



CSU
College of Law Library

Cleveland State University
EngagedScholarship@CSU

Law Faculty Articles and Essays

Faculty Scholarship

4-8-1996

Cognitive Theory and the Selling of the Flat Tax

Deborah A. Geier
Cleveland State University, d.geier@csuohio.edu

Follow this and additional works at: https://engagedscholarship.csuohio.edu/fac_articles



Part of the [Tax Law Commons](#)

How does access to this work benefit you? Let us know!

Original Citation

Deborah A. Geier, Cognitive Theory and the Selling of the Flat Tax, 71 Tax Notes 241 (April 8, 1996)

This Article is brought to you for free and open access by the Faculty Scholarship at EngagedScholarship@CSU. It has been accepted for inclusion in Law Faculty Articles and Essays by an authorized administrator of EngagedScholarship@CSU. For more information, please contact research.services@law.csuohio.edu.



SPECIAL REPORT

COGNITIVE THEORY AND THE SELLING OF THE FLAT TAX

by Deborah A. Geier

Deborah A. Geier is an associate professor of law at Cleveland-Marshall College of Law, Cleveland State University. In this article, she brings to bear the insights of Professor Edward J. McCaffery, regarding the interaction of cognitive theory and the tax world, to the flat tax proposal. The article explores how the perceptual biases described by Professor McCaffery might affect both taxpayers' impressions of the contours of the proposed tax base and their behavioral responses to the savings incentive. She warns that any errors in her application of Professor McCaffery's work to the flat tax are entirely her own.

Table of Contents

I. Introduction	241
II. Cognitive Biases Implicated by the Wage Tax ..	242
III. Cognitive Biases and Savings Behavior ...	246
IV. Conclusion	247

I. Introduction

"Great minds think alike." I like to nurse my disappointment with that old aphorism whenever someone else publishes just the law review article that I was thinking of writing. I had been thinking for a few years about how people's *perceptions* affect, or should affect, the structure of the tax system. I had even thought about drafting an unscientific questionnaire and submitting it to the unscientific sample of my Basic Tax students on the first and last day of class, asking them whether they thought certain tax provisions were a good idea, such as the home mortgage interest deduction, the exclusion of interest on state and local bonds, and the corporate tax. My working hypothesis was that most of them would think they were a good idea both before *and* after the course — even after they learned about some of the inefficiencies and consequences of

these provisions. That is, I thought that some of these provisions were premised not so much on a lack of *education* and *understanding* (the rational actor acting simply on imperfect information) as on perceptual biases that they were still "good" provisions notwithstanding these consequences.

Before I could get my act together, however, Professor Edward J. McCaffery published "Cognitive Theory and Tax."¹ Like most of the articles that beat me to the punch, it was much better than the article I would have likely written anyhow.² It describes some fundamental findings of cognitive theory from the discipline of psychology and then explores how those tenets might explain in part some often-criticized provisions of the Internal Revenue Code. Cognitive or behavioral decision theory can explain how "people's subjective opinions, perceptions, and decision-making often differ systematically from sound objective criteria."³ Professor McCaffery warns that "the practical reformer had best be aware of the possible cognitive impacts in advancing any particular project. . . ."⁴

The insights discussed in his article can be fruitfully brought to bear on the selling of the "Hall-Rabushka-Army-Forbes" flat tax, and the discussion in Part II indicates a mixed prognosis for selling the flat tax (if cognitive theory were all that mattered). On the other hand, the functional equivalent of the flat tax — a business VAT coupled with a universal rebate — would be much easier to sell under cognitive theory, although fears about a resulting spiral in federal spending might be a normative reason to resist selling it. Part III muses about the impact of cognitive biases on changes in savings behavior, since one of the stated reasons for a switch from an income tax to a consumption tax is a desire to increase the savings rate. With absolutely no

¹ Edward J. McCaffery, "Cognitive Theory and Tax," 41 *UCLA Law Rev.* 1861 (1994).

² It also reinforced to me that my working hypothesis probably would not have been disproved had I gone ahead with my experiment. *See id.* at 1916-20 (describing the cognitive phenomenon called "anchoring," which is the human tendency to cling to initial thoughts and beliefs, failing to adjust them as new data are received).

³*Id.* at 1864.

⁴*Id.* at 1867.

empirical evidence to back me up, I would suspect that there might be a better chance to influence savings behavior under a flat tax than under the VAT-universal rebate alternative (if, in fact, a change in the tax law can meaningfully affect savings behavior at all).

II. Cognitive Biases Implicated by the Wage Tax

Though there are, of course, differences among the details of the Hall-Rabushka-Armev-Forbes plans, each plan shares the same overall structure. They would tax business income under, essentially, a subtraction-method value added tax (VAT), with the added twist that wages (normally nondeductible under a VAT) would be deductible. Those wages then would be taxed at the recipient level, after subtracting personal and family exemption allowances. Investment returns — dividends, interest, and capital gain — would not be taxed. In essence, the combination of the business tax and the wage tax would combine to mimic a VAT, with some of the VAT being paid by individuals so that personal exemptions could introduce some progressivity.⁵

The flat taxers tend to discount the cognitive biases that will make it difficult to push their proposal that the tax base at the individual level should exclude dividends, interest, and capital gains.

The flat taxers tend, in my opinion, to discount the cognitive biases that will make it difficult to push their proposal that the tax base at the individual level should exclude dividends, interest, and capital gains, taxing only wage income. The flat taxers seem to believe that simply educating the citizenry on the principles of financial analysis underlying their argument (i.e., that taxing investment income amounts to "double taxation" of the recipients of this kind of income) will make this dichotomy between wage and investment income palatable to the public at large. After reading Professor McCaffery's article, I'm not so sure.

First, we need to review the "double tax" argument that the flat taxers must sell to the public. The first balloon to burst will be their often-made, short-cut argument that dividends, interest, and capital gains should not be taxed because they were already taxed at the business level. This may work insofar as it explains the failure to tax dividends (and perhaps capital gain on stock) because the corporation has already paid tax on the earnings, but "integration" of the corporate and individual income taxes can be done under an income tax,⁶ eliminating the overt double taxation of

corporate earnings does not require replacing the income tax with a consumption tax at the individual level.⁷ (Many believe that one of the biggest reasons that integration has not been achieved under the income tax is the accompanying revenue loss.⁸) More basically, however, that line does not adequately explain to taxpayers the double-tax argument regarding, say, the purchase and later sale of unimproved land by an individual (neither through a corporation nor a business in any form).⁹

For example, assume that Investor purchases unimproved land for \$100,000. Under an income tax, Investor is disallowed a deduction of the \$100,000 "capital expenditure," because there has been no decrease in wealth; the form of Investor's wealth has simply changed form from dollar bills to land. Thus, an income tax taxes the \$100,000 used to purchase the land (through prohibiting a deduction). The flat tax would also prohibit Investor from deducting that \$100,000 (and thus tax the \$100,000). Assume further that five years pass and the land has appreciated in value to \$150,000. (Make the example really clean by assuming zero inflation; the appreciation in value was entirely due to, say, the encroaching borders of a growing town, which made the land more valuable for future development.) Investor sells the land for \$150,000 to a real estate developer.

Under an income tax, Investor must include in income in year five her \$50,000 realized gain on the sale:

⁷As Professor Warren demonstrated in his seminal article, the wage tax is, under normal conditions, the functional economic equivalent of a cash-flow consumption tax. That is, allowing contributions to savings to be deducted from the tax base but taxing the returns on those savings, such as interest and capital gain (as in a cash-flow consumption tax), is the economic equivalent (under expected conditions) of prohibiting a deduction for the addition to savings but excluding the returns on those savings. Hence, a wage tax that taxes labor income, disallows a deduction on the purchase of investment assets, but excludes the returns on investment assets is a consumption tax. See Alvin C. Warren Jr., "Fairness and a Consumption-Type or Cash Flow Personal Income Tax," 88 *Harv. L. Rev.* 931, 938-41 (1975); Joseph M. Dodge, J. Clifton Fleming Jr., and Deborah A. Geier, *Federal Income Tax: Doctrine, Structure and Policy* 416-19 (1995). Consumption taxes differ from income taxes in that the former tax only amounts spent on current consumption, while the latter tax both amounts spent on current consumption and net wealth additions.

⁸But see *infra* notes 16-24 and accompanying text (discussing how cognitive theory might help further explain the survival of the corporate tax).

⁹The Kemp Commission Report recognizes that the corporate tax issue is distinct from the "double tax" phenomenon. It refers to the tax on dividends (or, if the stock is sold, on the capital gain reflecting retained earnings) as the *third* layer of tax on corporate earnings. (It also describes the estate and gift tax as a fourth layer of tax on these earnings. Presumably, the estate and gift tax on noncorporate investment income would be described as a third layer of tax.) See The National Commission on Economic Growth and Tax Reform, *Unleashing America's Potential*, reprinted in *Tax Notes*, Jan. 22, 1996, pp. 413, 438 [hereinafter Kemp Report].

⁵See *infra* notes 25-27 and accompanying text (considering a VAT without a deduction for wages, no individual tax at all, and a universal rebate to families to introduce the progressivity intended to be accomplished through the wage tax).

⁶See generally Report of the Department of the Treasury on Integration of the Individual and Corporate Tax Systems (Jan. 1992).

the difference between her \$100,000 cost basis and the \$150,000 amount realized on sale. Under the flat tax, the \$50,000 would be free of tax. Taxing it, the flat taxers argue, would amount to double taxation of the same dollars to the same taxpayer. Why (you ask)? The \$100,000 used to purchase the property was taxed (you add), but \$50,000 of the sales proceeds is new wealth to Investor that has never been taxed. How does taxing it result in double taxation?

We need a short course in financial analysis to explain the double-tax phenomenon. Under financial theory, the \$100,000 value that Investor paid to purchase the property represented (assuming no sentimental value) the present value of the future stream of payments that Investor expected the property to generate. This future stream of payments includes not only the recovery of the original \$100,000 "principal" but also the capital appreciation.¹⁰ Thus, taxation of the original \$100,000 outlay (through prohibiting a deduction) already taxed (on a present-value basis) all future expected returns on the investment, including the \$50,000 appreciation — at least under financial theory. To tax it again when received would be tantamount to double taxation, the flat taxers argue.¹¹ (The same argument applies with respect to the receipt of interest and dividends, even without a corporate tax.)

The flat taxers compare Investor to Consumer, who purchases a television set with after-tax dollars (say, wages) and then enjoys watching television over the life of the set. Consumer's enjoyment is the "return" generated by the television set, the present-discounted value of which determined the set's purchase price. Because Consumer's return is enjoyed on a tax-free basis, the flat taxers argue, so should Investor's return be free of tax, even though it is received in dollars.¹²

I think that this argument is a hard sell for the average citizen whose major source of income is wages, not only because it requires a certain level of sophistication but because it runs into the cognitive bias best described as "loss aversion." At bottom, he will find it hard to believe that Investor has *really* already been taxed on that \$50,000 of appreciation, even if he understands the explanation just given. Consumer doesn't likely appreciate the "income" element in watching the television set; he thus will find the argument that Investor's return ought to be tax-free, for the same reason that Consumer isn't taxed on the pleasure en-

joyed on watching television, difficult to accept.¹³ Wage earners will likely see the investment earners as being less heavily taxed than they are (even *without* charts showing the top decile of taxpayers, who have proportionately more investment income, as receiving the lion's share of the tax cuts under a flat tax).¹⁴

[P]eople are especially averse to losses. For example, people will not use credit cards if a

¹³It's worth stepping back from the discussion at this point and mentioning the obvious: that flat taxers believe that if their equation of television watching with investment return (in the form of appreciation, dividends, or interest) is accepted, then *a fortiori* the investment return should be free from tax, both because of fairness concerns (equal treatment of Consumer's television viewing and Investor's investment return) and economic policy (to discourage the anti-savings bias inherent in treating the two kinds of returns differently). See *infra* Part III (discussing the anti-savings bias). But that conclusion really begs the question. One might accept the equation of Consumer's return with Investor's return and still argue that Investor's return ought to be taxed anyhow.

You can't implicitly assume away the fundamental inquiry when tax policy is on the table: What norms *should* govern? One can argue that both fairness norms and economic norms justify taxing Investor. An important fairness norm is the ability-to-pay norm. Even if Consumer's return is the same as Investor's, Consumer's return (watching television) does not represent resources under the control of Consumer that are available for contribution to the fisc, while Investor's return does. And if savings behavior is substantially inelastic, so that taxing it more heavily than consumption does not substantially interfere with economic behavior, then taxing Investor's return does not violate the value of economic neutrality; repeal would only create inefficient windfall benefits. See *infra* Part III.

In other words, the evaluation of tax systems, as well as individual provisions and principles within it, must be guided by the overarching inquiry regarding how the burden of collecting \$X — whatever that amount is — *should* be allocated among the population. Fairness norms, such as ability to pay, and economic norms, such as economic neutrality, help to guide such inquiries. If one is really concerned about ability to pay taxes, "equal" treatment of Consumer and Investor (by exempting Investor's return) would not be the highest good. And if savings rates are insufficiently sensitive to a switch from an income tax to a consumption tax to increase savings substantially, the economic argument is gone. The role of these underlying norms must not be assumed away in all the discussions about a switch from an income tax to a consumption tax, though it does seem that they are often discussed more implicitly than explicitly. The financial-analysis approach to Investor implicitly abandons the ability-to-pay norm as a guiding norm in taxation; that abandonment ought to be discussed explicitly. Disagreements about whether a consumption tax or an income tax is "better" really reflect deeper disagreements about which norms ought to govern how that \$X tax burden that must be collected should be allocated among Americans. See Dodge, Fleming, and Geier, *supra* note 7, at 17-26.

¹⁴On the other hand, Professor McCaffery has noted the tendency of democracy (contrary to popular "soak-the-rich" beliefs about the electorate and perhaps due in part to cognitive bias) to enact increasingly regressive tax provisions. McCaffery, *supra* note 1, at 1940. Consumption taxation in general — and the flat tax in particular — would surely be regressive compared to the current income tax.

¹⁰The same analysis applies to all property. Hence, stock purchased for \$100,000 represents the discounted present value of the expected return of the \$100,000 purchase price plus dividends and any capital gain; a zero-coupon bond purchased for \$100,000 represents the discounted present value of the return of the real principal amount coupled with interest that we call "original issue discount."

¹¹Even the flat taxers must concede that this analysis does not hold true if the return far exceeds the initial expectations that were capitalized into the purchase price.

¹²See Kemp Report, *supra* note 9, at 438.

merchant advertises a 3 percent penalty for using them, but they will do so if the same merchant advertises a 3 percent bonus for using cash: Being penalized appears worse than forsaking a bonus, although the two outcomes are economically equivalent. Similarly, people consistently attach more disutility to losing a sum of money or a valuable possession than they do to failing to gain the same sum or good, even controlling for wealth effects. A related phenomenon is that people insist on being paid more for giving up something they already own than they would be willing to pay to acquire it in the first place. All of these effects may be captured in the phrase 'loss aversion'... The idea of loss aversion is that people are especially sensitive to losses, above and beyond the particular dollars involved...¹⁵

Professor McCaffery goes on to explore how the propensity for "hidden taxes" may be explained in part by the cognitive bias of loss aversion. "The idea is that it will appear to be better to 'pay' a tax imputedly, by never receiving money in the first place, rather than directly, by first receiving money and then having to give some of it back."¹⁶ He uses the employer share of the social security tax on wages and the corporate tax as examples. "In each case, money is diverted from what would otherwise be its course in private commerce and sent to the government, without the potential recipient of the value ever necessarily being aware of the levy."¹⁷

The social security levy is 15.3 percent of salary, but the tax is structured so that only 7.65 percent is listed as coming out of the employee's paycheck;¹⁸ the remaining 7.65 percent is in form paid by the employer, though the entire tax is economically borne by each individual employee.¹⁹ The tax could easily be structured to avoid the bifurcated payment system.

It would be a simple expedient to "gross up" salaries, levy the full 15.3 percent share from the

¹⁵*Id.* at 1874-75.

¹⁶*Id.* at 1875.

¹⁷*Id.* at 1876.

¹⁸The practice of withholding itself has loss-aversion ramifications, in my view. Taxpayers, on balance, should experience more disutility from receiving income and then having to write checks for taxes owed than from having the tax withheld in the first place. Not gaining the "bonus" is not as bad as receiving it and then having to pay the "penalty." This might explain in part the rather irrational desire on the part of many taxpayers to ensure a large "refund" check in April, even when they are fully aware that the refund constitutes a terrible investment: a no-interest loan to the government.

For this reason, Texas Republican Rep. Richard Armev's original proposal that withholding be abolished and individuals be required to write a monthly check to the government for taxes owed (to make the tax more visible, more painful, and thus more difficult to increase) would be a hard sell. (Good thing, too. The government would collapse without withholding. I don't need empirical evidence to be comfortable with that belief.)

¹⁹McCaffery, *supra* note 1, at 1878-80.

employee, and still have the employer do all the withholding. Instead of Alice's being 'paid' \$10,000, contributing \$765, and taking home \$9,235, she would instead be 'paid' \$10,765, contribute \$1,530, and take home \$9,235 — exactly the same bottom line.

While the two arrangements are economically or objectively equivalent, the choice between contribution with and without matching is a situation where cognitive theory predicts a subjective difference in utility assessments. Getting paid and then losing the \$765 is subjectively worse than never having received the \$765 in the first place. Cognitive theory predicts a more favorable taxpayer response to the [bifurcated payment structure].²⁰

In other words, the bifurcated payment system may have survived in part because of loss aversion²¹ and, moreover, may explain in part why the government has increasingly relied on payroll taxes to fund government. Those taxes may be easier to raise because of the cognitive bias attached to the bifurcated payment structure.²²

Loss aversion may also explain in part the failure to achieve integration of the corporate and individual taxes. We all know that since corporations are not real people, they cannot bear the economic burden of the corporate tax. While the incidence of the tax is not known with certainty, some combination of labor, shareholders, or all holders of capital in general pay the corporate tax, though they are not aware of it. Wages, dividends, or all returns to capital would be higher in the absence of the corporate tax. Yet, it persists. Perhaps part of the reason is loss aversion.²³

The corporate income tax is attractive precisely because it is hidden by its uncertain incidence. If we were to repeal it, and replace it with a tax of equal net revenue, the tax burden would become manifest, and loss aversion would dictate a fall in total subjective utility levels. In 1993, for example, the federal corporate income tax produced approximately 117 billion dollars. Repealing the tax would therefore, in the first instance, be expected to increase income by at least that much. But if the government were then to raise taxes by that same 117 billion dollar figure (even if it were to figure out who, precisely, the beneficiaries of the repeal had been and to tax exactly those parties — that is, even if it were to solve the incidence question), this would involve precisely the same giving and taking away as the alternative for-

²⁰*Id.* at 1879-80.

²¹Professor McCaffery makes no claim that the drafters of the act back in the 1930s understood this phenomenon and consciously manipulated it. *Id.* at 1880-81.

²²*Id.* at 1881-83.

²³*Cf.* Jennifer Arlen and Deborah M. Weiss, "A Political Theory of Corporate Taxation," 105 *Yale L.J.* 325 (1995) (exploring the lack of incentive on the part of managers of publicly held corporations to lobby for repeal of the corporate tax).

mulation of the social security system discussed above. Subjective utility would fall.

As with the social security example, cognitive theory suggests an advantage to the actual, apparently senseless, way of doing things.²⁴

These examples suggest that the recipients of investment income under a flat tax would indeed love the structure; their tax would be hidden. But the much larger proportion of the population whose major source of income is wages would also perceive the investment earners as being in a favorable position under a flat tax as compared to them — as being advantaged. Try telling them that the investment earners returns were really already taxed! It would be tantamount to trying to convince the corporate executive — as his accountant writes the check to the IRS — that his corporation really doesn't pay any taxes, that they are really paid by shareholders, labor, etc. It's a hard sell — notwithstanding all the objective economic data in the world.

This discussion also implicates the dramatic cognitive advantages that a VAT-universal rebate system would have over a flat tax. Professor Zelenak recently described how the flat tax could be replaced with a business-level VAT (*without* the flat-tax deduction for wages) coupled with a universal rebate check each year from the government to each family to replicate the progressivity created by the flat tax's personal and family exemption allowances.²⁵ (The rebates would be keyed to subsistence levels in view of family size and composition.) Individuals would not pay any tax directly. Indeed, individuals would only receive checks each year from the government! Professor Zelenak forwarded this alternative chiefly as a means of simplification, but it has obvious implications under cognitive theory.

Because taxpayers would, in form, pay no taxes (paying them only implicitly under the VAT paid in form by businesses), the VAT-universal rebate structure exploits the loss-aversion principle to the hilt. The money is diverted to the government before it ever reaches the hands of individuals. And unlike a withholding tax on wages, the individual's share of the VAT is never formally brought to his attention. Moreover, wage earners would no longer "feel" disadvantaged compared to investment earners, because neither would owe a tax on the "income" (whether wages or investment income) that they receive.²⁶

²⁴McCaffery, *supra* note 1, at 1884.

²⁵Lawrence Zelenak, "Flat Tax vs. VAT: Progressivity and Family Allowances," *Tax Notes*, Nov. 27, 1995, p. 1129 (citing and extending the work of Professors Joseph Isenbergh and Gerard M. Brannon).

²⁶Thus, a VAT-universal rebate is even superior, under cognitive theory, to the significantly different form of "flat tax" advocated by Sen. Phil Gramm, R-Texas. Under his proposal, investment income would also be taxed at the individual level. See Mary Deibel, "Just Try to Make Sense of Latest Tax Proposals," *The Cleveland Plain Dealer*, Feb. 11, 1996, at A22. That would eliminate the perception of wage earners that investment earners were advantaged, but that plan would still be inferior, from a cognitive-theory point of view, to one in which no taxes are directly paid by individuals.

Messrs. Hall and Rabushka reject the idea of a VAT-universal rebate *precisely because* the tax would be hidden. "If individuals did not file returns, advocates of more government spending could promise voters new benefits without higher costs."²⁷ Their refusal (and the refusal of their cohorts) to endorse a VAT-universal rebate may kill their entire idea. (Perhaps that is not a bad idea in itself, though.)

Perhaps the flat taxers intuitively feel the enormity of their task regarding selling their definition of the tax base, for they have focused their media storm on the marginal rate instead, a wise decision under cognitive theory. Professor McCaffery discusses the effect of "prominence" in cognitive theory.

Prominence refers to the practice of attaching particular and disproportionate importance to highly visible or easily recallable events or facts.

... Individuals are apt to overreact to disasters that are well-publicized on television in predicting the future; in analyzing present facts, individuals are apt to give disproportionate weight to their immediate, local experiences, and so on.²⁸

He explores how the marginal rates in section 1 of the Internal Revenue Code are particularly prominent features of the code, as compared with the effective rate or the tax base. A change in the section 1 rate structure is page one news; changes in the tax base — through creating exclusions or altering the personal and dependency exemptions, for example — are hardly reported. The prominence of the section 1 rate structure explains in part the tendency on the part of Congress to enact rate increases *outside* amending the rates in section 1, where they won't be so prominent. Historical and current examples include lowering the floor at which the marginal rate kicks in, failing to index rate

²⁷Robert E. Hall & Alvin Rabushka, *The Flat Tax* 121 (2d ed. 1995) (quoted in Zelenak, *supra* note 18), at 1133. Professor McCaffery echoes this theme when he notes how cognitive effects, such as the allure of hidden taxes, can "play into the hands of Leviathan." McCaffery, *supra* note 1, at 1928.

The recent publication by *Tax Notes* of Roy Blough's and Carl Shoup's 1937 study of the federal tax system is instructive for several reasons. See "A Report of the Federal Revenue System Submitted to Undersecretary of the Treasury Roswell Magill," *Tax Notes*, Feb. 23, 1996, p. 1071, Special Supplement. It shows how there is almost nothing new under the sun. Integration of the corporate and individual taxes, mark-to-market accounting to take care of the capital-gain-and-loss problem, the regressivity of payroll taxes, and the relative benefits of consumption and income taxation were all discussed. Of interest here is the authors' assertion that one standard by which tax systems should be judged is "tax consciousness." "To instill a considerable amount of tax consciousness into those who really bear the tax burden is desirable. It gives those persons a better chance to allocate their total spending power between governmental and non-governmental activities in the proportion that they desire." *Id.* at 1079. The authors discuss the difficulty of raising tax-consciousness in the case of liquor taxes, *id.* at 1166, and suggest that the amount of cigarette taxes be printed on each pack. *Id.* at 1170.

²⁸McCaffery, *supra* note 1, at 1886-87.

brackets for inflation, phasing out itemized deductions under section 68, and phasing out the personal and dependency exemptions in section 151(d)(3).²⁹

The highest marginal bracket, which is widely reported, as well as the individual's marginal bracket, are both prominent facts for taxpayers.

An aspect of bracket prominence, known to any teacher of a course in basic taxation, is that the typical taxpayer is likely to overestimate the relevance of her marginal rate bracket in assessing the real, effective income tax burden on her. That is, a taxpayer in the 25 percent bracket will often think that she pays 25 percent of *all* her income in taxes; she will exaggerate the burden from the margin.³⁰

The single, flat rate bandied about by the flat taxers generally ranges from 17 percent to about 20 percent. That, of course, compares very favorably, from the cognitive point of view, to the current rate structure of 15, 28, 31, 36, and 39.6 percent.³¹ Even though the vast majority of Americans pay an *effective* rate of tax well below the suggested flat-rate range (and, indeed, would pay an effective tax below the marginal rate under the flat tax in view of the personal and family allowances), the role of prominence means that most Americans may see the suggested flat rate as a boon to them.

But this cognitive descriptive bias, revolving around prominence, can go only so far. When the flat taxers eventually attempt to sell seriously the definition of the tax base, as eventually they must, they're going to have to overcome the cognitive bias of loss aversion. They have already begun to hear calls for retention of the home mortgage interest deduction and charitable contribution deduction.³²

III. Cognitive Biases and Savings Behavior

One final observation. Many who advocate a switch to a consumption tax — whether a flat tax, a cash-flow consumption tax, a value added tax, or a sales tax — do so on the grounds that the income tax hinders savings in favor of current consumption, and our na-

tional savings rate is precipitously low. They argue that removing the tax-imposed disincentive for savings, putting it on equal footing with labor income, will allow the dollars to go to their more "natural," efficient use, thus increasing the savings rate.

For example, take Julie, who has \$100 to consume or save at a 10 percent interest rate. In a no-tax world, she can consume \$100 today or, if she saves for one year before withdrawing the savings to spend on consumption, \$110 one year from now — 10 percent more. In a world with a 50 percent flat-rate income tax, she could consume \$50 today or \$52.50 one year from now — only 5 percent more. In a world with a 50 percent cash-flow consumption tax, she could consume \$50 today or save for one year and consume \$55. Her consumption is cut in half compared to the level in a no-tax world, but it has still left her able to consume 10 percent more if she saves for one year, just as in the no-tax world. Thus, the relative tradeoff between consumption and saving is unaffected by the consumption tax.³³

Do economists take into account these cognitive biases when they try to predict behavioral response to a change in the tax law?

Reformers argue that the bias *toward* current consumption under an income tax is *actually appreciated* by the average taxpayer and fuels the low savings rate. Another way of putting it is that the Consumers who buy television sets actually appreciate that they are better off taxwise than the Investor who bought a bond (since Investor's bond interest is taxed while Consumer's pleasure in watching television is not taxed), and that tax advantage is what prompted Consumer to buy the television rather than the bond in the first place.

I have no expertise in evaluating the empirical research that seems to find that the elasticity of the savings rate is rather low and that a switch to a consumption tax would probably do little more in the long run than provide inefficient windfall benefits for those who would have saved anyway (i.e., those with more discretionary income).³⁴ I therefore have no great reason to doubt those predictions. In fact, they accord with my own unscientific hunch that people save and spend for reasons having more to do with cultural values and trends (and demographics) than with the tax system. For example, baby boomers, beginning to worry about retirement, are beginning to increase their savings rates, fueling the remarkable rise in the stock market.³⁵

²⁹See Dodge, Fleming & Geier, *supra* note 7, at 420.

³⁰See, e.g., Doc 96-5008 (3 pages) and Doc 96-5010 (3 pages).

³¹See "Big Surge in Market Is Largely Propelled by the Baby Boomers," *Wall St. J.*, Feb. 23, 1996, at A1. And all the cigarette taxes in the world did not significantly reduce cigarette smoking in America; only when smoking became socially unacceptable did the rates drop substantially. On the other hand, cigarette taxes are partially hidden, and thus cognitive theory would predict their deterrent effect to be diluted.

²⁹*Id.* at 1886-1905. Prominence might also explain why we have had, in our history, some very high marginal rates that were applicable to extremely few people. The symbolically high marginal rate made the far lower marginal rates actually applicable to most people seem comparatively acceptable. *Id.* at 1890-93. The prominence phenomenon might also help explain why states did not move toward replacing sales taxes with income taxes after 1986, when sales taxes became non-deductible. Income taxes are more prominent than sales taxes, which are partially hidden. *Id.* at 1901-04.

³⁰*Id.* at 1890.

³¹While the Clinton administration tried hard in 1993 to keep the 39.6 percent rate quiet by using the route of a 10 percent "surcharge" on incomes over \$250,000, the press quickly began to report the new top rate as 39.6 percent (or sometimes rounded to 40 percent), and thus the statute, as enacted, contained the explicit 39.6 percent rate bracket.

³²See, e.g., Kemp Report, *supra* note 9, at 426 (suggesting that the deductions for mortgage interest and charitable contributions ought to be retained under tax reform).

Nevertheless, I wonder if the cognitive effects related here were taken into account by the forecasting economists, and if they were not, whether they would have made a significant difference in their predictions. I also wonder whether their forecasts are the same whether the flat tax is enacted as described by Hall-Rabushka-Army-Forbes or whether the VAT-universal rebate alternative is adopted (or even whether they differ if a cash-flow consumption tax or sales tax is adopted). For the very reasons discussed above, I would bet that most taxpayers view labor income and investment income (except *perhaps* dividends and capital gain on stock, due to the failure of integration) as being taxed "the same" under an income tax and that a switch to the flat tax would, in fact, *favor* savings over consumption — not merely put them on the same level playing field. Because of the cognitive bias that will cause most wage earners to view capital income as getting a "tax break" with a flat tax, perhaps a switch to a flat tax *might* actually increase the savings rate more than some economists have assumed. That is, the same cognitive biases that likely cause the average taxpayer to think that the current income tax taxes labor and capital income *equally* might cause them to react more strongly to the switch that they perceive as favoring savings (not merely as compared to the treatment of savings under the "old" income tax but as compared to the treatment of labor income under the "new" consumption tax). And I would bet that these cognitive biases would disappear if the VAT-universal rebate proposal were adopted instead, since no taxes — on either wage or investment income — would be paid directly by individuals, even though the taxes are economically equivalent. The "incentive" effect would be masked, making a significantly increased savings rate even less likely than under the flat tax. In short, do economists take into account these cognitive biases when they try to predict behavioral response to a change in the tax law? Forecasting the microeconomic effects of a change from income to consumption taxation (of one sort or another) seems to be an area ripe for cooperation between economists and cognitive theorists.

IV. Conclusion

There is a profusion of permutations to the question of whether or not a flat tax can (or should) be sold to the electorate. Likewise, there is a profusion of permutations to the factors that influence behavior change in reaction to a change in tax law. Cognitive biases are clearly not the whole story, but they are, it seems to me, a *part* of the story at least. Both those who are trying to sell the flat tax and those who are trying to measure expected changes in taxpayer behavior in response to the tax would be wise to consider these biases.

Oh, one more thing. Cognitive theory has also identified the "status quo bias, which underscores the importance of the status quo ante."³⁶ Inertia is a powerful force (often for good reason, I think): another lesson for all those trying to sell radical tax change.

³⁶McCaffery, *supra* note 1, at 1871.

Attention, Dialog Users

Did you know *Tax Notes Today (TNT)* and *Tax Notes International (TNI)* are available on the Dialog system? Both publications are combined in a single file (File No. 650), but can be separated by adding a short phrase to your search. To limit your search to TNT, add `jc=TNT`, to limit your search to TNI, add `jc=TNI`. Dialog also has a current awareness file (File TNT) that can be printed or downloaded that contains headlines and highlights for the current issues of *Tax Notes Today* and *Tax Notes International*. Access to Tax Analysts' files is available through a subscription to Dialog.

**Call 1-800-3-DIALOG
to obtain a Dialog ID.**