

Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies

EDWARD J. McCAFFERY¹ and JONATHAN BARON^{2*}

¹*University of Southern California Law School, California Institute of Technology, USA*

²*University of Pennsylvania, USA*

ABSTRACT

People tend to focus on salient cues, ignoring others. We demonstrate such *isolation effects* in situations involving taxes and public finance, through experiments conducted on the World Wide Web. In general, subjects minimized or ignored the longer-term or indirect effects of tax policies, such as price increases from business taxes. Subjects preferred “hidden” taxes to transparent ones, failing to think through who would ultimately pay. The preference for hidden taxes was greater when it was uncertain who would pay. When subjects were prompted to think about indirect effects, their preference for hidden taxes was reduced but not eliminated. These observations are symptoms of general tendencies not to think ahead about the effects of public policies. Copyright © 2006 John Wiley & Sons, Ltd.

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INTRODUCTION

People do not like to pay taxes. It is thus not surprising that governments should try to “hide” the dreaded burdens by clever fiscal language and other mechanisms of deceit. But why should such a strategy work? Why, that is, can the people be tricked into not noticing money coming out of their own pockets? In this article we argue that *isolation effects* are a large part of the answer. People focus in on salient aspects of a choice or decision set, and make evaluations based on these aspects, ignoring other relevant factors in whole or in part. They do not notice hidden taxes because they are looking elsewhere.

Let us start with the facts. Taxes can be partially or fully hidden. In the former case, the incidence of the tax—who really pays it—is known or easily knowable, but hidden from the payer’s direct view: the employer’s “share” of social security contributions in the United States works this way. Other cases include value-added taxes (VATs) in some countries, or various excise taxes, such as on gasoline or alcohol products: taxes on a good or service that are simply not labeled as such, yet the taxpayer pays them with her own

* Correspondence to: Jonathan Baron, 80 Glenn Ave., Berwyn, PA 1931-1239, USA. E-mail: baron@psych.upenn.edu

resources, as part of a single stated price for the good. In the case of fully hidden taxes, in contrast, the ultimate incidence of the tax is not easily known or knowable; in fact, leading experts debate who, exactly, bears the real incidence of the tax. Corporate or business taxes of all forms are examples of fully hidden taxes. The business or legal entity must pass on these taxes as costs of doing business to some real persons, but no one is quite sure to whom the burden finally falls, or which prices, exactly, are affected, and in what way.

In both cases, but especially that of fully hidden taxes, people may prefer the hidden tax because of an *endowment effect*. People value what they think that they own. If, for example, a tax is labeled as an “employer’s contribution,” and sent off to the government before it is ever received in the pocket of an employee, the employee does not see what her income would be in the absence of the tax (McCaffery, 1994). She thus does not see the tax as a loss, and the effect of loss-aversion and the endowment effect on the perceived pain of taxation is avoided (Kahneman & Tversky, 1979; Kahneman, Knetsch, & Thaler, 1990). So too, and more generally, with corporate taxes, on their full range of ultimate payors: dollars are sent off to the federal government without anyone’s being aware of the loss. Yet even with all the complexity and confusion, one can still ask why people do not better understand the actual facts of the matter.

Hidden *taxes* are an example of a wider phenomenon of hidden *effects*. Government policies have effects that are not always manifest from a simple statement of the policy. Companies will respond to increased business taxes, for example, not just by paying the tax but also by raising prices, lowering wages, or laying off workers. A mortgage interest deduction predictably leads to higher pre-tax home prices. Some indirect effects arise because of a policy element not part of the definition of the direct effect policy: a tax deduction for child care under a progressive marginal rate income tax provides more benefit to those with high incomes than to those with low incomes—an indirect, redistributive effect—because the former pay a higher tax rate. This higher rate is not by itself part of the definition of the tax deduction: this information is located “offstage.” Like taxes, indirect effects can be partially or fully hidden. The rise in gasoline prices after a hidden tax is rather apparent; lower levels of employment following a business tax increase may not be. Policymakers can play a role in obscuring or making more transparent indirect effects.

As in the case of taxes, hidden effects may be attractive because of the endowment effect: People may not code a price increase due to a hidden tax as a loss, simply because they do not notice or consider the pre-increase price. But we do not think that endowment effects, alone, always best fit the cognitive phenomenon, which we find to be far more general. Our research goes beyond the endowment-effect explanation to consider why individuals do not adequately focus on hidden taxes and other indirect effects, such as the rise in prices attendant on various tax-law changes. Our hypotheses center on the isolation effect: People attend only (or primarily) to data or issues immediately before them. People know about indirect effects but do not consider them, or do not consider them enough, when evaluating the attraction of the tax or other payment mechanism. Although we follow others in calling this an isolation effect (Camerer, 2000; Kahneman & Lovallo, 1993; McCaffery & Baron, 2003; Read, Loewenstein, & Rabin, 1999), it is related to, or identical to, what others have called a *focusing effect* (Idson et al., 2004; Jones, Frisch, Yurak, & Kim, 1998; Legrenzi, Girotto, & Johnson-Laird, 1993), and also related to the apparent difficulty that people have in thinking about delayed feedback and delayed effects in dynamic systems: people seem to focus on immediate feedback (Diehl & Serman, 1995; Sweeney & Serman, 2000). The idea of the focusing effect came from the theory of mental models in reasoning (as explained by Legrenzi et al., 1993): people reason from mental models, and when possible they use a single, simple, model that represents just the information they are given. Other factors are ignored or under-used.

The isolation effect could be considered as a form of the availability effect (Tversky & Kahneman, 1973), insofar as that effect is a generic term for attention to what is available. Experimental demonstrations of the availability effect, however, usually involve showing that irrelevant information influences judgment, and our experiments, like the others just cited, show that *relevant* information is neglected. More generally, various means, such as availability, salience, framing, or elicitation effects can generate the over-weighted factors on which subjects “isolate,” we are concerned in our research, centered on topics of broad public policy

interest, to show that such isolation in fact occurs, can lead to preference shifts and reversals, and can be ameliorated by devices that minimize the isolation of some relevant factors. Grouping the common tendencies under the single label of “isolation effects” is helpful to these ends. Optimal decision making requires looking at a full data set, but people consistently cut short the fields of data they consider in making judgments.

Our main test of the isolation effect, in the first two experiments related below, is to examine the effect of prompting subjects to consider indirect effects, a manipulation similar to those used by Idson et al. (2004), Jones et al. (1998), and Legrenzi et al. (1993). We hypothesize that such prompts will reduce the attractiveness of hidden taxes as opposed to overt taxes, thereby illustrating both the isolation effect (without the prompts), and the possible efficacy of prompting. If the attractiveness of hidden taxes were entirely the result of loss aversion, we would have no reason to think that prompts about indirect effects—as opposed to framing manipulations changing reference points—would have any effect on evaluations.

Our final experiment reported below turns to uncertainty. A form of the isolation effect is that a decision with both benefits and costs may be evaluated more favorably if the mechanism for paying the costs is uncertain. In this case, people may tend to focus on the benefit and ignore the cost, insofar as the benefit is the “reason” for the decision. We test this with cases in which the cost of a tax could fall on two groups. We compare cases where the tax is known to fall on each group with cases where the tax’s incidence on the two groups is uncertain. We hypothesize that people will like the tax better in the unknown case. This prediction is in some sense the opposite of the *disjunction effect* (Shafir, Simonson, & Tversky, 1993; Shafir, 1994), where people reject an option when something about its outcome is unknown: they prefer the known to the unknown. The disjunction effect involves attention to reasons in favor of choosing each option; when these reasons are unclear, both options lose some attraction. In our case, a tax is a loss, and thus uncertainty about its incidence may be perceived as a good thing—it may lead to a relative muting of a fairly general tax aversion.

GENERAL METHOD

Our experiments follow a basic method we have employed elsewhere (McCaffery & Baron, 2003, 2004a,b). In each, subjects completed a questionnaire on the World Wide Web. The subjects found the questionnaire because of previous postings to newsgroups for other studies and links from various frequently visited Web pages. Subjects were paid \$3 or \$4 and had to provide their name, address, and social security number (if they lived in the U. S.) in order to receive pay. The questionnaires were run by a Javascript program, which checked to see that all responses were complete and in the required range.

Each experiment began with an introductory page that explained terms used in the questions (which were, in any case, chosen to be familiar) and provided some background. Subjects then saw a series of screens, each with a few questions about a brief scenario. Subjects had to answer all the questions to continue. It is important to bear in mind that, while the underlying policies and economics of what we were testing were often complex, the screen presentations made the decisions to be made very clear to the subjects.

We timed the subjects without telling them, and we eliminated, as outliers, subjects who went extremely fast, especially when such speed was associated with unresponsiveness to variables that were manipulated but not of primary interest. In the present three experiments, the percentages of subjects eliminated were 0%, 9%, and 0%, respectively. We provided a space for comments at the end. Most comments that we received were about policy issues raised by the study.

The order of the screens was randomized for each subject. The experiments used within-subject comparisons across the screens. We tried to design the questions so that it would be difficult for subjects to remember their responses from similar screens and simply try to repeat them by rote. Although our experimental design, consistent with much cognitive psychology, is within-subject, where we generally attain strong

statistical significance, we also note that the education, income level, and age of the subject panel is comparable to that of the U.S. adult population, although the sex distribution—mostly women—is not (Babcock, Gelfand, Small, Stayn, in press). Our results are not consistent with random error, but all lie in the direction of well-established prior theory and our prior hypotheses.

We assume that our experiments reflect the time and effort that many citizens put into forming preferences over public finance matters. Such preferences are neither revealed nor formed in real-world competitive markets, nor in settings analogous to incentive-compatible experimental games. The absence of strong incentives to correct isolation effects and other biases makes thinking about public finance especially vulnerable to inconsistency and error (McCaffery & Baron, in press).

EXPERIMENT 1: HIDDEN TAXES AND DISTRIBUTIVE EFFECTS

Our first experiment tested the hypothesis that people do not think ahead when they consider how to raise money for or how to pay for goods. The experiment makes use of the fact that (as we have found in other studies) most of our subjects prefer progressivity, that is, that policies should help the poor at the expense of the rich. Yet, because they isolate the immediate mechanisms of policies, they often neglect their distributional effects, the relative burden they place on rich and poor. We demonstrate this neglect by prompting subjects to think about the distributional effects. We show that these prompts lead to more positive attitudes toward policies that help the poor.

The income tax in the U.S. and other advanced democracies is both the most progressive tax and also the most direct, or least hidden. People may oppose it because it is direct, especially if they do not think about its distributive effects. In our first experiment, we pitted directness against progressiveness, with no other variables in play. When we prompted subjects to think about progressiveness, we expected that they would be more accepting of the income tax.

We examined raising money and paying for various forms of insurance, such as health insurance, that could be provided either privately or by the government. In the experiment, there were only two variables: how the programs would be paid for, and how the money would be raised. These two variables, in turn, had two dimensions: the *form* of how the government got and spent the money, and the *distributive effects* of the policies. We hypothesized that subjects would isolate or focus in on the form, ignoring the more fundamental distributive consequences, until and unless prompted.

Specifically, we compared raising money (“Raise”) by an income tax using progressive marginal rates (as the U.S. and other countries in fact do) with raising it by a payroll tax or a business tax. A payroll tax is a tax on wages collected by the employer, such as the tax for social security and Medicare in the U.S.; a business tax is paid by a corporation or other legal entity in the first instance. Income taxes with progressive marginal rates are more redistributive than the other taxes: given a fixed revenue constraint, the use of the income tax costs the rich more and the poor less, in both absolute and percentage terms, than a flat or regressive tax. We thus compare income taxes to the other two tax types.

We hypothesized that people would tend to oppose an income tax, the most salient and direct tax, despite the fact that they favor progressive taxes, because they do not spontaneously consider the fact that it is the most progressive tax at hand. However, when they are prompted to think about its redistributive effects, they would favor it more. Conversely (but consistently), we expected that people would favor a business tax, whose direct effect is apparently on business owners only, unless prompted to think about its ultimate effects and incidence.

We also compared *payment* for the forms of insurance (“Pay”) through tax deductions with two other methods: tax credits and direct payment. A tax deduction under a progressive marginal rate income tax system has a regressive effect—that is, benefiting the rich more than the not-rich, other things being equal. A taxpayer in a 35% bracket saves \$350 from a \$1000 deduction; a taxpayer in a 15% bracket

saves \$150 from the same dollar amount. We hypothesized that subjects would favor deductions over the other two methods until they thought about these distributive effects, and then would choose either tax credits (which do not vary with marginal rate brackets) or direct payments.

The experiment involved a baseline condition followed by two prompt conditions, one for Pay (paying for insurance) and one for Raise (raising revenue). The order of the prompting was counterbalanced to control for possible ordering effects. It consisted of asking questions about the distributive effects of the options. It did not systematically lead people into any particular view about the options.

Method

The questionnaire was completed by 201 subjects, ages 18–69 (median 37), 33% male, 19% students. It concerned four goods: health, disability, unemployment, and “terrorism” insurance. The 4 goods were presented in 6 cycles, for a total of 24 trials, in the same fixed order. The first two cycles were, respectively, about raising the money for the good (“Raise”) and about paying for the good (“Pay”). The next four cycles examined the effect of prompting manipulations, with the Raise prompting coming in the third or fifth cycle and the Pay prompting in the fourth or sixth, counterbalanced across subjects as follows:

Cycle:	1	2	3	4	5	6
Group 1:	Raise	Pay	Raise prompt	Pay	Raise	Pay prompt
Group 2:	Raise	Pay	Raise	Pay prompt	Raise prompt	Pay

The Raise and Pay conditions were identical each time they occurred, and subjects were warned about the repetitions. This design would be most sensitive if the prompting effects did not carry over to subsequent questions. But such carry-over is possible not only for the same questions coming later (e.g., Raise to Raise) but also for the other questions (e.g., Raise to Pay). Subjects may for example get the general idea of thinking about indirect distributive effects and continue so to think about them on later questions. We discuss this below.

The first screen introduced the situation, which concerned governments at all levels, and informed subjects of the definitions of business tax, income tax, payroll tax, tax deduction, tax credit, and “proportional increase” (the same proportion for everyone). It also warned subjects about the repeated questions. After this, the 24 screens followed, 6 cycles each for the 4 forms of insurance. Here is a typical Raise question:

The good in question is health insurance. These questions are about how to raise the money. Suppose all policies raise the same amount of money.

Which of these two policies is better on the whole?

Proportional increase in **taxes on business profits**.

Proportional increase in **income taxes**.

No difference.

Which of these two policies is better on the whole?

Proportional increase in **payroll taxes**.

Proportional increase in **income taxes**.

No difference.

Which of these two policies is better **for the poor**?

[This question was asked for both pairs.]

The Pay questions followed the description of the good:

Which of these two policies is better on the whole?
 Government **pays directly**.
 Tax **deduction** (subtracted from income before tax calculation).
 No difference.

Which of these two policies is better on the whole?
 Tax **credit** (subtracted from tax or refunded).
 Tax **deduction** (subtracted from income before tax calculation).
 No difference.

Which of these two policies is better **for the poor**?
 [This question was asked for both pairs.]

The prompting manipulation for Raise followed a description of the type of insurance, and asked what the subject might do if she ran a business that had to pay taxes (reduce wages or profits, increase prices), and who would be hurt by each such change, and explaining that payroll taxes were flat while income taxes were not. The prompting for Pay explained how tax deductions, credits, and payments work, and drew attention to the fact that deductions under a progressive marginal rate income tax benefit the rich more than the not-rich, all else equal. Subjects were asked which proposal would benefit each group the most (rich versus poor).

Results

The main hypotheses concerned attitudes toward raising the money through income taxes as opposed to payroll or business taxes, and attitudes against paying through deductions as opposed to direct payments or tax credits, before and after prompting. We call these “favorable” attitudes, taking a point of view favoring redistribution, as most subjects did.

Figure 1 shows the proportion of favorable attitudes by the sequence of trials, separately for Pay and Raise, and separately for the two groups of subjects, who differed in where the prompting came. An overall test of whether attitudes were more favorable with prompting than without prompting in the last four cycles (3–6), combining Raise and Pay, was significant, $t(200) = 2.44$, $p = 0.0154$, combining both orders. The result was in the predicted direction for both Pay and Raise—with prompting moving subjects toward more favorable attitudes towards redistribution—but significant only for Pay, $t(200) = 2.34$, $p = 0.0203$.

In sum, subjects become more favorable toward an income tax, and less favorable toward tax deductions, as a means of payment, when they are asked to consider the distributional effects of these methods compared to others. Such a result implies that subjects generally favor progressive taxation and oppose regressive methods of payment, *but* that they also prefer hidden taxes, disproportionately focus on the mere form of tax, and fail to think about the indirect effects of taxation and payment methods on distribution—what really matters to them.

EXPERIMENT 2: IMMEDIATE VERSUS LONG-TERM EFFECTS

The indirect, distributive consequence of the fiscal policies in Experiment 1 were fairly static: their effects could be noticed right away. Fiscal policies can also have longer term, dynamic effects, as on prices. Our

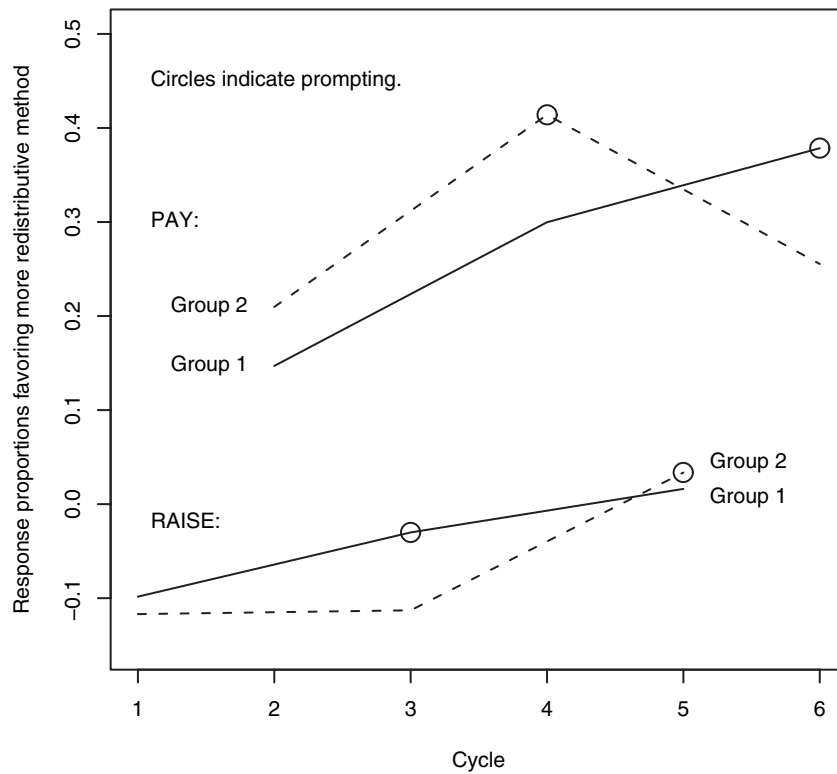


Figure 1. Favorable attitudes toward more progressive methods as a function of prompting (circles), Raise (bottom lines) vs. Pay (top lines), and the order of the conditions (Group 1, solid; Group 2, dashed)

second experiment tested the hypothesis that people isolate or focus on immediate effects in contrast to long-term ones. We presented six policy changes, each with a beneficial direct effect and a harmful indirect (or longer term) effect, or vice versa. In two-thirds of the cases, we asked if subjects knew the direction of the indirect effect before asking about their attitude toward the policy change. We compared the attitude in these cases to that in the one-third of cases in which we did not ask about the subjects' perceived facts of the matter. The imbalance in proportion was because we did not expect subjects to know all the effects.

Method

The questionnaire was completed by 125 subjects (ages 21–60, median 38; 13% male).

The introduction said that the study was about changes in taxes. It included the instruction:

“If the change is ‘creation’ of some tax, suppose that the tax doesn’t already exist in your country. If the change is ‘elimination’ or ‘reduction’ of some tax, assume that the tax does exist.”

The items were based on six policies, each presented in an “increase” (or create) format and a “decrease” (or eliminate) format, and each with a corresponding direct and indirect effect. We expected subjects to perceive the direct effect as favoring the policy and the indirect effect as opposing it; the precise hypothesis

would not be supported in the absence of this assumption. The items were as follows, with the directions of the two effects corresponding to the policy change format (i.e., create or eliminate):

1. creation/elimination of a tax on business profits
Direct: more/less money available for government programs
Indirect: higher/lower prices for goods and services

2. creation/elimination of a tax deduction for interest on home mortgages
Direct: lower/higher cost of borrowing for homes
Indirect: higher/lower average price of homes

3. creation/elimination of a tax deduction for health insurance
Direct: larger/smaller number of people getting health insurance
Indirect: higher/lower average price of health insurance

4. creation/elimination of a tax deduction for bonds issued by cities or states (municipal bonds)
Direct: lower/higher tax rates for municipal bond owners
Indirect: lower/higher interest rates on municipal bonds

5. reduction/increase in income tax rates for everyone (with no change in present government spending)
Direct: increased/reduced amount of consumer spending
Indirect: reduced/increased ability of the government to fund programs in the future

6. increase/reduction in taxes on imported goods (tariffs or duties)
Direct: lower/higher number of jobs lost from foreign competition

Each of the 12 conditions (increase and decrease formats for each of the six policies) was presented in a random order chosen separately for each subject. (Thirty-four subjects, because of a programming error, received the items in the above fixed order, but this does not affect the logic of the design.) Using the proposed change of “elimination of tax on business profits” as an example, the questions asked for each of the 12 items were:

- How do you think this change will affect the money available for government programs?
 more money available for government programs
 no predictable effect
 less money available for government programs
- How do you think this change will affect the prices for goods and services?
 higher prices for goods and services
 no predictable effect
 lower prices for goods and services
- How do you feel about the elimination of a tax on business profits?
 Strongly favor
 Moderately favor
 Neutral or mixed
 Moderately oppose
 Strongly oppose

Table 1. Knowledge of direct and indirect effects for the six policies (means, where 1 is a correct answer and -1 is its inverse)

Policies:	Business	Mortgages	Health	Municipals	Rates	Imports
Direct:	0.54	0.23	0.54	0.33	0.77	0.34
Indirect:	0.49	0.04	-0.05	0.19	0.34	0.48

The first question concerned the direct effect and was asked in every case. The second question (e.g., the question about prices for goods and services) concerned the indirect effect and was asked in two-thirds of the cases. (We wanted enough cases in which it was asked so as to analyze the correlates of the answer.) The third question was the attitude question.¹

Results

Knowledge of effects

Subjects gave the correct answer for direct effects in 58% of the cases, thought there was no effect in 30%, and gave the wrong direction in 12%. For indirect effects, the respective percentages were 43%, 39%, and 18%. In sum, subjects had some, but imperfect, knowledge of direct and indirect effects, more imperfect on the latter.

To assess knowledge on individual policies, we combined items in the increase and decrease conditions for the same policy. Table 1 shows the mean scores for each of the six effects, with a correct answer scored as 1 and its opposite scored as -1 (“no effect” scored as 0). The means were significantly positive for all the direct effects and for four of the six indirect effects (all by t tests, $p < 0.005$), but they were non-significant for the mortgage and health items for the indirect effects. It is possible that subjects did not understand the economic effects for these two items, each widely popular and a feature of current law.² We carried out the main analysis of indirect effects without these items, since we cannot expect thinking of indirect effects to have an effect when subjects do not know the direction of these effects.

Failure to think of indirect effects

Recall that the indirect effects were not mentioned in one-third of the cases. We scored mean attitude toward the policy on a scale where 2 is “strongly favor,” 0 is neutrality, and -2 is “strongly oppose.” The coding was reversed when the direction of the policy was reversed, so that we expected positive scores in general, assuming that subjects ignore the indirect effects. (Recall that the direct effects favor the policy and the indirect effects oppose it.)

The mean attitude was indeed higher when the indirect effect was not mentioned (0.70) than when it was mentioned (0.35; $t(123) = 3.40$, across subjects, $p = 0.0009$, excluding the mortgage and health cases—but still significant at $p = 0.0430$ when they were included).

In sum, subjects appear to fail to think of the indirect effect when it is not mentioned. Because the indirect effect opposes the policy, they like the policy more when they are not asked to think about the indirect effect. However, prompting ameliorated but did not altogether eliminate the isolation effect.

¹The items were presented a second time, for a total of 24 screens, to address a different issue that we do not discuss here.

²McCaffery (1994) reports a real classroom observation in which students at an elite law school, having been taught the “capitalization” effect, whereby tax benefits, such as the mortgage interest deduction, are factored into the price of a good (e.g., housing), and given an exam question in which, by design, there were no benefits of renting as opposed to owning, still overwhelmingly preferred the advice that owning a home was tax beneficial because of the mortgage interest deduction.

EXPERIMENT 3: BENEFITS, FUTURE COSTS, AND UNCERTAINTY

One way to reduce the focus on costs is to make their incidence uncertain. When the benefits are known but the specific costs are unknown, people may be more likely than usual to focus only on the benefits and neglect the costs. The issue is especially relevant in contemporary times, of course, when unfunded liabilities for government programs such as Medicare and Social Security in the United States pose a major public policy challenge. The precise nature of the future costs is unknown, and this causes people to focus on what is known.

Our next experiment asked people about their willingness to pay (WTP) for new government programs. There were three means of paying for the program in question, all presented together on the same screen: taxes to be paid in 10 years; programs to be cut in 10 years; or some unspecified method (which could be only taxes or cuts) in 10 years. (Two other questions concerned immediate payment, which is not relevant here.) We hypothesized that people would be more willing to pay if the source of payment were unspecified. The manipulation of question type was completely transparent; all questions appeared together on the same screen.

Method

Seventy-five subjects completed the questionnaire: 26% were male, and their median age was 41 (range, 21–69). The questionnaire began with an introductory page as follows:

New programs:

Suppose that the U.S. government is considering some new programs. (If you are not a U.S. resident, imagine that you are.)

We ask how much it should be willing to pay for each of these programs. We express the amount as a percent of all income taxes collected now.

In some questions, we ask about tax increases. A 2% increase in income taxes means that each taxpayer's taxes are 2% higher. It also means that the government has more money, equal to 2% of all income taxes collected.

Each screen began with a description of a program, e.g., "HEALTH COVERAGE FOR THOSE WITHOUT INSURANCE: As the cost of health care increases, more people will choose to go without health insurance. This program will subsidize payment for health insurance so that the percent of people without insurance will decrease by 75%." This was followed by five questions, three of which are relevant here:

Suppose the new law required that the income tax be raised in 10 years to cover the cost fully (including the cost up to then). What is the greatest acceptable cost of the program, as a percent of total income taxes collected now? 0% 1% 2% 3% 4% 5% 6% 8% 10% 12% [Tax]

Suppose the new law required an across-the-board cut in all other government programs, beginning in 10 years, sufficient to cover the cost fully (including the cost up to then). [Same question and choices.] [Cut]

Suppose that the new law simply mandated that the program would be paid for in ten years, fully, including the cost up to then. [Same question and choices.] [Unspecified]

Subjects were also told that every taxpayer would pay the increase, and that they were to assume that “if half the response were less than the cost of the program, the program would not be done. And 0% means you think that the program should simply not be done in this case”. In half the items, subjects were told that there was no budget deficit, and in half they were told that there was a deficit; this variable had no overall effect and is ignored henceforth. The cases were presented in a random order chosen for each subject.

The list of items was as follows. Each was presented with a description of why it was desirable.

- Guaranteed access to new medical technology
- Social security maintenance
- Health coverage for those without insurance
- Development of new energy sources
- Payroll tax reduction
- Defense department increase for more troops
- More money to fight AIDS in poor countries
- Reduce corporate income taxes

Results

We found that WTP depended on the program evaluated. Means were: health insurance 3.86%; energy sources 3.68%; social security 3.62%; payroll tax cut 3.26%; access to new medical technology 3.14%; defense 2.82%; AIDS 2.30%; and corporate tax cut 2.26%. Note that subjects on average opted to spend the least on cutting corporate taxes, a hidden tax. We ignore these differences henceforth.

Effect of uncertainty about payment

The WTP means for the three mechanisms of interest, averaged across categories, were: Tax 3.08%; Cut 2.94%; and Unspecified 3.50%. Tax and Cut did not differ significantly, although the direction of their difference suggests that a *status quo bias*, or a reluctance to cut programs, may be greater than a *tax aversion* (Baron & McCaffery, 2005). But Unspecified was significantly higher than both Tax $t(73) = 2.75$, $p = 0.0075$, and Cut $t(73) = 4.15$, $p = 0.0001$. Subjects favored the unspecified method of payment over either of the possible ways of realizing it. Uncertainty over future payment mechanisms seems to cause subjects to focus on the positive benefits of a present policy.

Follow up: predicting payment

In a follow-up experiment using similar cases and conditions, with 79 subjects, we asked subjects to make their “best guess about how the cost would be covered.” We were thus able to infer subjects’ own predictions about the uncertain future state of affairs, in part to see if a naive optimism informed their evaluations. We gave subjects 10 response options, ranging in roughly equal steps (100%, 89%, . . .) from “100% from taxes, 0% from cuts in other programs” to “0% from taxes, 100% from cuts in other programs.” As in the prior iteration, we asked subjects about both immediate payment and payment in 10 years. We call the relevant variables Pay0 and Pay10, for the WTP question in the basic, Unspecified condition (as above), and Predict0 and Predict10. The Predict variables were the inferred maximum WTP given the subjects’ judgments of maximum willingness to pay for each of the two separate ways of paying for the programs (the Tax and Cut variables, as above, but specific to the year). For example, if the subject predicted that 77% would come from taxes and was willing to pay 5% in taxes but only 3% in cuts, then the inferred WTP (in percent) for Predict was $(0.77)(5) + (0.23)(3) = 4.54\%$.

For the future, Pay10 was greater than Predict10, $t(78) = 2.37$, $p = 0.0205$. The same result was not found for the present (Pay0 versus Predict0: $t(78) = 1.61$, $p = 0.1122$). However, the interaction between Pay versus Predict and present versus future was not significant, and the overall result combining present and future was significant $t(78) = 2.22$, $p = 0.0294$. In sum, once again, we found that the acceptable cost of a program is higher when subjects do not know how it will be paid for. Even when we ask subjects to think about what will happen in the future, and infer a maximum willingness to pay based on their own component answers, they still choose a higher overall level of government programs (benefits) when they are not specifically and immediately focused on the costs.

This effect is much like the disjunction effect (Shafir et al., 1993; Shafir, 1994), but it is also, and we think in some ways more generally and helpfully seen as, an example of isolation effects. Subjects are inclined to focus on what is certain, the benefits of the program. They ignore costs when it is not clear how the costs will be paid, as in the more general case of hidden taxes. By appealing to such an effect, politicians can garner support for programs without specifying where the money will come from. (Baron & McCaffery, 2005, discuss other sources of the support for deficit spending.)

CONCLUSIONS

All taxes and government programs have multiple effects. When people consider tax and other public fiscal policies, they tend to focus on the most direct, immediate, and certain effects, neglecting all others. In Experiment 1, subjects focused on the transparency of the tax and neglected the distributive effects of the different policies, unless they were prompted to think about these effects. Experiment 2 showed subjects paying the most attention to immediate, direct effects of government fiscal programs, and neglecting longer-term, indirect ones, again focusing on the more salient effects. Experiment 3 showed that subjects focus on positive effects or benefits more when negative effects, or costs, are uncertain. The certain effects are presumably more salient. Some good news comes from the fact that we find that when we prompt people to think of indirect effects, they change their attitudes toward policies in ways consistent with their underlying values. Some bad news comes from the fact that subjects do not go very far in this “correct” direction, even after prompting.

We have found isolation effects—a tendency to view issues in cognitive isolation, even of clearly related matters—to have dramatic consequences in other settings, such as the inability to integrate attitudes about parallel tax systems (such as payroll and income taxes in the United States) to form a consistent whole (McCaffery & Baron, 2003), and the difficulty in aggregating taxing and spending policies to do likewise (Baron & McCaffery, 2006). Other factors are doing some of the work, to be sure, but ordinary people seem to have deep-seated tendencies to form quick judgments on matters of tax and economic policy, responding to the most obviously salient aspect of a choice or decision set.

All this is hardly surprising, given the complexity of the subject matter, the unfamiliarity of evincing attitudes about tax and economic policy, and the general inefficacy of even having informed attitudes about such matters in the first place. And yet, given the stakes involved in government tax and spending programs, even and maybe especially our understandable habits of mind can cause considerable havoc—real harm—in social structures. The looming fiscal crisis in the United States, on account of the unfunded future liabilities for government-provided health care and retirement income security—soon to be exacerbated by a newly promised, not-yet-paid-for expansion of the Medicare program to include prescription drug benefits—is a ready example to call to mind.

Our experiments suggest a way of partially remedying this situation. People do respond to prompts, and they have some relevant knowledge of economic effects. When political debate is useful, one side or the other may call attention to those factors that citizens are unlikely to think of themselves. The trick is to do this without at the same time provoking the audience to cling more strongly to their original

hunches. Although we did not undertake this comparison, it might be more helpful to ask people about the effects—as we did in most prompts—than to tell them, even though imperfect knowledge will make such questions ineffective for many. It may also be helpful to consider structural, institutional reforms aimed at preventing politicians from presenting policy options in isolation, as by separating out the benefits and costs of government programs. Balanced budget amendments or “pay as you go” mechanisms that require lawmakers to specifically fund specific promises may force people to do what our natures lead us to avoid: integrate related factors into a global data set for making consistent, well-informed decisions.

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Authors' biographies:

Edward McCaffery is Professor of Law at the University of Southern California and Visiting Professor of Law and Economics at California Institute of Technology. He is interested in tax law, and in behavioral public finance, and is the author of *Fair not flat* (University of Chicago Press, 2002). His web page is <http://lawweb.usc.edu/faculty/emccaffe.htm>.

Jonathan Baron is Professor of Psychology at the University of Pennsylvania. He is interested in heuristics and biases in thinking about public policy, and is writing a book about bioethics. His web page is <http://www.sas.upenn.edu/baron/>.

Authors' addresses:

Edward J. McCaffery, University of Southern California—Law School, 699 Exposition Boulevard, Los Angeles, CA, 90089-0071, USA.

Jonathan Baron, 80 Glenn Ave., Berwyn, PA 1931-1239, USA.