 60,000; for the secondary breadwinner, it tops out at 30,000. Thus, aggregate inflows are 450,000. See Table 2. Moreover, since the family is now effectively a two-person household, basic living expenses will be 30,000 per annum. Finally, the younger child finishes her remaining two years of college; these cost the family 30,000. See Table 1.

During the seventh tax period (age 53 through 57), both empty nesters continue their participation in the workforce, but experience decreasing productivity. Thus, I assume that the wage of the primary breadwinner declines from 59,000 to 55,000 during the period, and

that the wage of the secondary breadwinner declines from 29,000 to 25,000. Aggregate income is therefore 420,000. See Table 2. As for expenditures, these continue at the rate of 30,000 per annum. See Table 1.

During the eighth tax period (age 58 through 62), the primary breadwinner continues to see his wages decline, now from 54,000 to 50,000. The secondary breadwinner also continues to see her wages decline, and partly as a result, chooses to retire when she reaches age 60. Thus, she only works for the first two years of the tax period, and earns wages of 24,000 and 23,000, respectively. The result is aggregate income of 307,000. See Table 2. Expenditures, meanwhile, remain unchanged at 30,000 per annum. See Table 1.

During the ninth tax period (age 63 through 67), the primary breadwinner experiences a further decline in his wages, and chooses to retire when he reaches age 65. Thus, he only works for the first two years of this tax period, and earns wages of 49,000 and 48,000, respectively. This results in aggregate income of 97,000. See Table 2. Basic expenditures again remain unchanged at 30,000 per annum. However, upon reaching age 65, I assume that each adult begins to incur extraordinary medical costs, not all of which are covered by insurance or the social safety net. I assume these costs begin at 2,500 per person per annum, increase to 3,000 per person per annum when an individual turns 70, increase again to 3,500 per person per annum when an individual turns 75, and top out to 4,000 per person per annum when an individual turns 80. In any event, during this tax period, these medical costs total 15,000. See Table 1.

During the tenth, eleventh, and twelfth tax periods (age 68 through 72, 73 through 77, and 78 through 82, respectively), the family has no member in the workforce; wage income is 0. See Table 2. However, in the second of these periods, I assume that the family sells its residence and recoups its 300,000 aggregate purchase price (recall there is no inflation). Thus, the family can be viewed as having an inflow of 300,000, or equivalently as having an expenditure of negative 300,000, during such period. I adopt the latter view. See Table 1 and 2. In addition, expenditures continue as before, meaning that 30,000 per annum is devoted to living expenses and that slowly increasing amounts are devoted to medical expenses. Finally, to cleanly wrap up the illustration, both adults die precisely at the end of the twelfth tax period. See Table 1.

Given these assumptions, Table 1 summarizes the typical family's expenditures during the twelve tax periods of its existence.

TABLE 1. CONSUMPTION

	Poverty Subsistence	Add'l Amount For The Good Stuff	Education	Housing	Medical	Cumulative Consumption
pre-23			120,000			120,000
23-27	81,000	81,000				282,000
28-32	100,000	100,000				482,000
33-37	100,000	100,000		200,000		882,000
38-42	100,000	100,000		100,000		1,182,000
43-47	86,000	86,000	90,000			1,444,000
48-52	75,000	75,000	30,000			1,624,000
53-57	75,000	75,000				1,774,000
58-62	75,000	75,000				1,924,000
63-67	75,000	75,000			15,000	2,089,000
68-72	75,000	75,000			28,000	2,267,000
73-77	75,000	75,000		(300,000)	33,000	2,150,000
78-82	75,000	75,000			38,000	2,338,000

Table 2 summarizes the family's income and compares cumulative income to cumulative expenditures. It appears to show that the family's income comfortably exceeds its expenditures, at least in the long run. This it clearly must do: every family must live within its means.

TABLE 2. INCOME COMPARED TO CONSUMPTION

	Income	Cumulative Income	Cumulative Consumption	Cumulative Income Less Consumption
pre-23			120,000	(120,000)
23-27	287,000	287,000	282,000	5,000
28-32	210,000	497,000	482,000	15,000
33-37	295,000	792,000	882,000	(90,000)
38-42	370,000	1,162,000	1,182,000	(20,000)
43-47	420,000	1,582,000	1,444,000	138,000
48-52	450,000	2,032,000	1,624,000	408,000
53-57	420,000	2,452,000	1,774,000	678,000
58-62	307,000	2,759,000	1,924,000	835,000
63-67	97,000	2,856,000	2,089,000	767,000
68-72		2,856,000	2,267,000	589,000
73-77		2,856,000	2,150,000	706,000
78-82		2,856,000	2,338,000	518,000

But, alas, the level of comfort is illusory. Two items have been left out of Table 2: taxes (in this illustration necessarily only on wage income) and interest (both as an outflow when cumulative consumption exceeds cumulative income and as an inflow when cumulative income exceeds cumulative consumption). To add taxes to my illustration, I assume that the government “needs” to collect income taxes in an amount equal to 15% of gross wage income. Table 3 illustrates the necessary collections. To add interest to my illustration, I assume that the typical family can borrow across five-year tax periods at a real after-tax interest rate of 15% (approximately 3% per annum, reflecting an average of the rates charged on student loans, home mortgages, credit cards, and other consumer debt) and can lend across five-year tax periods at a real after-tax interest rate of 10% (which I assume it can achieve by purchasing the government’s debt). Table 4 illustrates the effects of a 15% flat tax and interest inflows and outflows on the family’s cumulative budget.

TABLE 3. NECESSARY TAXES – 15% FLAT TAX

	Income	Requisite Taxes	Cumulative Taxes
pre-23			
23-27	287,000	43,050	43,050
28-32	210,000	31,500	74,550
33-37	295,000	44,250	118,800
38-42	370,000	55,500	174,300
43-47	420,000	63,000	237,300
48-52	450,000	67,500	304,800
53-57	420,000	63,000	367,800
58-62	307,000	46,050	413,850
63-67	97,000	14,550	428,400
68-72			428,400
73-77			428,400
78-82			428,400

TABLE 4. INCOME LESS CONSUMPTION AND 15% FLAT TAX AND INTEREST

	Cumulative Income Less Consumption	Cumulative Taxes	Cumulative Income Less Cons. + Taxes	Cumulative Interest	Cumulative Income Less Cons. + Taxes + Int
pre-23	(120,000)		(120,000)		(120,000)
23-27	5,000	(43,050)	(38,050)	(18,000)	(56,050)
28-32	15,000	(74,550)	(59,550)	(26,408)	(85,958)
33-37	(90,000)	(118,800)	(208,800)	(39,301)	(248,101)
38-42	(20,000)	(174,300)	(194,300)	(76,516)	(270,816)
43-47	138,000	(237,300)	(99,300)	(117,139)	(216,439)
48-52	408,000	(304,800)	103,200	(149,605)	(46,405)
53-57	678,000	(367,800)	310,200	(156,565)	153,635
58-62	835,000	(413,850)	421,150	(141,202)	279,948
63-67	767,000	(428,400)	338,600	(113,207)	225,393
68-72	589,000	(428,400)	160,600	(90,668)	69,932
73-77	706,000	(428,400)	277,600	(83,674)	193,926
78-82	518,000	(428,400)	89,600	(64,282)	25,318

All's well that ends well: even when a 15% flat tax and interest are added to the mix, the family stays within its means, at least when viewed over its entire life. Still, the pattern of inflows and outflows is striking. Early in the family's life, its income does not always cover its consumption expenditures, much less the aggregate of its consumption expenditures and its income tax payments, still much less the aggregate of its consumption expenditures and its income tax payments and the interest it must pay on its borrowings. Later, the family's income begins to exceed its consumption expenditures, and then the aggregate of its consumption expenditures and its income tax payments, and ultimately the aggregate of its consumption expenditures and its income tax payments and the interest it must pay on its borrowings.

Of course, my illustration lacks realism. Even if the government requires taxes equal to 15% of gross wages, it is unlikely to enact a perfectly flat tax in order to collect such amount. In particular, the government is unlikely to impose any tax burden on families with absolutely no ability to pay. Thus, for example, the current federal income tax code contains a 0% tax bracket that essentially serves to exempt families living under conditions of poverty. Moreover, the government may choose to effect additional redistribution through

the tax code by imposing a tax rate schedule that is to some extent progressive. Thus, for example, the current federal income tax code imposes progressively higher marginal tax rates, ranging from 10% to 35%, on increasing amounts of income.

One possible progressive income tax regime would exempt from taxation income required to maintain a poverty-level standard of living. It would then impose a 15% tax on the next 160,000 of income and a 30% tax on any additional income. Table 5 illustrates the taxes imposed under this regime.¹⁰ Table 6 illustrates how the typical family would fare when such taxes and interest are taken into account.

TABLE 5. NECESSARY TAXES – PROGRESSIVE INCOME TAX

	Income less Poverty Subsistence	Progressive Income Taxes	Cumulative Taxes
pre-23			
23-27	206,000	37,800	37,800
28-32	110,000	16,500	54,300
33-37	195,000	34,500	88,800
38-42	270,000	57,000	145,800
43-47	334,000	76,200	222,000
48-52	375,000	88,500	310,500
53-57	345,000	79,500	390,000
58-62	232,000	45,600	435,600
63-67	22,000	3,300	438,900
68-72			438,900
73-77			438,900
78-82			438,900

¹⁰ Note that the government must nominally collect more tax under the progressive income tax than under the 15% flat tax, if (as I assume) it wishes to keep the net present value of its tax collections unchanged. For purposes of calculating net present value, I have assumed that the government can borrow at a 10% real interest rate per five-year tax period (approximately 2% per annum). This is the same after-tax rate at which I previously assumed the family can lend since, among other possibilities, it can always lend to the government (by buying government bonds).

TABLE 6. INCOME LESS CONSUMPTION AND PROGRESSIVE INCOME TAX

	Cumulative Income Less Consumption	Cumulative Taxes	Cumulative Income Less Cons + Taxes	Cumulative Interest	Cumulative Income Less Cons + Taxes + Int
pre-23	(120,000)		(120,000)		(120,000)
23-27	5,000	(37,800)	(32,800)	(18,000)	(50,800)
28-32	15,000	(54,300)	(39,300)	(25,620)	(64,920)
33-37	(90,000)	(88,800)	(178,800)	(35,358)	(214,158)
38-42	(20,000)	(145,800)	(165,800)	(67,482)	(233,282)
43-47	138,000	(222,000)	(84,000)	(102,474)	(186,474)
48-52	408,000	(310,500)	97,500	(130,445)	(32,945)
53-57	678,000	(390,000)	288,000	(135,387)	152,613
58-62	835,000	(435,600)	399,400	(120,125)	279,275
63-67	767,000	(438,900)	328,100	(92,198)	235,902
68-72	589,000	(438,900)	150,100	(68,608)	81,492
73-77	706,000	(438,900)	267,100	(60,459)	206,641
78-82	518,000	(438,900)	79,100	(39,794)	39,306

Once again, all's well that ends well: the typical family, even after taking taxes and interest into account, remains within its means. Thus, the illustration is conceivably realistic. But if it is realistic (and I believe that it is), it highlights a problem. Early in the typical family's life, its desired and compelled expenditures exceed its income, and so it must borrow. Given the fungibility of money, it is equally correct to view the family either as borrowing to pay for desired expenditures, or consumption, or as borrowing to pay for compelled expenditures, or taxes. I have no particular problem with the former: in a free society, the family should be allowed to choose to borrow to pay for consumption. I do, however, have a problem with the latter: unless the government has a compelling reason to do so, it should not ask the typical family to (explicitly) borrow to pay taxes.

I believe that the government lacks a compelling reason to impose explicit borrowing on the typical family. In particular, the government could adopt an alternative tax regime that provides its requisite revenue and that allows the typical family to engage in its desired consumption, but that does not compel the typical family to borrow to pay its taxes. One such regime, which I call the "lifetime income tax," would function as follows. First, the typical family would be allowed, during each tax period, an exemption equal to the poverty subsistence amount. Second, the typical family would be allowed lifetime deductions for the purchase of principle residences in

aggregate amounts not to exceed 300,000; as a corollary, gains from the sales of principle residences would be included in income. Finally, the typical family's remaining *cumulative lifetime income* would be taxed at the following rates: the first 500,000 at a 0% rate; the next 500,000 at a 45% rate; the next 500,000 at a 33% rate; any excess over 1,500,000 at a 27% rate.¹¹ Table 7 illustrates the taxes imposed under this regime.¹² Table 8 illustrates the typical family's financial results taking both taxes and interest into account.

TABLE 7. NECESSARY TAXES—LIFETIME INCOME TAX

	Income less Poverty Allowance & Residence	Cumulative Taxable Income	Taxes	Cumulative Taxes
pre-23				
23-27	206,000	206,000		
28-32	110,000	316,000		
33-37	(5,000)	311,000		
38-42	170,000	481,000		
43-47	334,000	815,000	141,750	141,750
48-52	375,000	1,190,000	145,950	287,700
53-57	345,000	1,535,000	111,750	399,450
58-62	232,000	1,767,000	62,640	462,090
63-67	22,000	1,789,000	5,940	468,030
68-72	(75,000)	1,714,000		468,030
73-77	225,000	1,939,000	40,500	508,530
78-82	(75,000)	1,864,000		508,530

¹¹ I choose this particular schedule in part because, while providing the government with the requisite revenue, it is on average (slightly) progressive. Thus, the average rate of tax paid on taxable income begins at 0%, rises from 0% to 22.5% over the course of the 45% tax bracket, rises further from 22.5% to 26% over the course of the 33% tax bracket, and then slowly rises to 27% as income tends to infinity.

¹² Note that cumulative taxes paid under the lifetime income tax are considerably higher than under either the 15% pure flat tax or the previously-considered progressive income tax. Nonetheless, such taxes provide the government with the same net present value of revenue, based on the government's 10% after-tax borrowing rate.

TABLE 8. INCOME LESS CONSUMPTION AND LIFETIME INCOME TAX AND INTEREST

	Cumulative Income Less Consumption	Cumulative Taxes	Cumulative Income Less Cons + Taxes	Cumulative Interest	Cumulative Income Less Cons + Taxes + Int
pre-23	(120,000)		(120,000)		(120,000)
23-27	5,000		5,000	(18,000)	(13,000)
28-32	15,000		15,000	(19,950)	(4,950)
33-37	(90,000)		(90,000)	(20,693)	(110,693)
38-42	(20,000)		(20,000)	(37,296)	(57,296)
43-47	138,000	(141,750)	(3,750)	(45,891)	(49,641)
48-52	408,000	(287,700)	120,300	(53,337)	66,963
53-57	678,000	(399,450)	278,550	(46,641)	231,909
58-62	835,000	(462,090)	372,910	(23,450)	349,460
63-67	767,000	(468,030)	298,970	11,496	310,466
68-72	589,000	(468,030)	120,970	42,543	163,513
73-77	706,000	(508,530)	197,470	58,894	256,364
78-82	518,000	(508,530)	9,470	84,531	94,001

The net effect, taking taxes and interest into account, of moving from the progressive income tax to the lifetime income tax, is that the typical family ends up with an additional 54,695 of terminal net worth (the excess of 94,001 under the lifetime income tax (Table 8) over 39,306 under the progressive income tax (see Table 6)). This additional terminal net worth has a net present value of approximately 13,350 when viewed from the beginning of the family's existence.¹³ This amount is approximately 1.25% of the net present value of such family's lifetime consumption. In other words, moving the typical family in a revenue neutral fashion from the progressive income tax regime to the lifetime income tax regime would allow such family to increase its lifetime consumption by 13,350 or 1.25%. In a society that consists of 60-odd million typical families (or their equivalents), the aggregate effect of such increases would be approximately 800,000,000,000 (eight hundred billion).

This may look like magic, but it is not. It is entirely the result of a simple fact: the typical family is an inefficient borrower as compared

¹³ This value is calculated using the same interest rates the family actually faces. Thus, during periods when the family is a net borrower, a 15% rate is used, and during periods when the family is a net lender, a 10% rate is used.

to the government.¹⁴ I have accounted for this fact by allowing the government to borrow (and the family to lend) at a 10% after-tax interest rate, while allowing the typical family to borrow only at a higher 15% after-tax interest rate. To the extent that the government channels the typical family's borrowing through itself — and that is precisely what happens when the lifetime income tax replaces the progressive income tax — the government allows such family to pay interest at the lower 10% rate instead of at the higher 15% rate. In this difference lies the typical family's entire gain.¹⁵

III. THEORETICAL ISSUES

A. The Ability to Pay

As already noted, it is not necessary to try to justify the lifetime income tax by arguing that it assesses taxes that better comport with taxpaying units' abilities to pay taxes; even if it did not, it would provide a significant benefit to taxpaying units without causing the government any harm. Nonetheless, since "the standard justification for using income as the tax base is that (1) taxes should be imposed on [taxpaying units] in accordance with their relative abilities to pay, and (2) a [taxpaying unit's] income is the best practical measure of [its] ability to pay,"¹⁶ it is not unreasonable to ask how the lifetime income tax base fares as a measure of ability to pay.

Since the question is ultimately one of relative fit, the first order of business is to ask how a more traditional income tax base fares as a

¹⁴ There are three primary reasons. First, no matter how well a lender to the typical family can diversify her loan portfolio, she cannot do better than to hold the family's loan as part of a portfolio that includes the obligations of all taxpaying units. By lending indirectly to the family by lending directly to the government, she will indeed hold such family's loan as part of such an optimally diversified portfolio. Second, a lender to the typical family can do little to protect her loan against the moral hazard of such family: strategic bankruptcy and so forth. By lending indirectly to the family by lending directly to the government, she need not worry (so much) about the family's potential moral hazard: the government's power of compulsion, exercised through the tax law, allows it to collect on the indirect loan even when the lender could not collect on a direct loan. Third, when all else fails, a lender to the government, but not a lender to the typical family, can expect her loan to be satisfied by the government's printing press.

¹⁵ Foreigners and tax-exempt organizations may be losers under my scheme: they will be forced to purchase lower-yield government debt instead of higher-yield private debt.

¹⁶ RICHARD SCHMALBECK & LAWRENCE ZELENK, *FEDERAL INCOME TAXATION* 20 (2004).

measure of ability to pay. This will depend on what is included in such tax base, and therefore on what is meant by “income.” Unfortunately, in spite of the cavalier way in which the word “income” is employed, it is hardly self-defining: the Supreme Court has struggled to find a definition¹⁷ and Congress’s definition is circular.¹⁸ Economists and academics employ yet a third definition,¹⁹ but it deviates significantly from the actual federal income tax base.²⁰ So perhaps the best way to proceed is to assume away the relevance of a (platonic) definition of income. If our government really wanted to impose taxes on taxpaying units in accordance with their relative abilities to pay, it would construct a measure of their relative abilities to pay and it could then, if it chose, name such measure “income” or “taxable income.” Accordingly, I limit myself to the question of how the current income tax base fares as a measure of ability to pay.

To answer this question, it is necessary to know what is meant by “ability to pay.” Again, this term is not self-defining. Indeed, I can imagine a continuum of possible definitions, even in the case of a typical taxpaying unit that by hypothesis lives more or less exclusively off its wages (i.e., it receives no significant gifts or bequests). At one extreme, a taxpaying unit’s ability to pay could be measured by something as broad as all of the cash it is ever expected to control: the sum of its periodic wages and the present value of its expected future wages. Somewhat less extreme, it could be measured by the sum of its periodic wages and its borrowing capacity. At the other extreme, it could be measured by something as narrow as the portion of its periodic cash receipts that is not in a broad sense “spoken for”: the excess of its periodic wages over the sum of its periodic consumption and its outstanding indebtedness. Somewhat less extreme, it could be measured by the excess of its periodic wages over the sum of its

¹⁷ See *Commissioner v. Glenshaw Glass Co.*, 348 U.S. 426 (1955); *Eisner v. Macomber*, 252 U.S. 189 (1920).

¹⁸ “Gross income means all income from whatever source derived.” I.R.C. § 61(a).

¹⁹ The Haig-Simons formula defines income during a tax period as the sum of (1) the market value of consumption during such tax period and (2) the taxpaying unit’s change in wealth during such tax period. HENRY C. SIMONS, *PERSONAL INCOME TAXATION: THE DEFINITION OF INCOME AS A PROBLEM OF FISCAL POLICY* 50 (1938); Robert Murray Haig, *The Concept of Income-Economic and Legal Aspects*, in *THE FEDERAL INCOME TAX* 1, 7 (Robert Murray Haig ed., 1921).

²⁰ The current federal income tax base excludes numerous items that an academic would include, such as gifts, imputed income, and unrealized asset appreciation. In addition, it includes some items that an academic would exclude, such as returns to the extent such returns reflect inflation.

undesired consumption²¹ and the interest it must pay on its outstanding indebtedness. There are a myriad of other possibilities as well.

The problem is that there is no a priori reason to prefer any one of these definitions to any other. Nor is it impossible to imagine a tax regime that adopts any one of these definitions. Thus, to focus on the one that is most problematic from an implementation standpoint, suppose that the tax base were defined as the sum of the taxpaying unit's periodic wages and the present value of its expected future wages. If a taxpaying unit's periodic wages are low, but its expected future wages are high, the tax burden could easily exceed the unit's access to cash. But why should this deter the government? The government could accept the unit's IOU, at a suitable interest rate, and could, moreover, loan the unit an additional amount, also at a suitable interest rate, which the unit would be compelled to use to purchase term life insurance in the amount of the tax liability and with the government as the beneficiary. Thus, the taxpaying unit would have a tax liability which, in the normal course, it would satisfy out of future wages and which, in the case of premature death, it would satisfy with insurance proceeds.

In any event, given the indeterminate nature of the ability-to-pay inquiry, it seems to me that the lifetime income tax is based on as good a measure as any other, and in particular on as good a measure as that embodied in a traditional progressive income tax. For me, the proof in the pudding comes from focusing on two tax periods that are in some ways similar and in some ways not: the third (age 33 through 37) and the eighth (age 58 through 62). In each, the family's wage income is roughly the same: 295,000 in the former; 307,000 in the latter. See Table 2. Consequently, under the progressive income tax, the family's tax liability is also (very) roughly the same: 34,500 in the former; 45,600 in the latter.²² See Table 5. I find this result unsatisfying since the family is a net borrower in the former tax period, and indeed must borrow to satisfy any tax liability, but is a net lender in the latter tax period, with plenty of cash to spare. Thus, I

²¹ Undesired consumption might include such items as unreimbursed medical expenses and casualty losses.

²² To the extent that the progressive income tax would be imposed on net interest expense or net interest income, the first of these amounts would be somewhat lower and the second would be somewhat higher. This follows since I illustrate interest flows in after-tax amounts. Correcting for this, taxes would be reduced by 4,173 to 30,327 in the former tax period and would be increased by 6,540 to 52,140 in the latter.

find that the tax liability that would be imposed under the lifetime income tax — 0 in the former tax period and 62,640 in the latter (see Table 7) — more closely tracks my personal notion of ability to pay. But I accept that my personal notion may be eccentric.

B. Incentive Effects

The driving force that makes the typical family better off under the lifetime income tax than it would be under a traditional progressive income tax regime is that such family “transfers” some borrowing to the government and thus realizes savings in interest expense, even after taking into account that such family will on average be required to pay off (with interest) the borrowing “transferred” to the government.²³ Of course, requiring a family to pay off a borrowing *on average* is not really requiring it to pay off the borrowing at all. Indeed, if self interest is taken into account, the family could be expected to go to considerable lengths to attempt to avoid paying off the borrowing. If all families behaved likewise, it is conceivable that the government would run into serious difficulty. But this is unlikely.

Every day, the federal government does precisely what I am suggesting: it pays for goods and services with borrowings, all of which could be avoided with current tax impositions, but are not. Each government borrowing allows families to defer a potential tax payment; in some cases, such tax payments would have been financed by borrowing. Thus, even under current law, there is effectively a transfer of borrowings from families to the government. It is true that there is no necessary expectation that the families that actually transfer borrowings to the government will ultimately pay them off; instead, future generations may be called upon to pay off some or all of such borrowings. But this fact does nothing to diminish the families’ “moral hazard” problem (and arguably exacerbates it). Nonetheless, the government’s ability to borrow does not appear to be (significantly) negatively impacted. Evidently, credit markets remain quite confident that the attempts of families (and their successors) to avoid repaying borrowings transferred to the government will not, in the aggregate, be successful.

That being the case, it only remains to consider the incentive effects that would be produced by the lifetime income tax as a tax. In

²³ These are not actual transfers, of course. They are transfers only relative to the baseline of a more traditional progressive income tax.

general, every income tax discourages work and encourages leisure, since the former is taxed and the latter is not. In addition, every income tax discourages savings and encourages consumption, since the former is taxed twice and the latter is only taxed once. Both of these effects are arguably undesirable. The question here is not whether the lifetime income tax would produce these effects (it would), but rather whether the lifetime income tax would produce a greater quantum of these effects than does a more traditional progressive income tax.

1. Work vs. Leisure

Economic theory suggests that a family's choice of work vs. leisure will be affected by the marginal income tax rate it faces. To wit, the family must derive the same utility (or enjoyment) whether it devotes its final available hour to work (which produces incremental consumption in an amount equal to the after-tax wage) or to leisure (which produces, for example, an extra walk in the park). For example, if the family is faced with the progressive income tax illustrated in Tables 5 and 6, and is in any one of the tax periods in which it finds itself solidly in the 30% tax bracket, it will work and work and work until 70% of the wage earned in the final hour of work produces incremental consumption that is no more desirable than an extra walk in the park. Thus, the family has a simple decision mechanism, and it applies this mechanism anew in each tax period.

While this is all rather clear in theory, it is less clear in practice. Consider a family that has two adult members, one the primary breadwinner and one the secondary breadwinner. In the case of the primary breadwinner, his employer may or may not grant his request to reduce his hours of work so as to properly align the enjoyment received from an hour's after-tax wage and the enjoyment received from an hour's leisure. Even if the employer grants his request, such grant will almost surely affect his opportunities (promotions, raises, etc.) in subsequent periods. Thus, the periodic work-leisure choices made by the primary breadwinner of a family facing a traditional progressive income tax are likely to respond only imperfectly to the marginal tax rates imposed by such tax. In the case of the secondary breadwinner, of course, there is likely to be a greater response. However, to the extent that she has human capital, the value of which will deteriorate with lack of use (i.e., an education), even she cannot be too cavalier in eschewing work for leisure simply to align her periodic margins because such myopic behavior can, in the long run,

seriously diminish her and her family's opportunity set.

What this means is that, even in the face of a traditional progressive income tax, a family is not likely to make periodic work-leisure choices based primarily on periodic marginal tax rates, but rather is likely to make a lifetime work-leisure choice based on its lifetime marginal tax rates. That is precisely what it would do under the lifetime income tax. For example, if the typical family faced a traditional progressive income tax, its lifetime work-leisure choice would generally be based on a marginal tax rate of 30%, unless it could shift its lifetime marginal hour of work into the second or the ninth tax period. See Tables 5 and 6.

On the other hand, if the typical family faced the lifetime income tax, its lifetime work-leisure choice would unambiguously be based on a lifetime marginal *nominal* tax rate of 27% rate (which is reached relatively late in its life). This marginal nominal tax rate, in turn, would translate into still lower marginal effective tax rates, since a wage earned in one period would not necessarily lead to a rise in taxes paid in such period, but only to a rise in taxes paid in some future tax period. Thus, for example, if the typical family depicted in Tables 7 and 8 earned an additional 100 in the 23-27 tax period, it would owe an additional 45 of tax in the 43-37 tax period, save 12 of tax in the 48-52 tax period, and save 6 of tax in the 53-57 tax period. All in all, it would indeed pay an additional 27 of nominal tax. This additional tax, however, would have a net present value of approximately 14.8 at the time the additional wages were earned. Thus, the true marginal tax rate would in fact be 14.8%. At the opposite extreme, if such family earned an additional 100 in the 43-47 tax period, it would owe the additional 45 of tax in the same 43-37 tax period, save 12 of tax in the 48-52 tax period, and save 6 of tax in the 53-57 tax period. Again, it would pay an additional 27 of nominal tax. This additional tax, however, would now have a net present value of approximately 29.8 at the time the additional wages were earned. Thus, the true marginal tax rate would in fact be 29.8%. Under my predicates, these two possibilities represent the lowest and the highest marginal tax rates the typical family would face. Thus, in every case, the after-tax rewards from additional work would be unambiguously higher under the lifetime income tax than they are under a traditional progressive income tax. It follows that typical families would, all else being equal, work more rather than less.²⁴ And that should please the government.

²⁴ The discussion in the text focuses solely on the so-called "substitution effect" of a change from a progressive income tax to a lifetime income tax. There would also

Moreover, a significant additional benefit would flow from the unambiguous nature of the marginal tax rate under the lifetime income tax. To the extent that families subject to a traditional progressive income tax regime have the prospect of facing different marginal income tax rates in different tax periods, they will adjust their behavior, including (if possible) their periodic work-leisure mix, to achieve optimal after-tax results. Thus, for example, if a family faces a 30% marginal tax rate in one tax period, but is confident that it will face a 15% marginal tax rate in the subsequent tax period, it will attempt to shift income from the first tax period to the second tax period, perhaps by working less in the former and more in the latter, or by manipulating the reporting of income so that it appears to fall less in the former and more in the latter. Neither of these behaviors is particularly beneficial from a societal standpoint and neither would occur under the lifetime income tax.²⁵

Before leaving the discussion of work vs. leisure, it is worthwhile to remember that not all families are typical families as defined in my illustration. Furthermore, it is worthwhile to ask whether the incentive effects produced by the lifetime income tax would be manifestly different for families that are not typical. Thus, consider a poor family, which I will define as a family with exactly one-half of the annual wage income of the typical family. Such a family will not, of course, incur the same consumption expenditures as will the typical family. Nonetheless, it will be confronted with the same tax code, containing either a traditional progressive income tax or a lifetime income tax. Table 9 shows such family's tax payments under the progressive income tax and the lifetime income tax (under the additional assumption that such family does not, at any time, purchase its residence).

be a "wealth effect." That is, under the lifetime income tax, the typical family would be given an enhanced opportunity set — greater wealth — assuming it did not alter its current work-leisure choice. So long as consumption and leisure are both "goods," the family would want to convert its increased wealth into somewhat more of each. No matter the mix, it would work less. Thus, although the substitution effect would lead the typical family to want to work more, the wealth effect would to some extent mitigate this desire.

²⁵ The design of the lifetime income tax generally makes it impossible to achieve a better tax result by deferring income, since tax brackets are based on cumulative rather than on periodic income. The one exception to this would occur in late tax periods in a family's lifetime, when the possibility of having unused poverty exemption amounts could induce such family to attempt to defer income.

TABLE 9. POOR FAMILY'S TAX PAYMENTS

	Gross Wage Income	Income Less Poverty Subsistence	Progressive Income Taxes	Cumulative Taxable Income	Lifetime Income Taxes
pre-23					
23-27	143,500	62,500	9,375	62,500	
28-32	105,000	5,000	750	67,500	
33-37	147,500	47,500	7,125	115,000	
38-42	185,000	85,000	12,750	200,000	
43-47	210,000	124,000	18,600	324,000	
48-52	225,000	150,000	22,500	474,000	
53-57	210,000	135,000	20,250	609,000	49,050
58-62	153,500	78,500	11,775	687,500	35,325
63-67	48,500	(26,500)		661,000	
68-72		(75,000)		586,000	
73-77		(75,000)		511,000	
78-82		(75,000)		436,000	

I will ignore the fact that the poor family's tax payments under the lifetime income tax have a net present value of only 66% of its tax payments under the progressive income tax; to the extent that is considered to be a bad thing, it is easily rectifiable.²⁶ Rather, I will focus on the fact that the poor family's tax payments under the lifetime income tax would be made in a significantly different pattern than would its tax payments under the progressive income tax: 45% of income earned late in the family's life would flow to the government, replacing the 15% of income earned throughout the family's life that trickles to the government under the progressive income tax. Expressed in the language of marginal income tax rates, the family's

²⁶ Revenue neutrality with respect to the poor family could be achieved as follows. The size of the 0% tax bracket could be reduced to 400,000, with an additional 100,000 exemption available only to the extent that the family incurs educational (college) expenditures in excess of 20,000. Such change would not affect the typical family. Moreover, such change would arguably align the structure of the lifetime income tax more closely with its underlying motivation: educational expenditures made early in the family's lifetime are a primary contributor to the family's need to "borrow" to pay its taxes; to the extent that a family does not incur such educational expenditures, or incurs less of them, it is not faced with the same need to "borrow," at least not if it otherwise generally lives within its means. If, as seems likely, the poor family fails to incur more than 20,000 of educational expenditures, the additional taxes collected under this modified version of the lifetime income tax would make up the government's revenue shortfall.

current 15% marginal income tax rate would be replaced by a far higher 45% marginal nominal income tax rate. This marginal nominal income tax rate, in turn, translates into a marginal effective income tax rate of approximately 16.9% for income earned in the 23-27 tax period, and a marginal effective income tax rate of 45% for income earned in the 53-57 or the 58-62 tax periods. These higher marginal tax rates could well induce the family to work less, indeed perhaps significantly less.

I think, however, there would be two mitigating factors. First, to accomplish a strategic withdrawal from the 45% marginal tax bracket, the family would need to precisely plan its lifetime work-leisure choice. Even if it could accomplish the strategic withdrawal, what it would find is that its reduced income would pay for only roughly 90% of the consumption it had achieved under the progressive income tax (and which consumption it could still achieve, provided it was willing to confront the 45% tax bracket). Particularly for a poor family, this strikes me as a rather dramatic decline in standard of living, and hence, one such family would be unlikely to choose.²⁷ Second, I believe that it would be difficult for the family to exercise the requisite self-restraint with respect to its supply of work, at least early in its life. That is, early in its life, the family will face not a 45% marginal tax rate or even a 15% marginal tax rate, but what appears to be a 0% marginal tax rate.²⁸ This tax rate will likely induce the family to march more rather than less swiftly through the 0% tax bracket. When, at last, it exits such tax bracket and confronts the 45% tax rate, it will have little choice but to work or “starve.” If it chooses to work sufficiently hard, lower marginal tax rates beckon. If it chooses to starve, . . .

²⁷ Stated most strongly, the mix of consumption and leisure that the poor family chose when confronted by a progressive income tax is still available under the lifetime income tax; the only reason not to choose it is that some other pattern, such as the one hypothesized in the text, is superior. The one hypothesized in the text involves a 10% decrease in consumption and a concomitant increase in leisure. Given the generally low level of consumption enjoyed by the poor family, it would generally place a *relatively* high value on consumption and a *relatively* low value on leisure. Thus, it seems highly unlikely that such family will find the hypothesized trade-off worthwhile.

²⁸ This argument is based on the idea that taxpayers are not wholly rational, but rather are myopic. This myopia will lead them to discount too heavily future events, including the imposition of future taxes. Thus, if the prospect of paying taxes at a 45% rate is sufficiently far off in the future, the effective marginal tax rate will indeed appear to be close to zero.

Finally, in Table 10, I repeat the foregoing exercise for a rich family, which I define as a family earning wages equal to one-and-a-half times those earned by the typical family. Again, such family will have a consumption pattern that differs from that of the typical family; in particular it is likely to buy a more expensive personal residence. Nonetheless, I maintain the exclusion for personal residence expenditures at the 300,000 level that putatively reflects the upper middle class American Dream.

TABLE 10. RICH FAMILY'S TAX PAYMENTS

	Gross Wage Income	Income Less Poverty Subsistence	Progressive Income Taxes	Cumulative Taxable Income*	Lifetime Income Taxes
pre-23					
23-27	430,500	349,500	80,850	349,500	
28-32	315,000	215,000	40,500	564,500	29,025
33-37	442,500	342,500	78,750	707,000	64,125
38-42	555,000	455,000	112,500	1,062,000	152,310
43-47	630,000	544,000	139,200	1,606,000	173,160
48-52	675,000	600,000	156,000	2,206,000	162,000
53-57	630,000	555,000	142,500	2,761,000	149,850
58-62	460,500	385,500	91,650	3,146,500	104,085
63-67	145,500	70,500	10,575	3,217,000	19,035
68-72		(75,000)		3,142,000	
73-77		(75,000)		3,367,000	40,500
78-82		(75,000)		3,292,000	

*Cumulative taxable income takes into account housing expenses.

I will ignore the fact that the net present value of the taxes imposed under the lifetime income tax is only 97% of the net present value of the taxes imposed under the progressive income tax; this shortfall could be rectified by, for example, adding a 30% income tax bracket for cumulative lifetime income in excess of 2,250,000. In any event, however, whether the final tax bracket under the lifetime income tax imposed a 27% or a 30% rate, it would not impose a marginal rate that was higher than the marginal rate under the traditional progressive income tax. Accordingly, for the reasons discussed above in the case of the typical family, it would be unlikely that the rich family would significantly cut back on the amount of its work.

2. Savings vs. Consumption

In my illustrations, both the progressive income tax and the lifetime income tax actually impose a tax not on income, but on wages. (Since the great majority of the typical family's income is derived from wages, this should hardly be surprising.) With respect to each tax, my additional assumptions about after-tax interest expense (uniformly 15% per tax period, whether the family has low or high wage income) and after-tax interest income (uniformly 10% per tax period, whether the family has low or high wage income) are equivalent to an assumption that interest, whether flowing out or flowing in, is taxed at rates that are independent of the rates applied to wages.²⁹ In particular, interest under either regime could be taxed at a 0% rate without affecting my illustrations or my proposal. Of course, if interest were taxed at such a 0% rate, neither the progressive income tax nor the lifetime income tax would discourage savings at the expense of consumption. Thus, without more, it is impossible to conclude that the lifetime income tax would negatively impact a family's savings rate.

3. Social Engineering

Finally, before leaving incentive effects, it is worth saying that the lifetime income tax would likely encourage home ownership (since a family can defer taxes on up to 300,000 of income by buying a house) and would, if some or all of the zero-bracket amount were made contingent on the family's incurring educational expenses, encourage higher education as well. This is entirely deliberate. First, home purchases and higher education expenditures are likely to be the most significant sources of a family's debt, and thus are a significant contributing factor in a family's need to borrow to pay its income taxes under a traditional progressive income tax regime. Any tax regime that attempts to ameliorate the economic effects of a family's borrowing can hardly afford not to give them special consideration. Second, homes and higher education are, for better or for worse, the

²⁹ For example, my tables are consistent with nominal rates for borrowing and lending of 15% and 10%, respectively, provided that no tax is imposed on interest flows. And they are consistent with nominal rates for borrowing and lending of 30% and 20%, respectively, provided that a 50% tax rate is imposed on all interest flows. And they are consistent with nominal rates for borrowing and lending of 15% and 15%, respectively, provided that no tax is imposed on interest expense outflows and a 33.3% tax rate is imposed on interest inflows. And so on.

bedrock of the upper middle class American Dream. Accordingly, any tax regime that seeks to move families ahead in their attempts to reach such Dream should make special allowances in these areas. True, this is social engineering. But it is social engineering of precisely the type that the current progressive income tax regime already engages in (albeit not as effectively).

C. *Income Averaging*

The motivation of the lifetime income tax regimes heretofore offered up by the academic literature has largely been to offset the negative impact that progressive income tax rates may have on taxpaying units with volatile income patterns.³⁰ That is, under a progressive income tax regime, two taxpaying units who over the course of their lifetimes earn identical (in terms of present value) amounts of pre-tax wage income may pay considerably different (in terms of present value) amounts of tax on such income. In particular, if one such unit earns its income in a very steady fashion, while the other earns its income in fits and starts, the former unit will generally pay less tax than the latter.³¹ If, instead, a tax is imposed on each taxpaying unit's lifetime income, this disparity will inevitably be largely eliminated.

This paper is not directly concerned with the detrimental effects that a progressive income tax regime can have on taxpaying units with wildly fluctuating incomes. Thus, I have not portrayed the typical family as being confronted by any (significant) amount of income volatility. Nonetheless, given the prominent role that the detrimental effects of progressive income taxes is given in the existing lifetime income tax literature, I now consider two "atypical" families, each of which faces considerable income volatility. My baseline will continue to be the typical family discussed in Part I. The first atypical family will, in the first five-year tax period, earn all of the income earned by the typical family in the first five-year tax period and one-third of the

³⁰ William Vickrey, *Averaging of Income for Income Tax Purposes*, 47 J. POL. ECON. 379 (1939); Jeffrey Liebman, *Should Taxes be Based on Lifetime Income? Vickrey Taxation Revisited*, New York University Colloquium on Tax Policy and Public Finance (Spring 2003).

³¹ To the extent that the tax regime imposes taxes on income other than wage income, this differential effect on wage income might be masked. But in that case, my statement would be true as applied more broadly to all income. In any event, my focus in this paper is on wage income; that is also the focus in the extant lifetime taxation literature.

income earned by the typical family in the second five-year tax period. The first atypical family will then, in the second five-year tax period, earn the remaining two-thirds of the income earned by the typical family in the second five-year tax period. This pattern will then reverse itself in the following pair of five-year tax periods, and the entire twenty-year pattern will then be repeated. Finally, the first atypical family's resulting lifetime income pattern will be multiplied by a factor that insures that such pattern has the same net present value as the typical family's much smoother lifetime income pattern.³² See Table 11. The second atypical family's income pattern is constructed similarly, except that it will, in the first five-year tax period, earn only two-thirds of the income earned by the typical family in the first five-year tax period, with the remainder allocated to the second five-year tax period, along with all of the income earned by the typical family in the second five-year tax period. I then reverse this pattern in the following pair of five-year tax periods, and repeat the entire twenty-year pattern as necessary. See Table 11.

TABLE 11. VOLATILE INCOME PATTERNS

	Typical Income	Cumulative Income	Atypical Income 1	Cumulative Income	Atypical Income 2	Cumulative Income
pre-23						
23-27	287,000	287,000	356,640	356,640	191,889	191,889
28-32	210,000	497,000	139,859	496,499	306,555	498,444
33-37	295,000	792,000	196,468	692,967	419,548	917,992
38-42	370,000	1,162,000	467,860	1,160,827	247,383	1,165,375
43-47	420,000	1,582,000	569,425	1,730,252	280,813	1,446,188
48-52	450,000	2,032,000	299,697	2,029,949	591,713	2,037,901
53-57	420,000	2,452,000	279,717	2,309,666	523,850	2,561,751
58-62	307,000	2,759,000	446,549	2,756,215	205,261	2,767,012
63-67	97,000	2,856,000	96,903	2,853,118	64,854	2,831,866
68-72		2,856,000		2,853,118	32,206	2,864,072
73-77		2,856,000		2,853,118		2,864,072
78-82		2,856,000		2,853,118		2,864,072

³² To determine the necessary factor, I discounted each family's lifetime income by the periodic rate of 12.5% (reflecting the average of the lending rate of 10% and the borrowing rate of 15%). Applying this discount rate, the income earned by the first atypical family needs to be multiplied by a factor of approximately 0.999 in order to have the same net present value as the income earned by the typical family, and the income earned by the second atypical family needs to be multiplied by a factor of approximately 1.0006 in order to have the same net present value as the income earned by the typical family.

Focusing initially on the first atypical family, note how the pattern of tax payments depends on whether the progressive income tax, the 15% pure flat tax, or the lifetime income tax, is imposed. See Table 12.

TABLE 12. TAXES IMPOSED ON VOLATILE INCOME (FIRST ATYPICAL FAMILY)

	Variation 1 Income – Poverty Level	Progressive Tax	Variation 1 Gross Income	15% Flat Tax	Cumulative Taxable Income	Lifetime Income Tax
pre-23						
23-27	275,640	58,692	356,640	53,496	275,640	
28-32	39,859	5,979	139,859	20,979	315,499	
33-37	96,468	14,470	196,468	29,470	211,967	
38-42	367,860	86,358	467,860	70,179	479,827	
43-47	483,425	121,028	569,425	85,414	963,252	208,463
48-52	224,697	43,409	299,697	44,955	1,187,949	78,560
53-57	204,717	37,415	279,717	41,958	1,392,666	67,557
58-62	371,549	87,465	446,549	66,982	1,764,215	106,758
63-67	21,903	3,285	96,903	14,535	1,786,118	5,914
68-72	(75,000)				1,711,118	
73-77	(75,000)				1,936,118	40,500
78-82	(75,000)				1,861,118	

Following the same methodology heretofore employed, it is possible to compare the family's terminal net worth under each of these three tax regimes. That is, I assume notwithstanding the volatility of the atypical family's income stream that such family continues to make exactly the same consumption expenditures at exactly the same times (and hence in amounts that have exactly the same net present value). To the extent that the family cannot meet its current consumption and tax expenditures, it borrows, and so on. Table 13 collapses these various steps. In particular, it shows how the first atypical family's two expenditures that differ from tax regime to tax regime — namely taxes paid and interest paid or received — vary dramatically across the three regimes.

TABLE 13. TAXES PAID AND INTEREST PAID
(FIRST ATYPICAL FAMILY)

	Cumulative Progressive Income Tax	Cumulative Interest PAID Prog. Inc. Tax	Cumulative 15% Flat Tax	Cumulative Interest PAID Flat Tax	Cumulative Lifetime Income Tax	Cumulative Interest PAID Life. Inc. Tax
pre-23						
23-27	58,692	18,000	53,496	18,000		18,000
28-32	64,671	18,308	74,475	17,686		12,336
33-37	79,141	28,580	103,945	29,335		12,120
38-42	165,499	73,093	174,124	77,682		42,293
43-47	286,527	112,058	259,538	118,629	208,463	51,812
48-52	329,936	128,907	304,492	132,416	287,023	49,215
53-57	367,351	136,841	346,450	137,060	354,580	42,244
58-62	454,815	133,694	413,432	131,844	461,338	28,359
63-67	458,101	109,324	427,968	103,150	467,252	(5,892)
68-72	458,101	89,654	427,968	79,850	467,252	(36,168)
73-77	458,101	85,818	427,968	72,020	507,752	(51,672)
78-82	458,101	69,898	427,968	51,707	507,752	(76,375)

Note that the aggregate of taxes and interest paid during the family's lifetime under the progressive income tax exceeds by approximately 48,300 the aggregate of taxes and interest paid under the 15% pure flat tax, and that the aggregate of taxes and interest paid under the 15% pure flat tax in turn exceeds by approximately 48,300 the aggregate of taxes and interest paid under the lifetime income tax. Viewing a move from the progressive income tax to the 15% pure flat tax as a move that eliminates the relative burden of progressive income taxation, and a move from the 15% pure flat tax to the lifetime income tax as a move that essentially eliminates the burden of inefficient borrowing, it is apparent that for the first atypical family each of these burdens is of identical magnitude.

To test the robustness of this conclusion, I repeat the exercise with the second atypical family. See Tables 14 and 15.

TABLE 14. TAXES IMPOSED ON VOLATILE INCOME
(SECOND ATYPICAL FAMILY)

	Variation 2 Income – Poverty Level	Progressive Tax	Variation 2 Gross Income	15% Flat Tax	Cumulative Taxable Income	Lifetime Income Tax
Pre-23						
23-27	110,889	16,633	191,889	28,783	110,889	
28-32	206,555	37,967	306,555	45,983	317,444	
33-37	319,548	71,864	419,548	62,932	436,992	
38-42	147,383	22,107	247,383	37,107	484,375	
43-47	194,813	34,444	280,813	42,122	679,188	80,635
48-52	516,713	131,014	591,713	88,757	1,195,901	209,013
53-57	448,850	110,655	523,850	78,578	1,644,751	139,435
58-62	130,261	19,539	205,261	30,789	1,775,012	35,170
63-67	(10,146)		64,854	9,728	1,764,866	
68-72	(42,794)		32,206	4,831	1,722,072	
73-77	(75,000)				1,947,072	46,456
78-82	(75,000)				1,872,072	

TABLE 15. TAXES PAID AND INTEREST PAID
(SECOND ATYPICAL FAMILY)

	Cumulative Progressive Income Tax	Cumulative Interest PAID Prog. Inc. Tax	Cumulative 15% Flat Tax	Cumulative Interest PAID Flat Tax	Cumulative Lifetime Income Tax	Cumulative Interest PAID Life. Inc. Tax
pre-23						
23-27	16,633	18,000	28,783	18,000		18,000
28-32	54,600	36,712	74,767	38,534		34,217
33-37	126,464	47,942	137,699	53,063		36,883
38-42	148,572	68,704	174,806	76,278		37,016
43-47	183,016	103,789	216,928	116,434	80,635	45,062
48-52	314,030	146,481	305,685	166,111	289,647	63,589
53-57	424,685	153,473	384,263	174,795	429,083	57,522
58-62	444,224	132,514	415,052	151,926	464,253	27,408
63-67	444,224	105,886	424,780	124,322	464,253	(7,728)
68-72	444,224	86,610	429,611	104,946	464,253	(36,362)
73-77	444,224	79,987	429,611	98,694	510,709	(53,280)
78-82	444,224	61,001	429,611	80,117	510,709	(78,944)

In this variation, the aggregate of taxes and interest paid during the family's lifetime under the progressive income tax is approximately 4,500 less than the aggregate of taxes and interest paid under the 15% pure flat tax, and the aggregate of taxes and interest paid under the 15% pure flat tax exceeds by approximately 78,000 the aggregate of taxes and interest paid under the lifetime income tax. Again viewing a move from the progressive income tax to the 15% pure flat tax as a move that essentially eliminates the relative burden of progressive income taxation (although, for this atypical family, the progressive income tax regime actually provides a small benefit relative to a purely flat tax), and a move from the 15% pure flat tax to the lifetime income tax as a move that essentially eliminates the burden of inefficient borrowing, it is apparent that for this atypical family the second of these burdens is significantly larger than the first.

Thus, it appears that even for taxpaying units suffering (by virtue of their volatile income streams) from the pernicious effects of a progressive tax rate structure, the benefit they would receive from an elimination of the progressive rate structure is no greater than, and indeed is likely smaller than, the benefit they would receive from being unburdened of the obligation to engage in inefficient tax-induced borrowing. Moreover, all other taxpaying units would receive no benefit at all from an elimination of the progressive rate structure, but would receive a substantial benefit from being unburdened of the obligation to engage in inefficient tax-induced borrowing.³³ These facts can lead to but one conclusion: if a lifetime income tax regime were ever seriously considered, it should be one that not only eliminates the pernicious effects of a progressive tax rate structure, but one that eliminates the pernicious effects of inefficient tax-induced borrowing.³⁴

³³ Although not directly illustrated in the Tables in the text, for the typical family, a move from the progressive income tax to the 15% pure flat tax would, under my assumptions, actually lead to a decline of 14,000 in terminal net worth. The reason for this is that the 15% pure flat tax imposes higher income taxes on taxpayers earning lower levels of income, and thus imposes higher income taxes during the typical family's first few tax periods. These tax periods, of course, are also those during which the typical family maintains its highest debt levels. Thus, all such incremental tax payments cause increases in the family's net interest payments.

³⁴ The Vickrey lifetime income tax produces a second benefit in addition to eliminating the pernicious effects of a progressive tax rate structure on taxpaying units with volatile income patterns: it also provides a modicum of "income smoothing." That is, if a taxpaying unit suffers from a decline in income after having dutifully paid taxes on higher incomes in prior tax periods, it will likely receive a refund: its average income will have fallen, and so too will its average marginal tax

IV. IMPLEMENTATION

While the lifetime income tax is easy to design in the case of a single typical family (or any other typical taxpaying unit), it is somewhat harder to design when a myriad of “atypical” circumstances, ranging from divorce and remarriage on the one hand to immigration and expatriation on the other, must be taken into account. The reason is obvious: the lifetime income tax imposes a tax on cumulative lifetime income, but cumulative lifetime income is well-defined only when a taxpaying unit is well-defined and cumulative lifetime income is taxable only when the taxpaying unit’s entire life is lived within the taxing government’s jurisdiction. I will not attempt to provide rules that would enable the lifetime income tax to be seamlessly applied to all atypical circumstances. Rather, I will show that it is possible to construct a more traditional periodic income tax that in many ways approximates the lifetime income tax, but that is “portable” and therefore relatively easily applicable to atypical circumstances.

Thus, consider a periodic tax that is designed as follows. First, as always, a family’s income up to the level of poverty subsistence is exempt, but this exemption is implemented by means of allowing the family a deduction in an amount equal to the level of poverty subsistence.³⁵ Second, excess medical costs of elderly family members

rate; accordingly it will, in retrospect, have overpaid its taxes in prior tax periods. This refund can be used to pay for incremental consumption at precisely those moments when the taxpaying unit has the most difficulty (due to its reduced income level) paying for such consumption. Hence the name “income smoothing.” The lifetime income tax that I have sketched in this paper does not have this feature since I have chosen not to make the tax refundable. But it would be easy to add such a feature. In the case of the typical taxpaying unit illustrated in Tables 7 and 8, the key change would be that such unit would be entitled to a tax refund in the 68-72 and 78-82 tax periods, since in both periods it would have negative taxable income (due to having income below the poverty subsistence level). Giving the family a tax refund in such periods would not be costless because the government would need to increase taxes on such unit’s prior income in order to pay for the future tax refunds. However, the total increase in cost would be manageable: raising tax rates by a single percentage point would suffice. Thus, if taxes imposed were 0% on the first 500,000 of taxable income, 46% on the next 500,000, 34% on the next 500,000 and 28% thereafter, the government would be able to pay for the desired income smoothing.

³⁵ The purpose of this structure is to allow a family with income below the poverty subsistence level to report a taxable loss, which loss it will be allowed to carry forward. I do not allow a similar deduction for “the good stuff” because such a deduction would increase the amount of the loss carryforward and would therefore lead to a significant revenue loss. Ultimately, significantly higher marginal tax rates

are deductible in amounts equal to 2,500 per adult per annum for adults of ages 65 to 69, 3,000 per adult per annum for adults ages 70 to 74, 3,500 per adult per annum for adults ages 75 to 79, and 4,000 per adult per annum for adults ages 80 and above. Third, education costs incurred by an individual are partially deductible: each taxpayer is allowed to deduct up to 60,000 for the cost of her own education, and each family is allowed to deduct up to 60,000 for the cost of educating each of their children. Fourth, the cost of a family's principle residence (or upgrade) is deductible in an amount up to 300,000. As a corollary, however, the family is required to include in taxable income any gain from the sale of such residence. Fifth, and critically, to the extent that the family incurs a taxable loss (negative taxable income after applying the foregoing rules) in a given tax period, it is entitled to carry such loss forward to offset taxable income in subsequent tax periods.³⁶ Finally, the family's taxable income in any given tax period, computed in accordance with the foregoing rules, is taxed according to the following modified flat rate structure: the first 80,000 is taxed at a 0% rate, and any excess over 80,000 is taxed at a 49.7% rate.³⁷ See Table 16.

would be required to offset such revenue loss.

³⁶ I do not allow losses to be carried back for two reasons. First, the lifetime income tax as I designed it does not have a carryback feature: the ultimate amount of lifetime income tax is based not on cumulative lifetime income but rather on the highest level of cumulative lifetime income achieved at the end of any tax period. Second, the present value of the revenue loss from allowing a carryback would be significant, and would thus force a significant increase in the ultimate marginal tax rate.

³⁷ While the nominal amount of taxes collected under this scheme differs from that under the lifetime income tax, the present value of these taxes is the same.

TABLE 16. A PERIODIC TAX THAT APPROXIMATES THE LIFETIME TAX

	Income less Poverty Subsistence ³⁸	Education and Housing Deductions	Loss Carry-forward	Taxable Income	Taxes
pre-23		(120,000)		(120,000)	
23-27	206,000		(120,000)	86,000	2,982
28-32	110,000			110,000	14,910
33-37	195,000	(200,000)		(5,000)	
38-42	270,000	(100,000)	(5,000)	165,000	42,245
43-47	334,000	(90,000)		244,000	81,508
48-52	375,000	(30,000)		345,000	131,705
53-57	345,000			345,000	131,705
58-62	232,000			232,000	75,544
63-67	7,000			7,000	
68-72	(103,000)			(103,000)	
73-77	(108,000)	300,000	(103,000)	89,000	4,473
78-82	(113,000)			(113,000)	

Table 17 shows the effects the imposition of this periodic tax would have on the typical family's finances. In particular, it shows that while the family would need to engage in some borrowing to pay its tax liabilities, the amount of such borrowing would be significantly less than under either the 15% pure flat tax or the progressive income tax. Taking into account the savings on net lifetime interest expense, the family would end up with a terminal net worth that, while slightly less than under the lifetime income tax, was nonetheless significantly greater than its terminal net worth under either the 15% pure flat tax or the progressive income tax.

³⁸ Poverty subsistence in this table reflects the incremental medical expense deduction for the elderly.

TABLE 17. INCOME LESS CONSUMPTION AND A PERIODIC TAX THAT SOMEWHAT APPROXIMATES THE LIFETIME TAX AND INTEREST

	Cumulative Income Less Consumption	Cumulative Taxes	Cumulative Income Less Cons + Taxes	Cumulative Interest	Cumulative Income Less Cons + Taxes + Interest
Pre-23	(120,000)		(120,000)		(120,000)
23-27	5,000	(2,982)	2,018	(18,000)	(15,982)
28-32	15,000	(17,892)	(2,892)	(20,397)	(23,289)
33-37	(90,000)	(17,892)	(107,892)	(23,891)	(131,783)
38-42	(20,000)	(60,137)	(80,137)	(43,658)	(123,795)
43-47	138,000	(141,645)	(3,645)	(62,227)	(65,872)
48-52	408,000	(273,350)	134,650	(72,108)	62,542
53-57	678,000	(405,055)	272,945	(65,854)	207,091
58-62	835,000	(480,599)	354,401	(45,145)	309,256
63-67	767,000	(480,599)	286,401	(14,219)	272,182
68-72	589,000	(480,599)	108,401	12,999	121,400
73-77	706,000	(485,072)	220,928	25,139	246,067
78-82	518,000	(485,072)	32,928	49,745	82,673

It is worthwhile to make two additional points about this periodic approximation of the lifetime income tax. First, it could be tweaked in a myriad of ways, each of which could serve to align more closely the tax payments required under the approximation with the tax payments required under the lifetime income tax. I have not attempted to derive the closest-of-all-approximations, in large part out of a desire to avoid unnecessary complexity. Second, under any tweak of the periodic approximation, there would be a need to impose an almost 50% average tax rate on income in excess of the requisite 0% bracket amount. This means that the periodic approximation will impose on the typical family a significantly higher marginal income tax rate (49.7% in my illustration) than does the lifetime income tax (27% in my illustration).³⁹

³⁹ This is not entirely true, but is true provided I care, as I did when designing the lifetime income tax, that average income tax rates are not regressive. See *supra* note 12. In the instant case, the combination of a 0% tax bracket in the amount of 80,000, which is necessary to reduce as much as possible the need for the family to borrow to pay its taxes, and a 50% tax bracket in the amount of at least around 265,000, which is necessary to raise the government's required revenue, yield an average tax rate of approximately 38%. Thus, if a third and lower tax rate were introduced, say for taxable income in excess of 345,000 per tax period, such tax rate

V. CONCLUSION

In this paper I have proposed replacing the current individual Federal income tax with a lifetime income tax. Such a tax would have a number of benefits that have been identified by other scholars. For example, it is well understood that the burden imposed by a lifetime income tax is largely immune from the vagaries of income volatility: an individual with highly volatile income would pay neither more nor less tax than an individual with smooth income, provided only that both such individuals earn the same aggregate amount of income over their lifetimes.

The lifetime income tax I propose differs from any that has been proposed before in that it concentrates tax payments in tax periods in which individuals are likely to have a surplus of disposable income, after taking into account “typical” consumption patterns. The additional benefit derived from this structure is that individuals would be able to reduce the amount of their direct borrowings: in essence, they would shift a portion of what would have been direct borrowings to the government. Since the government is a more efficient borrower than any individual, the interest rate charged on the shifted borrowings will be lower than the interest rate that would have been charged on a like amount of direct borrowings. Viewed over the course of a typical lifetime, this reduction in interest expense would produce a significant benefit.

could be no lower than 38%, unless the government chose to tolerate a scheme that was regressive. This 38% is therefore the floor on the ultimate marginal income tax rate.