

# The Psychology of Taxing Capital Income: Evidence from a Survey Experiment on the Realization Rule

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**Abstract:** The realization rule—requiring that property must be sold or otherwise disposed of before gains are taxed—is central to taxing capital income, but often decreases the efficiency, equity, and simplicity of the tax system. Given these problems, it is unclear why the rule exists for assets that are easy to value and sell. Scholars have long speculated about the role of the public’s views here, but little is known empirically about them. We conduct the first survey experiment to understand the psychology of the realization rule.

We have three main findings. First, respondents strongly prefer to wait to tax gains on stocks until sale: 75% to 25%. This pattern persists across a variety of other assets and policy framings. But the flip side is that there is surprisingly strong support for taxing gains on assets at sale or transfer, including at death, in areas where current law never taxes those gains. Second, these views barely change as participants learn more about the issue by being given randomized videos explaining the pros and cons of taxing before sale, though the pro and con treatments have large effects individually. And, third, among many possible explanations of this psychology, we find particular evidence for three: a desire to tax consumption, not income, in this context; mental accounting regarding unsold gains; and a tendency to support the status quo.

## I. Introduction

Though Mark Zuckerberg’s wealth has increased by tens of billions of dollars over the past couple of decades, he has paid relatively little income tax.<sup>1</sup> The primary reason is a central tenet of income tax law: the realization rule. The income tax’s use of a realization rule means that increases in the value of property—like stocks or a house—are not taxed until those gains are “realized” when the owner sells or otherwise disposes of the property. Until such a realization event, therefore, Zuckerberg owes no tax on the appreciation of his Facebook shares, even as other

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<sup>1</sup> David S. Miller, *The Zuckerberg Tax*, N.Y. TIMES (Feb. 8, 2012).

wealthy individuals pay high taxes. When this effect is multiplied across the U.S. economy, trillions of dollars of capital income go untaxed for years or escape taxation altogether.

It has long been understood that the realization rule creates a range of problems. Some people wish to raise taxes on capital income amid concerns about inequality and pressing social spending needs, but increasing tax rates raises little revenue when taxpayers can delay paying until later, perhaps when the rate decreases. Others are concerned about deficits. And many are concerned about significant inefficiency, since the realization rule allows some types of income to escape taxation, while other types of income remain fully taxed. Scholars have also criticized the realization rule for creating a host of collateral difficulties in the income tax, including raising doctrinal questions about the timing of realization, income deferral, and anti-abuse rules—and requiring the creation of ancillary doctrines like basis recovery.<sup>2</sup> Indeed, William Andrews has called the realization rule the “Achilles’ Heel” of the income tax.<sup>3</sup> In short, it generates results that violate each of the three main tax policy principles of efficiency, equity, and simplicity.

Given the range of problems created by the realization rule, the presence of the rule—at least, for many easy-to-value assets—is something of a mystery. For hard-to-value assets, there is a pragmatic case for the realization rule: for example, the increase in value of a unique piece of art can be hard to calculate. Moreover, even if the gain could be determined, the owner of that artwork may lack liquid assets she needs to pay tax on the gain without resorting to selling the artwork.<sup>4</sup> But, for assets like publicly traded corporate stocks,<sup>5</sup> valuation and recordkeeping are easy, and those who have gains can sell some of the appreciated stock, easily accessing the liquidity they need to pay the taxes they owe.

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<sup>2</sup> Some of these doctrines will have some continued relevance under various proposed alternatives to the realization rule. And, of course, the alternatives could also raise collateral difficulties of their own.

<sup>3</sup> William D. Andrews, *The Achilles’ Heel of the Comprehensive Income Tax*, in *NEW DIRECTIONS IN FEDERAL TAX POLICY FOR THE 1980S*, 278-85 (Charles E. Walker & Mark A. Bloomfield eds., 1983). Taxing gains annually would also be counter-cyclical, raising revenue when assets appreciate and reducing revenue when they decline in value.

<sup>4</sup> The owner could also take out a loan, but the associated transaction costs may be considerable.

<sup>5</sup> Corporate stock, financial securities, mutual funds, and personal trusts constitute about 31% of the assets of the top 1% of the wealth distribution and about 20% for those in the next 19% of the wealth distribution. Edward N. Wolff, *Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered?* (Nat’l Bureau of Econ. Research, Working Paper No. 20733, 2017). Other assets are harder to value. Proposals like the Wyden proposal would tax other assets upon sale with accrual taxation. Sen. Ron Wyden, *Treat Wealth Like Wages* (Sept. 2019).

So, why then does the realization rule persist for such liquid assets in the U.S. and around the world?<sup>6</sup> One leading explanation is that the public is averse to taxing unsold (or otherwise unrealized) gains in the value of assets, sometimes called “paper gains.”<sup>7</sup> Judicial rulings have long appealed to this view, arguing that taxing paper gains is unfair.<sup>8</sup>

Despite its centrality to tax law and estimates that moving away from the realization rule could raise over \$2 trillion of revenue each decade in an equitable and efficient way,<sup>9</sup> we have little empirical evidence on what the public actually thinks about “paper gains” and the realization rule, much less why they have those attitudes.<sup>10</sup> This lack of basic information is especially glaring as leading national policymakers have begun proposing detailed alternatives, such as the “mark-to-market” tax on unsold gains proposed by Ron Wyden, the chair of the Senate Finance Committee.<sup>11</sup> Legislators and activists have also begun proposing such taxes at the state level in California<sup>12</sup> and New York.<sup>13</sup> The goal of this project is to help rectify this basic ignorance about

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<sup>6</sup> Countries outside of the U.S. have similar requirements. See *Tax Guides and Highlights*, DELOITTE, <https://dits.deloitte.com/#TaxGuides> (showing that all major countries typically have a realization rule).

<sup>7</sup> Deborah H. Schenk, *A Positive Account of the Realization Rule*, 57 TAX L. REV. 355 (2003-04). See also David S. Miller, *Toward an Economic Model for the Taxation of Derivatives and Other Financial Instruments*, 3 HARV. BUS. L. REV. ONLINE 108 (2013) (“The most serious challenge to a progressive system of mark-to-market taxation is the psychological concern about taxing ‘paper gains.’”). Zelinsky suggests that Proposition 13 in California, limiting property tax increases, could also be based in opposition to taxing paper gains. See Edward A. Zelinsky, *For Realization: Income Taxation, Sectoral Accretionism, and the Virtue of Attainable Virtues*, 19 CARDOZO L. REV. 861, 896 (1997). Limiting the realization rule would also mitigate the perverse budget cycle incentives in which cutting capital gains tax rates loses little revenue over the 10-year budget window because of increased realizations, thereby encouraging rate cuts.

<sup>8</sup> Schenk, *supra* note 7, at n. 102 (assembling numerous judicial rulings ranging from the Supreme Court in 1872 to recent cases, which describe the unfairness of taxing paper gains). In *Eisner v. Macomber*, 252 U.S. 189 (1920), the Supreme Court held that realization was constitutionally required in order to constitute income within the meaning of the 16<sup>th</sup> Amendment. Later opinions have implicitly rejected this interpretation, however. See *Cottage Sav. Ass'n v. Comm'r*, 499 U.S. 554 (1991) (characterizing realization as a mere “administrative convenience.”). Likewise, the tax code now provides for income taxation without realization in some circumstances. See, e.g., §§1256; 1272.

<sup>9</sup> Lily L. Batchelder & David Kamin, *Taxing the Rich: Issues and Options* (2019) (working paper) estimate that an annual tax on gains of publicly-traded assets would raise \$2.2 trillion over a decade, if limited to the top 1% of income-earners and taxed at the same rate as ordinary income. They estimate that an additional \$600 billion would come from retrospectively taxing illiquid assets upon sale with a rate that increases the longer the asset was held, in order to limit deferral.

<sup>10</sup> Others have tried to understand the psychology of taxation. See, e.g., Edward J. McCaffery & Jonathan Baron, *Thinking About Tax*, 12 PSYCHOL., PUB. POL’Y, & L. 106 (2006) (focusing on cognitive errors); STEVE SHEFFRIN, TAX FAIRNESS AND FOLK JUSTICE (2013). None discuss paper gains.

<sup>11</sup> See Wyden, *supra* note 5. Compared to wealth tax proposals, plans based on altering the realization rule are produce a tax base that more closely tracks income and also are probably more likely to be upheld as constitutional.

<sup>12</sup> See <https://www.bizjournals.com/sanfrancisco/news/2020/08/24/grab-your-wallet-public-employee-unions-want-cali.html>.

<sup>13</sup> See <https://www.wsj.com/articles/some-democratic-lawmakers-push-for-wealth-tax-on-new-york-billionaires-11613692224>.

the psychology of the realization rule, given its huge implications for the ability of the government to tax capital through an income tax.

Survey experiments are increasingly used in the emerging field of empirical social economics to understand the nature of attitudes that do not readily reveal themselves in market settings.<sup>14</sup> In our case, we use a survey experiment to help answer: Are there consistent and widespread attitudes against taxing gains on assets that have not been sold or transferred; what seems to underlie those attitudes; and are there framings, policies, or information treatments that change those views?

We are currently conducting survey experiments with a provider of high-quality, demographically representative samples of Americans. In total, we have about 4,000 respondents now, which we discuss here, and will have 5,000 respondents when completed.

Our preliminary analysis reveals three main findings. First, respondents strongly prefer to wait to tax gains on publicly-traded stocks until sale: 75% to 25%. This lack of support persists and is often strengthened when looking across a variety of other assets and policy framings. But the flip side is that there is surprisingly strong support for taxing gains on assets at sale or transfer, including at death, in places where current law never taxes those gains.

Second, views change little as a randomized set of participants learn more about the issue by watching two videos explaining the pros and cons of taxing gains before sale. Each video on its own, however, was very effective. Several other randomly assigned treatments—including on taxing unsold gains of only the very rich—also typically garner little more support, even as other tax policies targeted at the rich elicited broad support.

Third, we explore a variety of possible explanations of this psychology, but find the most evidence for three: (i) a desire to tax consumption, not income, in this context; (ii) widespread use

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<sup>14</sup> See, e.g., Alberto Alesina et al., *Intergenerational Mobility and Preferences for Redistribution*, 108 AM. ECON. REV. 521 (2018); Ilyana Kuziemko et al., *How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments*, 105 AM. ECON. REV. 1478 (2015); Matthew C. Weinzierl, *Popular Acceptance of Inequality Due to Innate Brute Luck and Support for Classical Benefit-based Taxation*, 155 J. PUB. ECON. 54 (2017).

of mental accounting heuristics, under which people think of and react differently to unsold gains than other ways of getting richer, like wages;<sup>15</sup> and (iii) a tendency to support the status quo.<sup>16</sup>

Our main goal with the project is descriptive: understanding empirically how the public thinks about taxing unrealized income—and how it would think if there were a public debate on the issue, which is part of why we provide respondents with many policy frames and randomized informational treatments. A better understanding of attitudes about the realization rule could matter for at least three reasons—of course, knowing that any such measurement, while valuable, is imperfect. The first reason is explanatory: while the effect of public attitudes on policy outcomes is complex,<sup>17</sup> understanding commonplace attitudes will suggest whether public opposition to taxing unrealized gains could be playing the role that is often claimed. A second reason is prescriptive. If there appears to be widespread opposition to taxing unrealized gains, it is valuable to understand why such views are held, without necessarily assuming that those attitudes exist in any consistent or coherent form.<sup>18</sup> Doing so can help indicate whether there are ways of designing policies that are both palatable and workable.<sup>19</sup> Third, the public’s attitudes may have normative

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<sup>15</sup> Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 *Journal of Economic Behavior & Organization* 39 (1980).

<sup>16</sup> Respondents also provide some other explanations for their views, but addressing their stated reasons for opposing taxing unsold gains does not change their mind.

<sup>17</sup> There are at least two big critiques of the idea that voters’ policy preferences matter for policy outcomes. The first is that only the rich have political influence. See Martin Gilens & Benjamin I. Page, *Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens*, 12 *PERSP. ON POL.* 564 (2014). That work has been widely critiqued, and the issue remains unsettled. See Dylan Matthews, *Remember That Study Saying America is an Oligarchy? 3 Rebuttals Say It's Wrong*, *VOX* (May 9, 2016). In any case, even if you believe that work, policy outcomes still correlate with policy preferences—just those of the well-off, who we include in the survey. The second critique is that democracy does not work very well, being dominated by irrational, uninformed voters. See CHRISTOPHER H. ACHEN & LARRY M. BARTELS, *DEMOCRACY FOR REALISTS: WHY ELECTIONS DO NOT PRODUCE RESPONSIVE GOVERNMENT* (2017). This view has been criticized as well. See Vanessa Williamson, *Public Ignorance or Elitist Jargon? Reconsidering Americans’ Overestimates of Government Waste and Foreign Aid*, 47 *AM. POL. RESEARCH* 152 (2018) (showing that apparent misperceptions can result from jargon). Even assuming that this view is true, it is not to say that the public’s views do not influence policy outcomes. See Devin Caughey & Christopher Warshaw, *Policy Preferences and Policy Change: Dynamic Responsiveness in the American States, 1936-2014*, 112 *AM. POL. SCI. REV.* 249 (2018) (showing that state policy is responsive to public opinion measured through surveys, largely through the adaptation of incumbent officials).

<sup>18</sup> See, e.g., Philip E. Converse, *The Nature of Belief Systems in Mass Publics*, 18 *CRIT. REV.* 1 (1964) (arguing that most voters lack a structured belief system).

<sup>19</sup> An important part of policy adoption is the availability of potential solutions. See JOHN W. KINGDON, *AGENDAS, ALTERNATIVES, AND PUBLIC POLICIES* (1995).

weight on their own account,<sup>20</sup> making it valuable to understand them,<sup>21</sup> especially given the important role public buy-in plays in maintaining tax morale (i.e., the public’s willingness to comply with tax laws).<sup>22</sup> We return to these implications in the conclusion.

Section II summarizes the structure of the survey. Section III discusses the main results. Section IV explores why the opposition to taxing unsold gains is so widespread. Throughout, unless otherwise noted, we discuss the results of the control survey, without the information treatments. The full survey text is in the appendix, along with the statistics on the share of respondents giving each answer in brackets. In the main text, we reference the question number to which the result refers as “Q#.”

## II. Survey Design

We designed the survey using Qualtrics. We created eight versions of the survey in order to test the effects of seven persuasion and information treatments. The survey was distributed by Respondi, a commercial survey company that specializes in producing high-quality responses representative of their target populations through screening potential participants and repeated contact of individuals to complete various surveys.<sup>23</sup> At the heart of each survey was a set of questions asking respondents about their preferences for taxing stock gains in the year the gains occur, rather than when they are sold. We also asked respondents for all surveys to complete

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<sup>20</sup> For many adherents of deliberative democracy, the best way to understand what the people want is a deliberative poll, in which participants receive information, reflect, and discuss—or perhaps a nation-wide Deliberation Day. See JAMES FISHKIN, *DEMOCRACY WHEN THE PEOPLE ARE THINKING: REVITALIZING OUR POLITICS THROUGH PUBLIC DELIBERATION* 72 (2018) (“Surely there is room [in a democracy] to take [the public’s] views into account. And if one takes that step, why not take their informed and representative views?”); BRUCE ACKERMAN & JAMES FISHKIN, *DELIBERATION DAY* (2018). Some evidence shows larger impacts on attitudes after deliberation versus just information. See Cynthia Farrar et al., *Disaggregating Deliberation’s Effects: An Experiment within a Deliberative Poll*, 40 BR. J. POL. SCI. 333 (2010). But lots of evidence shows the impact of information and persuasion alone without discussion with others, suggesting that the results of survey experiments, especially those with information, may also be probative of the public will, though less probative than a deliberative poll.

<sup>21</sup> Such approaches are little discussed in tax law, but they are much discussed in criminal law. See, e.g., Joshua Kleinfeld, *Manifesto of Democratic Criminal Justice*, 111 NW. U.L. REV. 1367 (2016) (arguing on multiple grounds for deference to community views of justice).

<sup>22</sup> A parallel in the criminal law literature is Tom Tyler’s work on legitimacy, arguing that people obey the law when they believe the law is procedurally fair. TOM R. TYLER, *WHY PEOPLE OBEY THE LAW* (1990).

<sup>23</sup> Respondi worked with a U.S. partner to collect data. See <https://www.respondi.com/EN/access-panel>. Responses were largely high-quality, partly due to the fact that respondents have an incentive to carefully complete the survey to ensure that they are invited to participate in future panels. As one example, when we asked respondents why they preferred taxing only on sale, the average answer length of the free response was a rather lengthy 21 words.

comprehension questions, answer a number of inquiries regarding their policy preferences, and provide demographic information.<sup>24</sup>

The surveys were designed to ensure data quality.<sup>25</sup> Language in the consent form appealed to respondents' sense of social responsibility and warned that careless answers would be flagged. And we drop participants who fail a simple exercise of following directions in a later question. We asked respondents to answer two comprehension questions to ensure a solid understanding of the programs presented,<sup>26</sup> and we asked free-form questions before multiple-choice questions to avoid biasing those free-form answers. We phrased questions about respondents' policy preferences to verify that respondents were generally careful in their responses. At the end of the survey, we also asked respondents if the survey was biased or confusing.<sup>27</sup> The median respondent completed the control survey in 30 minutes.

### **A. Control Survey**

This section describes the control survey, which was the primary survey issued to respondents and the model on which the other seven versions of the survey were based. Respondents first get a screen explaining what publicly-traded stocks are and that this survey focuses on such publicly-traded stocks, like the fictitious "Grocery Co," and that furthermore this stock is not held in a retirement account. After the comprehension questions, we explain that, though we give specific hypotheticals, we mean for the policies to apply to other similarly situated parties. We then turn to the main survey questions. To establish respondents' attitudes toward taxing stock gains in the control survey, we first asked respondents about their support for each of two policies: taxing stock gains only when sold and the taxing in the year when the gains occur. The order of these questions is randomized. We include these questions both to have an experimental test of support for taxing sold versus unsold stock gains and also to get our participants thinking more deeply about our "baseline" question. That baseline question offers

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<sup>24</sup> We asked for demographic information at the beginning of the survey to screen out participants early, as respondents who did not qualify were not paid.

<sup>25</sup> Following Stantcheva (2020).

<sup>26</sup> Among control survey respondents, 89% correctly answered the first comprehension question and 89% correctly answered the second one. Respondents were then told what the correct answer was.

<sup>27</sup> Respondents overwhelmingly said that the survey was unbiased (82%, Q118) and that they understood at least most (79%, Q117) of the survey.

respondents a head-to-head choice for when stock gains should be taxed: (1) in the year when the gains occur or (2) only when the stocks are sold. It looks like this:

**Facts:** Suppose that Leah bought stock in Grocery Co. at the end of last year.

This year, Leah's stock in Grocery Co. goes up in value by \$50,000. She does not sell any of her stock.

The government is choosing between two policies for taxing people like Leah. **Which do you prefer?**

Leah pays income tax this year on the increase in her stock, even though she does not sell it.

If her stock later goes back down in value, these taxes are refunded. And, because gains have already been taxed, she will not have to pay tax on them again when she sells her stock.

Leah pays income tax on increases in her stock only when she sells her stock in the future.

The setup is designed to be as simple as possible while still conveying the important policy aspects. We focus on publicly-traded stocks because they are a clear case where valuation and liquidity issues are relatively unimportant. We have one taxpayer (with a randomized name) to make matters concrete. We chose a \$50,000 stock gain to be sizable, but not outside the scope of what respondents would be familiar with. We also randomize the order in which the options appear (as we do for the rest of the survey). For our option to tax unsold gains this year, we also provide some additional detail explaining two aspects of the policy. First, taxes are refunded if the stock later goes back down in value. And the taxpayer will not be double-taxed on the gains. We focus on this head-to-head question to reduce status quo effects and to make clear what the counterfactual is to each option.

Once respondents' preferences were established for taxing unsold stock gains, the survey presented a number of follow-up questions asking respondents why they had this particular preference. Respondents were first asked to give a free-form response explaining their choice. We analyze these responses with natural language processing techniques. After the free-form prompt, respondents were presented with a list of reasons that might explain their thinking and were asked to choose any that applied to them. In particular, we ask respondents to agree or disagree that each of a list of factors influenced their choice, which we call "structured reasoning."



Then the respondents were asked a large number of additional questions, offering various fact patterns and policies exploring potential reasons for opposition and other contours of people’s beliefs about taxing sold and unsold gains. We will discuss these throughout the results section. Some of these questions were randomized in. In the interest of readability, the results of many of these questions are not discussed here and are instead left to future analysis.

After conducting three pilots that allowed us to hone our questions, we listed the survey with Respondi. We paid \$3.45 per response.<sup>28</sup> By the end, we will have collected data from 5,000 respondents for all surveys simultaneously, beginning on January 29, 2021. Respondents for the control survey were, by design, roughly representative of the United States population in terms of age, gender, and income. (Table to come.) There are modest differences in education and race. The survey is also representative with respect to stock and home ownership.

## **B. Persuasion and Information Treatments**

While some participants took the control survey, other participants were randomized into one of seven different versions of the survey to which we added various persuasion and information treatments at the beginning of the survey. These treatments can explore what drives respondents’ reasoning, measure how additional reflection affects attitudes, and test how malleable attitudes are.

The first treatment is the “both-sides” treatment, which presents two videos of “experts,” each about a minute. The “anti-tax” video offers reasons against taxing unsold stock gains. The other, “pro-tax” video explains reasons to support taxing those gains. We chose these to give what we thought would be the most persuasive arguments against and for, which would be used if there were a public debate on the topic.

The second and third treatments present each of the anti-tax and pro-tax treatments on their own.

We then have two variants of arguments seeking to persuade respondents that taxing unsold stock gains is a good idea. The fourth treatment responds to objections to taxing unsold stock gains, like that it would be unfair, complicated, etc. The fifth aims to break down the mental accounting

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<sup>28</sup> We were not told the exact payment each respondent received, but we were told that respondents are generally paid the same amount unless they are part of a “hard to reach” group, such as males aged 18 to 24 or the elderly.

categories in which people think of wages as income, but not unsold stock gains, by arguing that the two are essentially economically identical.

The sixth treatment aims to reduce the impact that the status quo may have on respondents by explaining to them that, under current law, various assets are taxed when gains or losses occur, before they are sold. In particular (though we do not use this language), various derivatives are taxed via “mark-to-market,” and depreciation approximates the decline in value of certain assets.<sup>29</sup>

The seventh and final treatment asks respondents about the taxation of rich individuals. We make two changes.

Aside from the addition of a persuasion or information treatment, the beginnings of these surveys were identical to the control survey. As well, these surveys had fewer follow-up questions. The data collection method was also identical to that used for the control survey. We will have collected about 500 responses from each of the persuasion treatments, except for the “both-sides” treatment, from which we will have collected 1,000. As with the control survey, our respondents for the treatment surveys were representative of the United States population on age, gender, and income. (Table to come.)

### **III. Main Results**

We divide our main results into two portions. We first describe the basic support for taxing unsold gains in stocks (and other assets). Respondents overwhelmingly support taxing gains upon sale rather than when the gains occur. This persists across a variety of framings. We then describe the effects of randomly assigned treatments. The treatments all have statistically significant impacts, but none leads to a majority preference for taxing unsold stock gains in the baseline question, including the treatment explaining “both sides” of the argument for taxing such gains.

#### **A. Baseline Preference for Taxing Unsold and Sold Stock Gains**

##### *i. Unsold Gains*

There is substantially less support for taxing unsold stock than sold stock. Comparing two “economically” equivalent individuals, one of whom has sold (Q29) and the other of whom has not (Q30), support for income taxation is 29 percentage points ( $p < 0.05$ ) higher for the sold stock (74% vs. 45%). The intensity of support for taxing sold and unsold stock is asymmetric. Among

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<sup>29</sup> See e.g. §1272 (original issue discount instruments); §168 (depreciation); § 1256.

those who support taxing sold gains, 62% do so “strongly” rather than “weakly.” By contrast, that figure is 52% for supporters of taxing unsold gains (Q29-30).

The preferences are even more stark when we provide respondents with the head-to-head choice between taxing gains when the stock appreciates or only when it is sold. Here, as shown in Figure 1, only 25% choose the former and 75% choose the latter—one of the key results in the paper. We will often focus on analyzing this “baseline” question for the remainder of the paper (Q31). This preference is reflected in a separate question asking respondents what they regard as fair: only 27% regard such a tax as fair (Q71).

There are differences in this preference by demographic group and political orientation, but no major demographic group has a majority preference for taxing when the gains occur, as shown in Figure 2. Those who are 44 years old and younger are 13 ppt more likely to prefer taxing unsold stock gains than those who are 45 and older. Those who earn under \$100,000 are 10 ppt more likely to prefer taxing unsold gains than those who earn more than \$100,000. There is a similar gap for education: those without at least a BA are 10 ppt more likely to prefer taxing unsold gains than those without at least a BA. There is no significant gap for gender. And there is a small, 5 ppt gap for race: non-whites are more supportive. Politics are also predictive: being a Republican is associated with being 15 ppt (SE = 2.4%) less likely to support taxing unsold gains than being a Democrat, and being an independent is associated with being 10 ppt (SE = 2.5%) less likely than being a Democrat. However, among all these sub-groups, none has greater than 34% support (the support among 18-44-year-olds) for taxing unsold gains.

Similarly, there are differences in support by stock ownership. As shown in Figure 3, support for taxing unsold stock is 12 percentage points lower among those who do own stocks versus those who do not own stocks. Results are similar for those who own stock outside of retirement accounts. But even among those who do not own stock in any form only 32% support taxing unsold stock gains. And these differences shrink yet further when controlling for demographics—to just a 7 ppt difference—as shown in Appendix Table 1.<sup>30</sup>

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<sup>30</sup> Those who say they understood all or most of the survey are 19 ppt less supportive than those who understand less (21% vs. 40%), and those who get a financial literacy question correct are 12 ppt less supportive than those who did not get it correct (19% vs. 31%).

This preference is similar across other unsold assets, as shown in Figure 4. Support for taxing unsold gains in real estate investments and private businesses was comparable to that for stocks (23% and 31% respectively, Q59 & Q61), despite these assets presenting valuation and liquidity issues that are considerably more difficult. As we will discuss below, this suggests to us that liquidity and valuation may not be central to motivating opposition to taxing unsold gains. For homes and art, support for taxing unsold gains was closer to 18% (Q64 & Q65). We suspect the public's greater resistance to taxing paper gains in these assets comes from thinking of them partly in non-market terms.<sup>31</sup> Support for taxing the combination of these assets is 24% (Q67).

Another sign of the strength of the preference comes from a different head-to-head choice (Q91). Respondents are asked to choose between two ways of adding a given amount of new revenue: (a) a new tax only on sold stock gains at rates higher than the current ones, or (b) a new tax on unsold stock gains with rates equal to the current rate for stock sales. For this, only 33% of respondents favored taxing unsold stock.

Perhaps even more tellingly, respondents prefer raising everyone's taxes versus a new tax on unsold stock gains. In particular, respondents are given a choice between raising a given amount of revenue by: (a) raising everyone's tax rates by the same amount or (b) a new tax on unsold stock gains. Over half of respondents (53%) supported raising everyone's rates, and only 47% supported the tax on unsold gains (Q92). Indeed, nearly half (46%) of those who *do not own taxable stock* supported raising everyone's rates. Put differently, these people appear to have preferred raising their own taxes to a mark-to-market regime that would not affect them.

Another sign of the tepid support for taxing unsold gains is that respondents who favor taxing unsold gains still often wish to reduce the tax on those gains. For example, fewer than half of supporters of taxing unsold gains would apply that regime to gains that had already accrued if we began taxing unsold stock gains today (Q95).<sup>32</sup> This is especially notable because proposals for a new tax on unsold stock gains generate a lot of their revenue from applying the new tax to

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<sup>31</sup> What we mean by non-market is the following: Many people think someone buys a house to live in. If it goes up in value, they think that the owner is not getting anything more: he's still just living in the exact same house. In contrast, if you buy a commercial building, clearly your motivation is to make money. If it goes up in value, people may quibble about realization, but there is no real sense in which you are still in exactly the same position as when you bought. It is therefore difficult to view financial assets or commercial real estate, etc. in a non-market manner.

<sup>32</sup> Similarly, support may also ebb as the survey goes on and respondents have more time to think about taxing unsold gains. When asked later in the survey, 23% support taxing unsold gains (Q82), as opposed to 25% initially.

gains that have already accrued.<sup>33</sup> Our results suggest some additional aversion to this aspect of such plans. Similarly, about 20% of supporters of taxing unsold gains would prefer to tax those gains at a rate lower than gains on sold stock (Q79).

A final piece of evidence of the aversion to taxing unsold gains comes from a different form of taxation: the property tax. Again, respondents are hesitant to fully tax gains on assets that have not been sold. When asked about a homeowner who paid \$250,000 for their home, which is now worth \$300,000, the average preferred property tax valuation was about \$273,000, because 51% of respondents preferred a tax-valuation of less than \$300,000 (Q73). By contrast, the vast majority of respondents thought that someone who had just paid \$300,000 for an almost identical house should be assessed at that value (Q75). This result suggests that an important motivation for referenda imposing caps on increases in property tax valuations may indeed be the paper gains phenomenon.

#### *ii. Sold Gains*

The flip side of this psychology is that there is strong support for taxing sold or transferred assets. Figure 5 shows that this pattern holds for those given the choice between taxing at the time of sale or transfer versus never taxing those gains, even in places where current law never taxes such gains. For sold stocks, 78% support taxing (Q42). Perhaps most notably, taxing unsold gains at death has substantial support (64%, Q51).<sup>34</sup> This is of course of independent interest as well. Under current law, neither the decedent (on her final tax return) nor the recipients of this kind of appreciated property must pay tax on such gains. Instead, the recipients receive a step-up in basis to the current fair market value under § 1014. This costs the fisc about \$45 billion annually.<sup>35</sup>

We find something similar with sales of homes. Current law exempts the first \$500,000 of gains on the sale of a principal residence for married couples filing jointly. This costs the fisc about \$40 billion annually.<sup>36</sup> By contrast, we find surprisingly robust support (64%, Q62) for taxing

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<sup>33</sup> See, e.g., Batchelder and Kamin, *supra* note 9.

<sup>34</sup> The potential impact of the status quo on people's beliefs may be less impactful here because a large share (43%) of respondents incorrectly believed that unsold gains are taxed at death under current law (Q86). But, even so, 59% of those who did not make that mistake still supported taxing unsold gains at death. We return to status quo effects below.

<sup>35</sup> JCT, ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2019-2023.

<sup>36</sup> *Id.*

gains realized on sales of homes.<sup>37</sup> Results are even stronger for sold small businesses, with 76% support for taxing upon sale versus never taxing (Q60).<sup>38</sup>

## B. Effect of Treatments

The seven treatments that we explored yielded striking results. Figure 6 shows the results of the treatments. Table 1 shows the results in tabular form. All treatments yielded statistically significant effects ( $p < 0.05$ ).

### *Both-Sides, Pro-Tax, and Anti-Tax*

The both-sides videos only modestly increase respondents' preference for taxing unsold stock gains. Watching the videos<sup>39</sup> causes a 6 ppt increase in the likelihood of preferring taxing unsold gains (S.E. = 2.2%,  $p < 0.01$ ).

Each of the anti-tax and pro-tax videos—on their own—is quite persuasive, producing large changes in respondents' views. But viewing them together in the both-sides treatment had a much more modest impact.

The anti-tax treatment reduces the preference for taxing unsold gains by about 1/3, or 8 percentage points (S.E. = 2.7%,  $p < 0.01$ ). This minute-long video describes taxing unsold gains

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<sup>37</sup> Note that in our question the taxpayer only owns the home for three years, although other assets in the survey were purchased the year before. We make this slight tweak to ensure that the taxpayer would be eligible for the exclusion on home value gains under IRC §121.

<sup>38</sup> Cf § 1202, which provides that gains on qualifying small business stock are never taxed, even at sale.

<sup>39</sup> The pro-video can be viewed here: <https://youtu.be/4N4CQKuIdR8> and <https://youtu.be/GXutbEHDDto>; the anti-video can be viewed here: <https://youtu.be/U913pi0LdmM> and <https://youtu.be/gCySTiw7Chc>. Each video has two versions: one read by each of our two narrators. Which narrator a respondent received was randomly assigned.

The script for the pro treatment is: “This tax is fair. It ensures that everyone—including the rich—pays their fair share, on-time. And it would provide revenue the government can use to strengthen the economy and help its citizens. Most people are taxed on their *entire income* every year, because their income comes from wages. But there’s a loophole for people owning stocks—who are mostly rich. They are *not* taxed on increases in their stock each year. Instead, they pay tax only when they choose to sell the stock later. And, of course, people prefer paying taxes far in the future to paying today. This means that Mark Zuckerberg can see his Facebook stock go up by billions of dollars without paying any tax. This is unfair because, by contrast, someone who earns *wages* must pay taxes now. This tax closes that loophole. It makes sure that everyone pays tax when they get richer, whether that income comes from wages or increases in stock value.”

The script for the anti treatment is: “This is an unfair and radical tax. It would mean taxing something that is just not income. If investors have not sold their stocks, they have not gotten the benefit of their investment yet. They do not even know how much they will eventually make or lose. Worse, investors would have to pay tax even though they have no control over the amount they earn in the stock market. Because the stock market is volatile, they could end up with big surprise tax bills. And some people would actually have to sell their stocks to pay the tax. This would all make the tax system even more complicated and time consuming. Finally, it would punish middle-class families who have stocks they are depending on and job-creators whose investments benefit all of us.”

as unfair, radical, and complicated; says that it punishes middle class families and job-creators; and notes that investors haven't gotten the benefit of their investment yet, among other problems.

The pro-tax treatment nearly doubles the preference for taxing unsold gains—by a whopping 20 percentage points (S.E. = 2.8%,  $p < 0.01$ ). This minute-long video emphasizes that taxing unsold gains is fair, analogizing it to taxing wage earners on their gains each year, and saying that it closes a huge loophole that the rich like Mark Zuckerberg take advantage of. As with the anti treatment, these large effect sizes suggest we have done a good job of capturing the salient points in favor and against this policy.<sup>40</sup>

Overall, the results provide little evidence that taxing unsold stock gains become much more psychologically appealing to the participants as they get more familiar with it. On the one hand, the anti-tax and pro-tax treatments produced large effects, which suggest people's views on the question are malleable. That is not surprising given that there has been relatively little public discourse on taxing unsold gains so far. On the other hand, the both-sides treatment provides the best evidence of what would happen if such a discourse did occur. And in that case, after learning more about the policy, there still was little appetite for taxing unsold gains, with only 31% preferring that policy.<sup>41</sup> In a similar vein, we also find that people's opinion on the baseline question do not change when we ask them again toward the end of the control survey—after spending 20-30 minutes thinking about the issue (Q82): 23% of that sample prefer taxing unsold gains, compared to 25% initially.

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<sup>40</sup> We do not believe that the effects are primarily driven a Hawthorne effect, where respondents try to give the answers they think we want. For example, we can narrow the sample to respondents who reported their subjective belief that the purpose of the survey was to push them to *neither* support nor oppose taxing unsold gains (Q118). When we do so the treatment effects are nearly identical (e.g., +21 pts for the pro-tax and -7 pts for the anti-tax treatments).

Likewise, we have a variety of treatments which favor taxing unsold gains, but some produce only modest increases in support like the anti-status quo treatment (Q28), while others produce very large effects. This is inconsistent with a large Hawthorne effect.

<sup>41</sup> One might expect that if there was a public debate—with Democrats in Congress lining up in favor of taxing unsold gains and Republicans against—citizens would retreat to their partisan corners. Even if that's true to a degree, we find that Democratic preference for taxing unsold gains remains low in the both-sides treatment (38%) even after hearing arguments in favor that are designed in part to appeal to their partisan instincts.

## *Responding to Objections to Taxing Unsold Gains*

This video primarily is aimed at responding to potential misconceptions about taxing unsold gains.<sup>42</sup> The video argues that taxpayers would find taxes on unsold gains simple, easy to pay, with tax bills that are steady over time, and fair. This treatment increases the preference for taxing unsold gains by 16 percentage points (SE = 2.8%,  $p < 0.01$ )—a considerable increase, though somewhat less than the policy “pro” treatment.

## *Mental Accounting*

The mental accounting treatment emphasizes the economic similarity of wages and stock gains.<sup>43</sup> Our primary goal in this treatment is to try to get respondents think of unsold stock gains without placing them in a different mental account from other types of realized income like wages. This treatment causes a modest increase in the preference for taxing unsold stock gains—of 7 percentage points (S.E. 2.7%,  $p < 0.05$ ). We defer further discussion of this treatment until the next section, which discusses the role of mental accounting in this context more generally.

## *Anti-Status Quo*

One potential explanation for respondents’ reluctance to tax unsold gains is a tendency to favor maintaining the status quo. We explore the issue further in our “anti-status quo” treatment, which explains to respondents that under existing law, owners of certain assets “similar to stocks”

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<sup>42</sup> The responding to objections videos can be viewed here: <https://www.youtube.com/watch?v=xD1yn81Eae4> and <https://www.youtube.com/watch?v=JRVbxd815cQ>. The script is: “Taxing stock gains each year, even if the stocks are not sold, is a good policy for four reasons. First, this tax is fair. Compare Mary to John, who makes \$50,000 in wages. *John* must pay tax on his wages this year. Like John, Mary got richer by \$50,000 and this tax ensures they *both* pay tax this year on that amount. Second, this tax is steady over time, since people pay tax gradually as stock increases occur. By contrast, waiting to tax people until they sell produces big tax bills because, by then, they have multiple years of gains to pay tax on. Third, this tax is simple to calculate because of technology today. People would get a statement each year telling them how much their stocks increased, so that they know how much tax they owe. Fourth, this tax is easy to pay. Usually people can pay the tax from their bank account. But they always have another option. They can pay the tax simply by selling some of their stock that has gone up in value. And selling has very low fees in today’s markets.”

<sup>43</sup> The mental accounting videos can be viewed here: <https://youtu.be/2OMSzRMgGVE> and <https://youtu.be/DoeUbbj9oSA>. The script is: “Mary’s \$50,000 increase in stock value should be taxed the same as if she’d made \$50,000 from her job. Economically, there’s no meaningful difference. So, the tax should be the same. Yes, she has not sold her stock yet. But Mary can sell her stock at any time, with no fees. This would give her the same amount of cash as the job. Here’s a different angle: imagine Mary did not have the stock gain, but had earned \$50,000 from her job. That would not really change her position. Mary could just invest her \$50,000 of wages in the stock, and she’d be in the exact same position as now. Whether Mary makes \$50,000 from her job or from seeing her stocks go up, the bottom line is the same: she’s \$50,000 better off. And she can spend it or invest it. So, Mary should be taxed the same in either case.”



are taxed on gains (or losses) each year, even if they have not sold.<sup>44</sup> Likewise, we explain that owners of commercial buildings can take depreciation to account for wear and tear each year, even if they do not sell the building. Our treatment increased the preference for taxing unsold gains by 6 percentage points. We again defer further discussion of the treatment until the next Section, which discusses mechanisms.

### *Rich*

Finally, we explore whether respondents' attitudes are different if limited to taxing only the rich. It is quite plausible that people's intuitions about how unsold gains should be taxed differ depending on whether the taxpayer is very wealthy or not.<sup>45</sup> Indeed, the plan from Senate Finance Committee Chairman Ron Wyden calls for taxing unsold stock gains only for taxpayers with over \$10 million of wealth or with very high incomes over the last few years. In our "rich" treatment, we tell respondents that we are only asking about how the wealthy should be taxed, in particular those with over \$10 million of wealth. Above each question, we put this box:

**Remember: this policy would only apply to people with over \$10 million of wealth.**

In addition, we increase the gains at issue from the \$50,000 in the questions to \$1 million, to avoid cognitive dissonance between being rich and having modest gains.

Surprisingly, the rich treatment only moderately increases the preference for taxing unsold stock gains—by 9 percentage points to 34% (S.E. = 2.7%,  $p < 0.01$ ). Only 41% found such a tax on the rich fair (Q71). This is true despite the fact that 73% of our respondents treatment think the rich pay too little tax and taxing unsold gains would explicitly only raise taxes on the rich. It is true that 52% of respondents prefer to tax the rich on unsold stock gains if any revenue is earmarked for protecting Social Security,<sup>46</sup> which is a particularly popular use of the funds

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<sup>44</sup> The anti-status quo videos can be viewed here: <https://youtu.be/RMFmt-qUz7g> and [https://youtu.be/n\\_g6g3zSClo](https://youtu.be/n_g6g3zSClo). The script is: "Today, under current law, many assets are taxed on changes in value each year, even if they are not sold. For example, when people buy certain assets that are similar to stocks, they must pay income tax on increases in the value of those assets each year, even if they do not sell the asset. Similarly, when people buy a commercial building, they can reduce their taxes each year to account for the building wearing out and losing value over time, even though they do not sell the building."

<sup>45</sup> For example, people may be less concerned that the rich would face liquidity problems in paying taxes on unsold gains than the population at large. Similarly, people may be less tolerant of very large unsold stock gains accruing to the rich escaping taxation than smaller amounts.

<sup>46</sup> In the control, 41% of respondents prefer taxing unsold stock gains in the analogous question.

(Q93).<sup>47</sup> Using a “withholding” tax on the unsold stock gains of the rich to protect Social Security increases support to 59% (Q94). Nevertheless, when allowed to choose other methods of taxing the rich, respondents strongly preferred those options. For example, respondents overwhelmingly (68%) favored new taxes on the rich implemented via higher rates rather than taxing unsold gains.<sup>48</sup> Likewise, 72% of our respondents favored raising corporate tax rates.

Many opponents of taxing unsold gains seem to just regard it as a bad tax and changing who pays it—rich or not—does not change their mind. Indeed, nearly half of respondents with no taxable stock would prefer to raise their own tax rates rather than to tax unsold stock gains, which would not (directly) affect them (Q92).

#### **IV. Explaining the Aversion to Taxing Unsold Gains**

We explore a large number of reasons that respondents could have for supporting or opposing taxing unsold stock gains. We find evidence for three mattering: that some participants wish to tax consumption, not income; that some exhibit behavior consistent with “mental accounting;” and that some exhibit an inclination to support the status quo. We also find evidence against a large number of other explanations. We first discuss respondents’ stated reasoning. We then turn to reasons with evidence favoring them and then to explanations with less robust evidence.

##### **A. Stated Reasoning**

We start with textual analysis of respondents’ stated reasons for opposing or supporting taxing unsold stock gains. This analysis ignores common words with no relevant meaning, such as “and,” “to,” and “I,” and “lemmatizes” the remaining words (for example, by converting “is” to “be,” or “realized” into “realize”). We find the most distinctive words used by respondents who preferred taxing unsold versus only sold gains. Tables 2a and 2b show 20 most distinctive words for those preferring each of taxing unsold and only sold gains, ranked by the largest (in absolute

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<sup>47</sup> For example 74% of Americans say Social Security benefits should not be reduced in any way. [Gallup Cite](#).

<sup>48</sup> Q92; as elsewhere respondents are told that each policy would raise the same amount of revenue. In a similar question, 59% of respondents preferred a new tax that increased the rate on sold stock gains of the rich to taxing unsold gains at a lower rate (Q91).

value) t-statistics associated with the coefficient resulting from regressing the presence of each word on an indicator for an individual using the word.<sup>49</sup> All data come from the control sample.

This analysis shows a few notable patterns. First, there is significant concern that unsold gains are not yet real in a sense. Hence respondents are concerned that “actual” profit has not “yet” been “realize[d].” Likewise, they note that the stock has not yet yielded “cash,” or anything in the taxpayer’s “hand” that can be consumed or used to pay the tax. Second, because the gain only exists on paper, there is a worry that it may disappear, if there is a “loss” in value in “market” “fluctuat[i]ons” before the owner sells. Finally, there is concern that taxing gains before sale would be “complicate[d].”

The words most associated with supporting taxing unsold gains interestingly have to do with “still” “get[ting]” a “refund” if stocks go down, suggesting that this is an important feature of a plan to supporters. Others express concern about taxpayers paying “late” or in the “future” in the absence of taxing unsold gains.

In the structured reasoning answers, people cited a wide variety of factors as important drawbacks and advantages of taxing unsold stock, shown in Figures 7 and 8 respectively. We first review the drawbacks chosen by those who opposed taxing unsold gains. The share of opponents who cited the drawbacks are as follows: People have not yet had a chance to consume the gains (78%), people do not have the money to pay the tax if they have not sold (“liquidity”) (76%), taxes on stocks and investments are too high already (75%), taxing unsold gains would make tax liability too variable (75%), people don’t have control over the size of their taxes (74%), taxing unsold gains would be time-consuming and complicated (74%), people are unsure of how much they would eventually make (73%), and people have not yet concluded their investment (73%).<sup>50</sup>

Supporters cited advantages at the following rates: unsold gains should be treated like wages and other forms of income which are taxed every year (73%), unsold gains are simply income (71%), the need for government revenue (70%), people can otherwise delay paying taxes on their

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<sup>49</sup> Formally, we find the largest t-statistics on  $\beta_j$  for each word  $j$  in the regression  $1(\text{word}_j)_i = \alpha + \beta_j \cdot 1(\text{cash})_i + \varepsilon_i$ .

<sup>50</sup> Several of these were also cited as important drawbacks by those who *supported* taxing unsold gains: 57% cited liquidity, 56% consumption, 56% that the investment was unfinished, and 53% that the taxpayer did not have control over the taxes.

gains for years (66%), unsold stock gains accrue primarily to the rich and we should pursue more ways like this to make the rich pay more tax (64%).<sup>51</sup>

In future analysis, we will conduct analysis that decomposes preferences for taxing unsold gains by respondents' answers to these and other questions, to see what variables are most predictive. For now, though, there is little variation within either supporters or opponents from which to discern what motivates them. So, going forward, we primarily focus on respondents' choices in other policy and factual scenarios, as well as other evidence from the survey.

## **B. Explanations with Evidence Favoring Them**

Three explanations have evidence favoring them as explaining the opposition to taxing unsold gains: a desire to tax consumption, mental accounting, and an inclination to support the status quo. We address each in turn.

### *i. Taxing Consumption*

Several pieces of evidence suggest that a significant share of respondents wish to tax consumption, not income, in this context. In general, this makes them prefer not to tax unsold gains, which usually appear not to have been used for consumption yet.<sup>52</sup>

In particular, adjusting the circumstances surrounding consumption through policy hypotheticals seems to affect support for taxing unsold gains. We give a scenario in which the taxpayer borrows \$40,000 against \$50,000 of unsold stock gains and uses the money for personal expenses. For those who prefer to wait to tax gains until sale in the baseline, 36% prefer to tax the amount borrowed and consumed, even without a sale (Q41).<sup>53</sup>

Similarly, as shown in Figure 9, in the context of sold or transferred assets, a significant share of respondents appears to want taxation of gains on assets to wait until consumption occurs. Most significantly, in the context of *sold* stock gains, in which respondents overwhelmingly (78%)

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<sup>51</sup> Notably, 56% of those who opposed taxing unsold gains nevertheless cited preventing undue delay in paying tax as an advantage of the policy, 43% cited additional revenue, and 35% cited that it would help tax the rich.

<sup>52</sup> Indeed, the most popular reason cited in the structured reasoning (Q34) for opposing taxing unsold gains is that it would tax stockowners before consumption. We draw only a limited inference from this fact, however, because of the limited variation in the reasons cited for opposing taxing unsold gains.

<sup>53</sup> Overall, 36% of respondents wished to tax today the amount borrowed and consumed, and 64% wished to wait until sale to tax. By contrast, when asked about someone who earned \$50,000 in wages, and saves \$10,000, only 27% of respondents wanted to tax only the \$40,000 consumed (Q44). This suggests that consumption intuitions could vary between the wage and stock gain contexts.

support taxing at sale (Q42) as shown earlier, if the gains this year are reinvested, just 58% prefer taxing when initially sold rather than waiting to tax until the stocks are sold and consumed (Q43). And, though 64% support taxing gains on home sales, just 51% support timing the tax to when it is initially sold if a housing gain is sold and reinvested (Q63). Likewise, though 64% of respondents favor taxing gains on bequeathed stock, only 49% support timing the tax to the death of the giver rather than the sale of the recipient, when the proceeds can be consumed (Q50). An even lower share (41%) taxing at transfer for gifted stock (Q52). Even for commercial buildings for which we presume that support for taxing gains is very high and our pilot showed 73% support for taxing gains, only 63% support taxing on initial sale when the proceeds are reinvested (Q58)—which is both a promising opportunity for reform, but also still evidence on consumption intuitions.

### *ii. Mental Accounting*

There is strong evidence that—outside the tax context—people treat unsold stock gains differently than other forms of income. For example, they consume significantly less out of unsold stock gains than wages.<sup>54</sup> This phenomenon arises in part because people use heuristics which put unsold gains in a different “mental account” than wage income.

Our measure of the degree to which people use these mental accounting heuristics *outside of tax* correlates strongly with their views about how unsold gains should be taxed. In particular, we correlate hypothetical “tithing” to charity with preferences for taxing unsold stock gains. We ask the respondent to suppose that she will tithe 10% of her income to charity and that she has \$80,000 of wages and \$20,000 of unsold stock gains. We ask whether they would tithe \$8,000, \$10,000, or some other amount.<sup>55</sup>

As shown in Figure 10, there is a very large difference in tithing behavior across those preferring taxing unsold gains versus only at sale: among those preferring taxing only at sale, 82% ignore stock gains when tithing, whereas only 48% of those preferring taxing before sale ignore stock gains when tithing—a difference of 34 percentage points. This suggests to us that, even outside of the context of taxation, many respondents just do not view unsold stock gains as income

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<sup>54</sup> Richard Thaler, *Mental Accounting and Consumer Choice*, 4 *MARKETING SCI.* 199 (1985); Schenk, *supra* note 7.

<sup>55</sup> Note that liquidity concerns should be addressed because of the large amount of wages to pay tithes out of.

in the sense that they do wages.<sup>56</sup> Because they view unsold gains as largely not yet ripe for consideration in making decisions outside of tax, they also hold the same view within tax.

### *iii. Status Quo*

A third explanation that seems to help explain some of the aversion to taxing unsold gains is the effect of the status quo. As a preliminary matter, it is worth distinguishing between two possible influences of the status quo on our results. First, existing law is something that shapes people's preferences ("path-dependent preferences"). This is a possible real effect of the status quo and one that may impede a move to a different system. Second, the status quo may serve as a kind of default that respondents choose when they are not sure what to answer or are overwhelmed.<sup>57</sup> This second issue is "status quo bias" in the sense that it might be created by the survey design and have little influence on how people would think about the issue in case of a serious public discourse about it. Our treatment impacts both of these possible influences, though the first of these is more interesting as a matter of psychology and policy.

Several pieces of evidence point toward the importance of the status quo. First, people's knowledge of current law is associated with their preferences for taxing unsold stock gains. As shown in Figure 3, those who believe incorrectly that such gains are taxed are 28 ppt more supportive of taxing unsold gains than those who correctly believe that they are not taxed.

Similarly, as discussed earlier, our treatment explaining that some similar assets have taxed gains (or loss deductions) before sale increases the preference for taxing unsold gains by 6 ppt.<sup>58</sup> There are at least two reasons why this treatment would increase support. First, people who would hold the correct view about current taxation regardless of the information treatment could become more familiar with—and thus more comfortable with—this alternative form of taxation. Second, people could become convinced that this is currently the way such gains are taxed and become

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<sup>56</sup> We have a second test for mental accounting that has less decisive results. In particular, we ask respondents if they would go on a vacation after receiving \$2,000 in dividends and \$2,000 in unsold stock gains and see if those responses correlate with support for taxing unsold stock gains (Q38-39). With fairly wide standard errors, we find no such correlation. We speculate that this could just be a low-power test, given the variability in how respondents would react to \$2,000 to spend on a vacation.

<sup>57</sup> See, e.g., Ole Bonnischen & Jacob Ladenburg, *Reducing Status Quo Bias in Choice Experiments*, 3 NORDIC J. HEALTH ECON. 47 (2015).

<sup>58</sup> Note that the treatment did not say that this is a good tax, which helps mitigate the Hawthorne effects. Also, an identical share of respondents (82%) thought that the survey was trying to get an unbiased understanding of support for taxing unsold gains, unlike in treatments that do say that it is a good or bad tax.

more supportive for that reason. We cannot measure the first reason, but we can gain an understanding into the second reason: our treatment increased the fraction of respondents who reported believing that unsold stock gains are taxed annually today rises 10 ppt—from 29% to 39% (Q89)—which presumably helps explain the increase in support for taxing unsold gains.

Another reason to think that the status quo might matter is the support for depreciation. Respondents evinced a modest majority support for allowing annual depreciation on commercial buildings (58%, Q69), even though only 30% supported allowing a deduction for stocks that go down in value but are not sold (Q35). A fairly large share (50%) of respondents knew that depreciation is allowed (Q88)—and those who knew that were more supportive<sup>59</sup>—suggesting that knowledge may encourage support for depreciation.

At the same time, status quo effects are unlikely to drive a majority of the dispreference for taxing unsold gains. First, among people who are unsure of current law—for whom the status quo is likely to have the least effect—only 25% support taxing unsold gains (see Figure 3; Q89).<sup>60</sup> Similarly, as noted earlier, we also ask respondents to pick between two explicitly *new* taxes to minimize status quo effects (Q91). In this question, 67% of respondents chose to impose a new tax on sold stock gains rather than to tax unsold gains at the current rate for stock sales. In addition, as noted above, people evinced strong support for taxing sold or transferred gains in places where existing law permanently excludes them, which is inconsistent with a very strong attachment to the status quo.

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<sup>59</sup> Among those who got the knowledge question correct, 70% support depreciation. Among those who were uncertain or got the question wrong, 45% support depreciation.

It is true that this existing exception to the realization rule for depreciation is for wear and tear that largely is not subject to market fluctuations, which makes it somewhat different from deducting unsold stock losses. *See* Schenk, *supra* note 7. But we think that the effect of the status quo is likely the more important driver of the difference in preferences between depreciation and unsold stock losses, rather than a general willingness to relax the realization rule for changes in asset values not driven by market fluctuations.

This interpretation is backed up by respondents’ attitudes toward taxing lenders each year on implicit interest on bonds that yield no cash interest payments before they are redeemed. *See* IRC § 1272. This kind of “original issue discount” income—like depreciation—is also not very subject to market fluctuations. But here only 14% of respondents (Q70) wanted to relax the realization rule and tax the (implicit) interest each year. Existing law does tax such interest, but we expect that almost no respondents knew that so the status quo could exert little effect.

<sup>60</sup> Even among respondents who incorrectly believe that current law taxes unsold stock gains in this treatment, only 42% prefer taxing unsold gains in the baseline question. Those who are unsure about the law, however, seem like the most relevant group for understanding people’s psychology outside the context of the status quo.

### **C. Explanations with Less Robust Evidence Favoring Them**

There are many other explanations—including ones that many of the respondents themselves give. However, it is unclear whether the concerns explicitly listed by opponents of taxing unsold stock are actually decisive for them.

We provide policy options or scenarios that respond to many of the concerns cited by opponents of taxing unsold gains in the structured reasoning. These alternative options, however, usually fail to garner more support. This causes us to question the degree to which these concerns are decisive rather than arguments that “sound good” once a person has made up her mind on other grounds. We go through each of these reasons in turn.

#### *i. Liquidity*

We present several scenarios that alleviate liquidity concerns, but none increases support for taxing unsold gains. For example, we create a situation in which the taxpayer has identical (and plentiful) liquidity regardless of whether she sells a stock that has gained value. As before, however, support for taxing her turns on whether she’s sold the stock: 71% if she has, 41% if she hasn’t (Q46-47). Likewise, we provide a policy in which taxpayers can choose between paying taxes on unsold gains each year, or to wait to pay their tax until they sell, along with interest on the delayed tax. This is an “optional accrual system.” We explain to participants that this addresses liquidity and control concerns among others. Again, support for this policy is identical to the baseline (Q48).

Furthermore, in the property tax context, offering liquidity through the property tax system does not seem to allay participants’ concerns about taxing built-in gains. We offer a policy scenario that shifts to a property tax where any tax on appreciation can be delayed until the owner sells, at which time the delayed tax must be paid with interest (Q76). This option of getting liquidity through the tax system does nothing to increase participants’ willingness to assess the home at the market price.

#### *ii. Control*

As just noted, the optional accrual system (Q48) gives taxpayers equal control over the timing of their taxes compared to the realization rule, but offering this policy does not increase support for taxing unsold gains. Likewise, there is strong support for taxing other forms of income



over which taxpayers have limited control, like lottery winnings (79%, Q98) or job bonuses (73%, Q99).<sup>61</sup>

### *iii. Variability*

We provide an option to tax people based on a four-year average of their (unsold) stock gains. We explain that this policy reduces the variability of people's tax liability, but support for this option is nearly identical to the baseline (Q49). Similarly, we also ask about taxing stock based only on a presumed 8% return, which would provide certainty about taxable income ahead of time. This policy received less support than the baseline (Q53).

### *iv. Framing as an Income Tax Instead of a Wealth Tax*

We examine whether a wealth tax is more popular than a mark-to-market regime, when, in the given scenario, they are economically identical (Q55-56). Apart from being of interest given proposals for wealth taxes, we wanted to test whether framing as an *income* tax is different from framing as a wealth tax because one might think that the (arguably) greater simplicity of the wealth tax and lower (nominal) tax rate might tilt support toward a wealth tax.<sup>62</sup> We randomized our participants into one of two questions: paying a given amount as a wealth tax and an equivalent amount as an income tax. We find that support is almost identical, suggesting that framing a tax as an income rather than wealth tax per se is not an important driver of intuitions.

### *v. Complexity*

We do not believe complexity is likely a primary driver of aversion to taxing unsold gains, but this rejection is less certain than with some other explanations in this subsection. We use a couple of avenues to probe the role of complexity in driving respondents' attitudes. First, consider again the comparison with the wealth tax, which is arguably less complicated. The fact that it is no more popular than taxing unsold gains suggests that complexity is not a major driver of the aversion to taxing unsold gains, although that is not the only interpretation.<sup>63</sup> Second, our highest

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<sup>61</sup> Note that lottery winnings and job-bonuses are not exactly parallel in the sense that they really can only be taxed this year if they are to be taxed, whereas with unsold stock gains that is not true.

<sup>62</sup> Both taxes are at the state level to prevent the possibility that respondents would fail to support a wealth tax due to concerns about constitutionality. In a separate question to our high-asset treatment (Q101) we ask about support for a wealth tax on those with over \$10 million of wealth, and 43% of respondents support this policy. This is similar to the level of support for taxing those with over \$10 million of wealth on unsold stock gains (Q30).

<sup>63</sup> People, of course, could be attracted by the simplicity of the wealth tax but repelled by other aspects of it that differ from taxing unsold gains as income even though in this case they are economically equivalent.

measured preference for taxing unsold gains comes from a “withholding” tax on the rich proposal that is among the most complicated of any of the proposals (Q94).

Finally, in our “responding to objections” treatment, we explain that (among other reasons) taxing unsold stock gains would not be complicated: taxpayers would simply get a statement each year listing the amount their stock gains/losses for the year. Getting the “responding to objections” treatment raises support for taxing unsold gains. But it does not appear to do so because respondents believed that taxing unsold gains would not be time-consuming. Instead, as shown in Appendix Table 2, the share of respondents evincing concern about the new tax being time-consuming does not shift (Q34). As with the “withholding tax” result, this suggests that respondents are willing to support taxing unsold gains, even if they regard it as complicated, if they find other aspects of it appealing, like that its fair.

*vi. Uncertainty Over Market Value*

In the context of publicly-traded stocks, uncertainty in present valuation is not a concern. However, in the case of the property tax it might be. So, in the property tax context, we change the fact pattern to strongly emphasize the uncertainty in the market value of that house (Q77). Interestingly, this prompt does not reduce respondents’ preferred tax assessment. This result suggests that people’s objections to taxing unsold gains via property taxes is less based on a fear that government’s judgment about the market price might be wrong, rather than some unfairness in having to pay a tax based on the full market price at all absent a sale.

**V. Conclusion and Implications**

How to tax capital is a central question of our time. And the realization rule is integral to how we do or don’t tax capital under the income tax. One explanation for its persistence is public attitudes toward “paper gains.” We offer the first empirical evidence on this question. The public does seem to strongly prefer taxing only at sale—by a large, 3:1 margin. Our best evidence of how opinion would shift as people learn more—from our “both-sides” video treatment—is that taxing gains before sale remains widely unpopular. Similarly, even limiting the tax to the rich does little to change attitudes. The apparent resistance to taxing unsold gains appears driven by deep psychological tendencies, like consumption tax intuitions and mental accounting, though changing

the status quo could also have an effect. These attitudes seem likely to help explain the persistence of the realization rule here and around the world, despite its downsides.

An important question is what the public would think if there were a public debate on the issue. We cannot know exactly how such a debate would change people's attitudes. On the one hand, the question is simple: should gains be taxed now or when sold? The simplicity of the question might suggest people will have stable views, regardless of the level of debate. On the other hand, a variety of more complicated concerns may come to matter with more thought, as may occur during a public debate. What we can do is provide a variety of framings, including 1) our baseline in which we educate participants about the possibility of taxing gains at different times through comprehension questions, 2) the full video treatments with a simulated debate including "both sides" of the argument, and 3) intermediate amounts of information in between. Offering these alternative framings and seeing how, if at all, people's views change provides insight into the deeper intuitions that the public has about this crucial question for taxing capital income. What we find is that views do shift, but almost no framing produces majority support for taxing unsold gains.

On the one hand, for those wishing to raise taxes on capital by taxing unsold gains, our rich treatment—which includes framings with narrow majority support—and the evidence on status quo effects give some modest reasons for optimism. This makes the recent state efforts in New York,<sup>64</sup> as well as proposals from academics,<sup>65</sup> to tax unsold stock gains all the more helpful. They could take advantage of deep, liquid public capital markets and technological improvements that would make taxing unsold gains far cheaper to administer, easier to comply with, and more accurate than doing so would have been when the modern income tax was first enacted a century ago. And they would provide an experiment to help understand status quo effects.

Overall, though, the results make alternatives to repealing the realization rule more attractive, judged as either second-best options (to the extent that the views of the public matter for the policy that is adopted) or as democratically legitimate ones (for those who pay normative heed to what the public thinks is a fair way of taxing). For example, we have shown that people seem to prefer taxing sold stock gains, as they do for the sale of a home, business, or investment

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<sup>64</sup> See <https://www.wsj.com/articles/some-democratic-lawmakers-push-for-wealth-tax-on-new-york-billionaires-11613692224>.

<sup>65</sup> Saez, Yagan & Zucman, <https://eml.berkeley.edu/~yagan/CapitalGainsWithholding.pdf>.

property—and that the same is true of taxing bequested gains. Making death a realization event and taxing gains on homes at sale alone would raise on the order of \$1.2 trillion dollars over a decade according to Treasury.<sup>66</sup> We also show considerably greater support for raising existing capital gains taxes than taxing unsold gains, another opportunity for policymakers.

Similarly, there are major debates about what the corporate tax rate should be and what its base should be. These results push in the direction of a higher rate and an expanded tax base. Notably, 69% of respondents favor raising the corporate tax rate, despite most of those supporters also preferring to tax stock gains only at sale. As to the tax base, one of the reasons for having a corporate tax base that focuses on rents, rather than the normal return, is because shareholders pay tax on the normal return in addition to rents.<sup>67</sup> But, our results suggest that it may be challenging to fully tax those normal returns to shareholders because of the support for the realization rule. This is especially so because the portion of returns covered by the realization rule has expanded over time, since corporations are paying considerably lower dividends—which are immediately taxable—than when the income tax was enacted.<sup>68</sup> This strengthens the case for expanding the corporate tax base to cover normal returns, including by partially turning away from allowing corporations to immediately deduct their investment expenditures, which reduces the corporate tax base.

Ultimately, though, there is a deeper point. Viewed at the highest level, we provide evidence of a significant barrier to taxing capital through an income tax—a barrier that does not apply to labor income. There may just be considerable psychological headwinds to taxing capital in particular through an income tax.

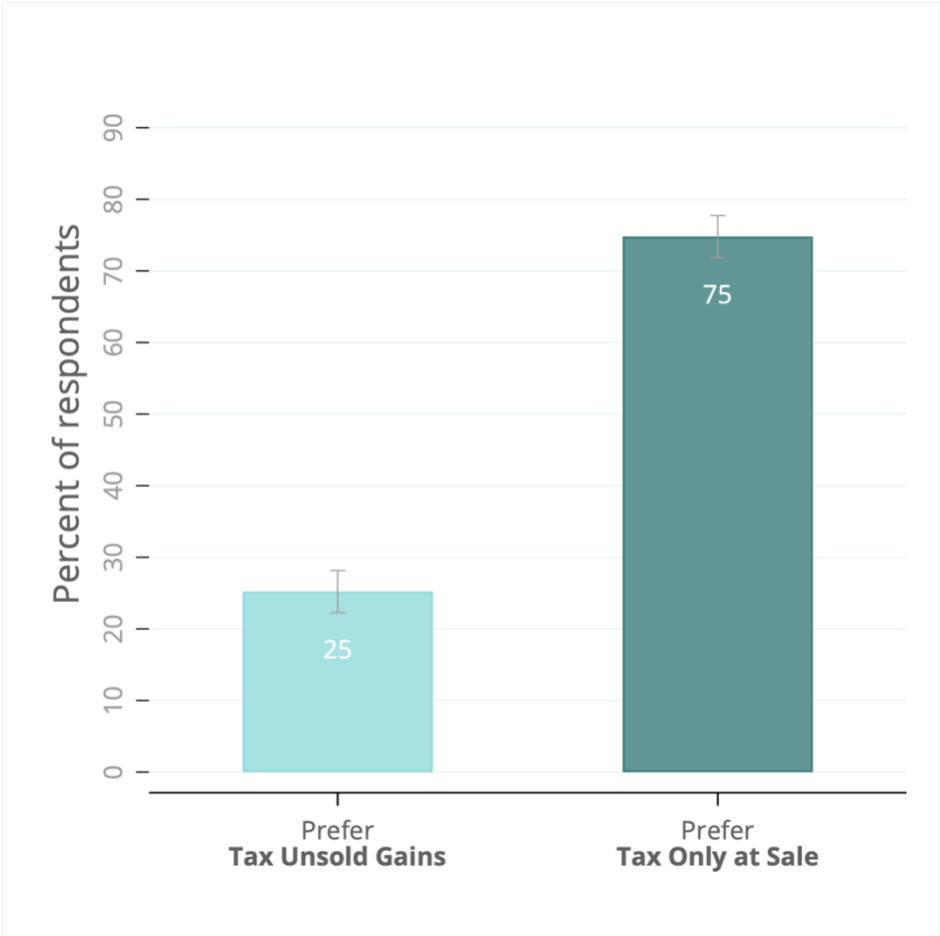
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<sup>66</sup> Note that there are limits on these revenue estimates: each repeal is calculated independently, even though there could be some interaction between them, and they hold behavior fixed. Also, note that there are potential downsides to ending the exclusion of gains, such as the result that people may be “locked in” to their homes and not move to avoid paying taxes.

<sup>67</sup> See, e.g., Edward Fox & Zachary Liscow, *A Case for Higher Corporate Tax Rates*, Tax Notes (2020).

<sup>68</sup> The data are on dividends as a share of stock price. See <https://www.multpl.com/s-p-500-dividend-yield>.

Figure 1: Percent Preferring Taxing Unsold Stock Gains vs. Only at Sale – Control Sample



Notes: Bars indicate 95% confidence intervals.

Figure 2: Percent Preferring Taxing Unsold Stock Gains by Demographic Group – Control

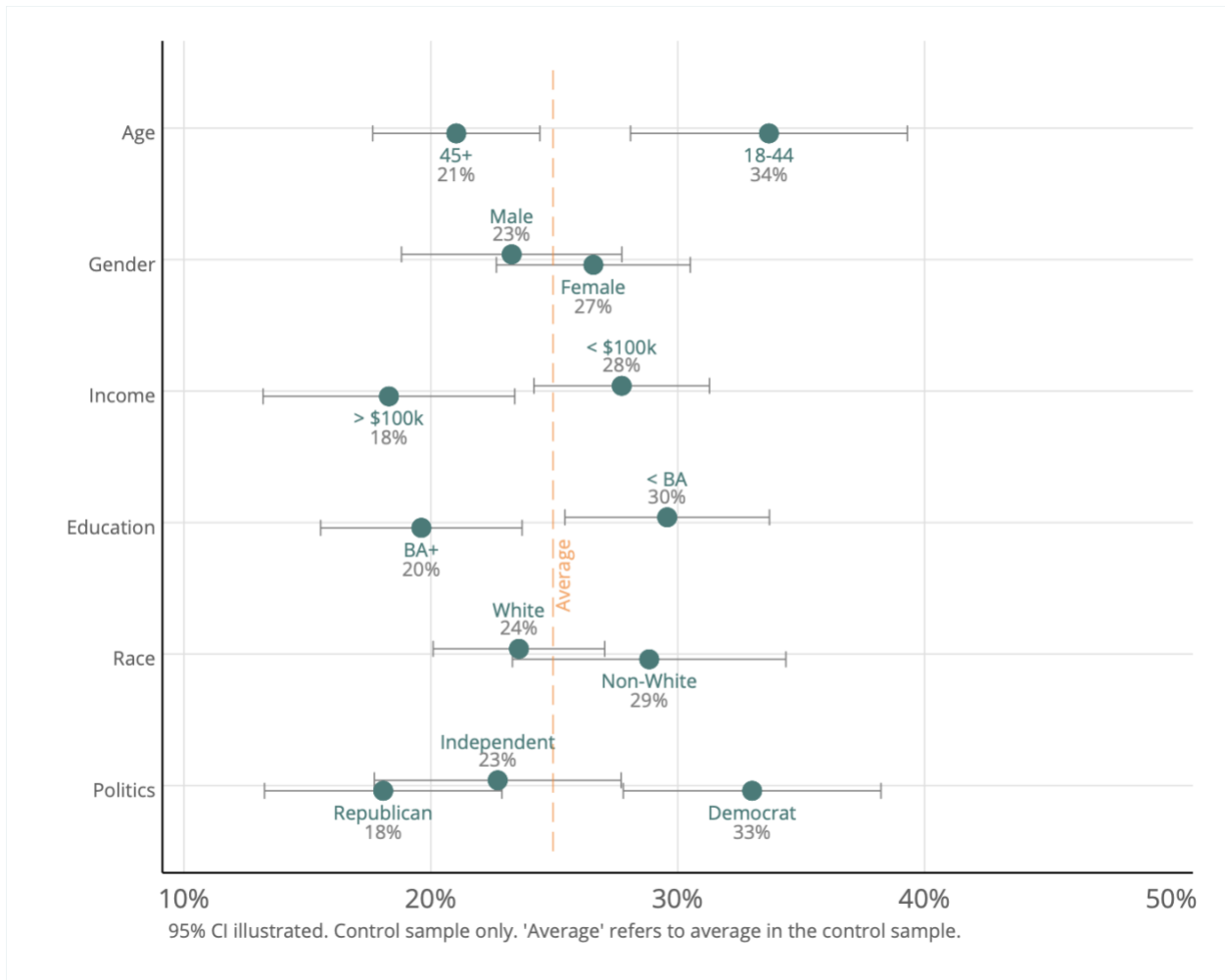


Figure 3: Percent Preferring Taxing Unsold Stock Gains by Other Respondent Attributes – Control

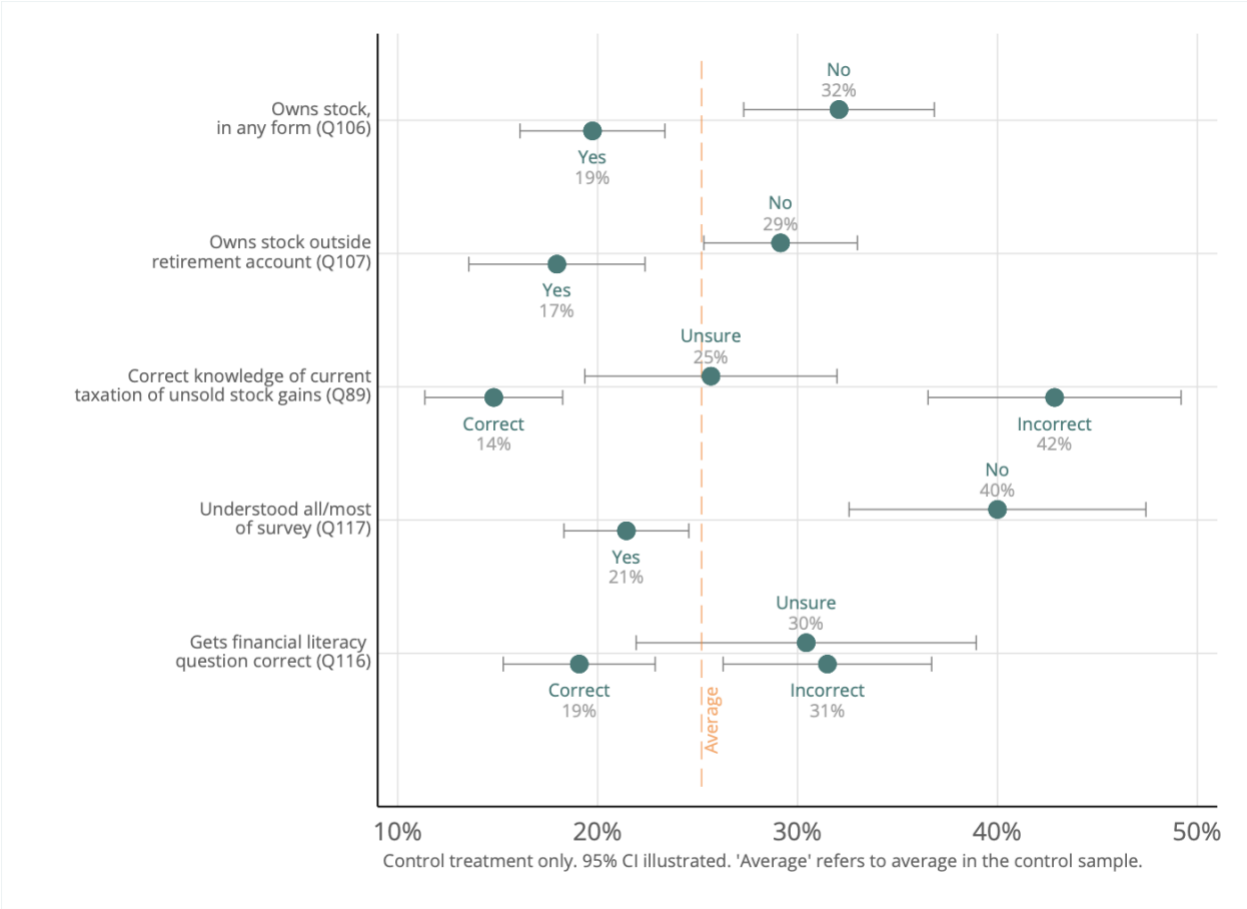
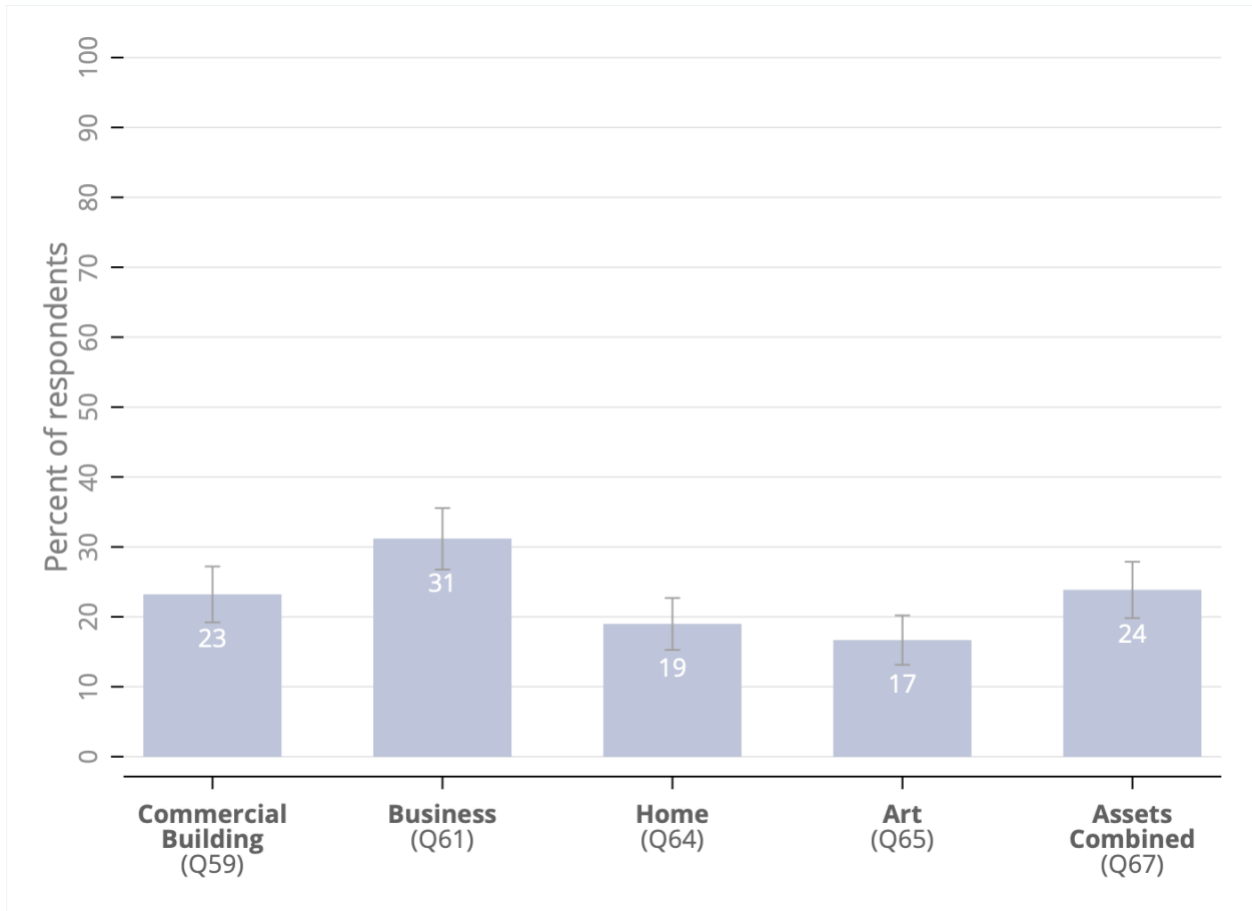


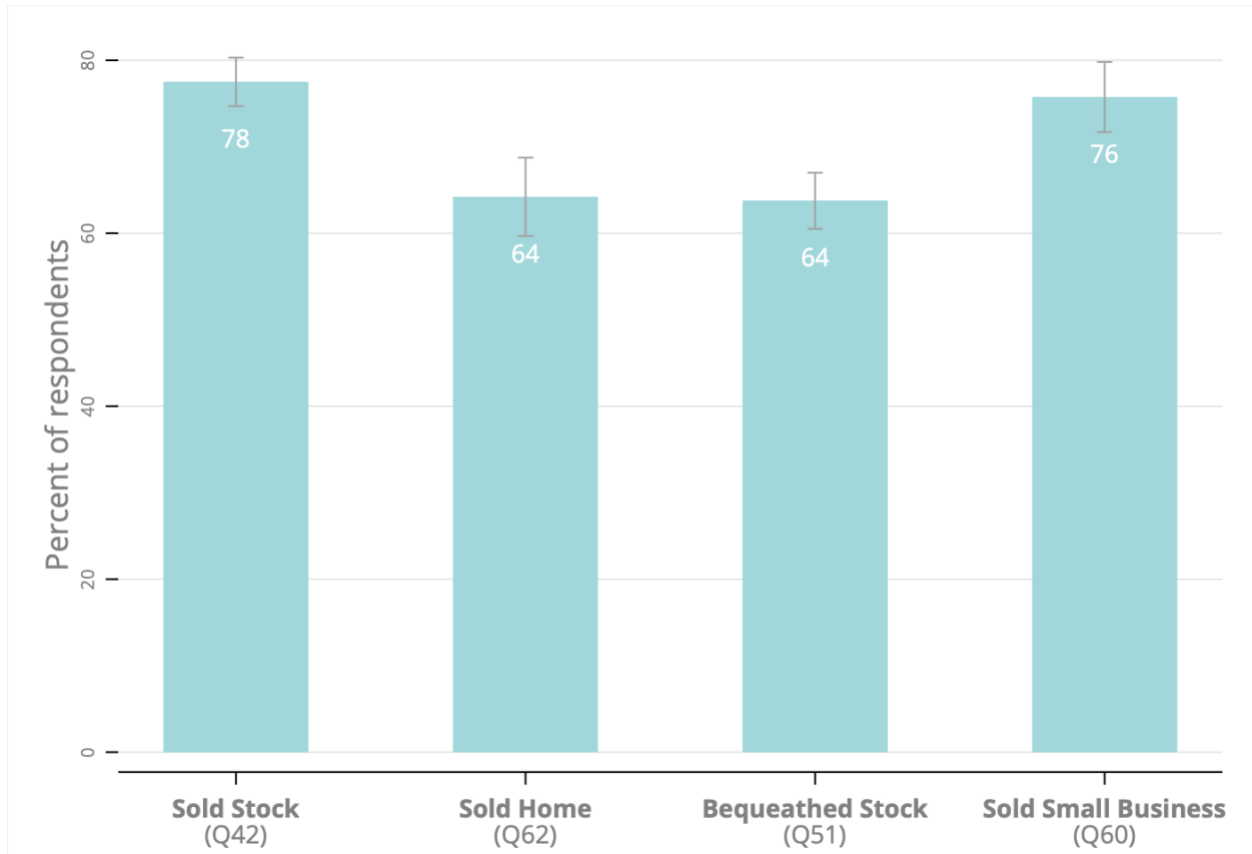
Figure 4: Percent Preferring Taxing Unsold Gains in Other Assets– Control



Notes: Bars indicate 95% confidence intervals.

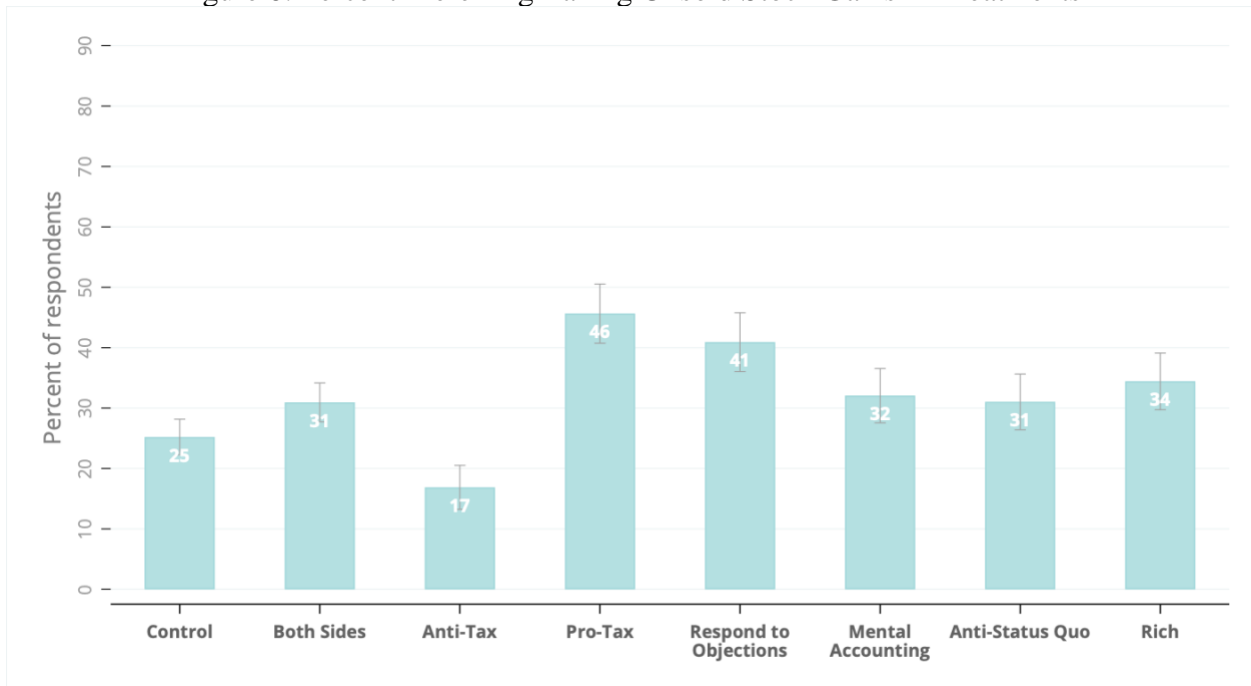


Figure 5: Percent Preferring Taxing Sold or Transferred Assets Vs. Never Taxing Those Gains - Control



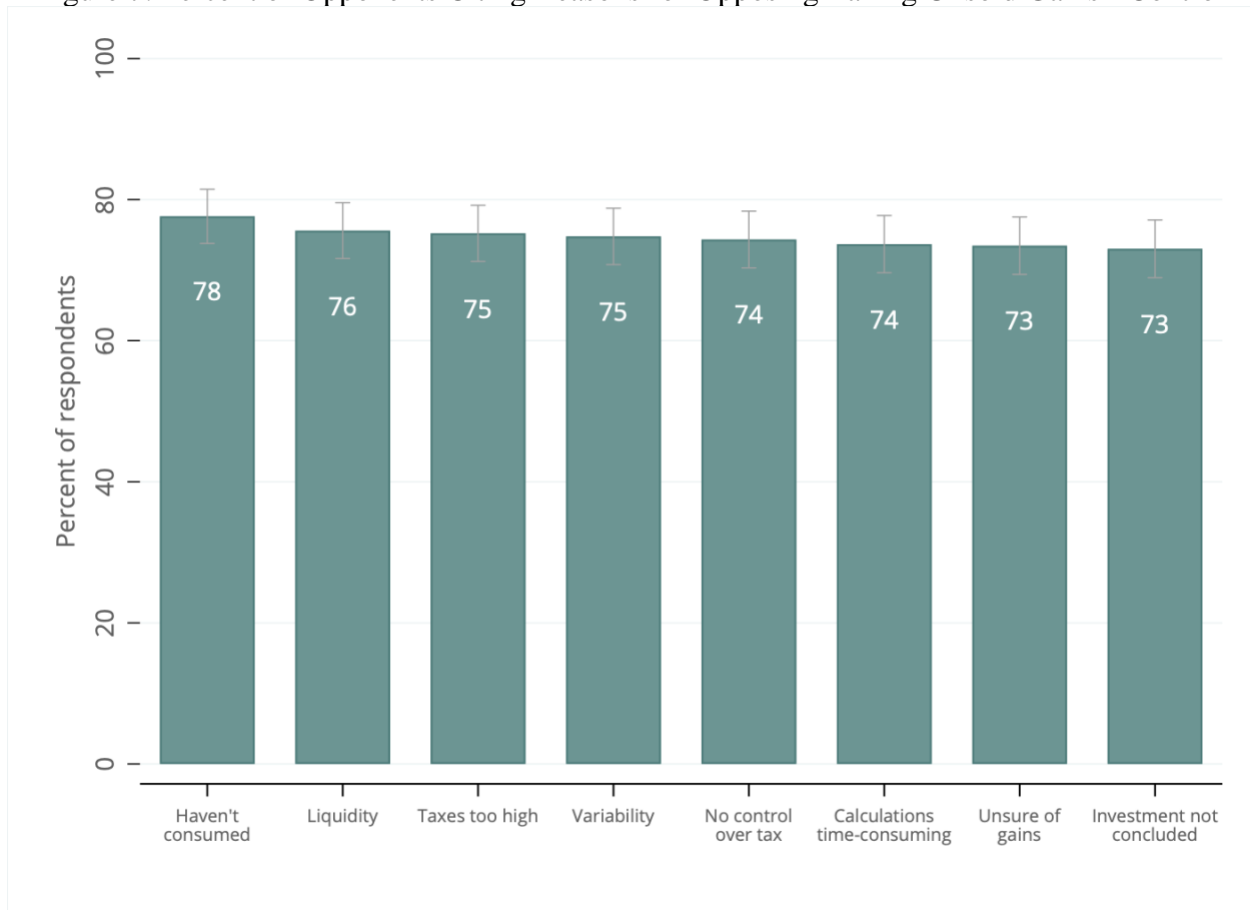
Notes: Bars indicate 95% confidence intervals.

Figure 6: Percent Preferring Taxing Unsold Stock Gains in Treatments



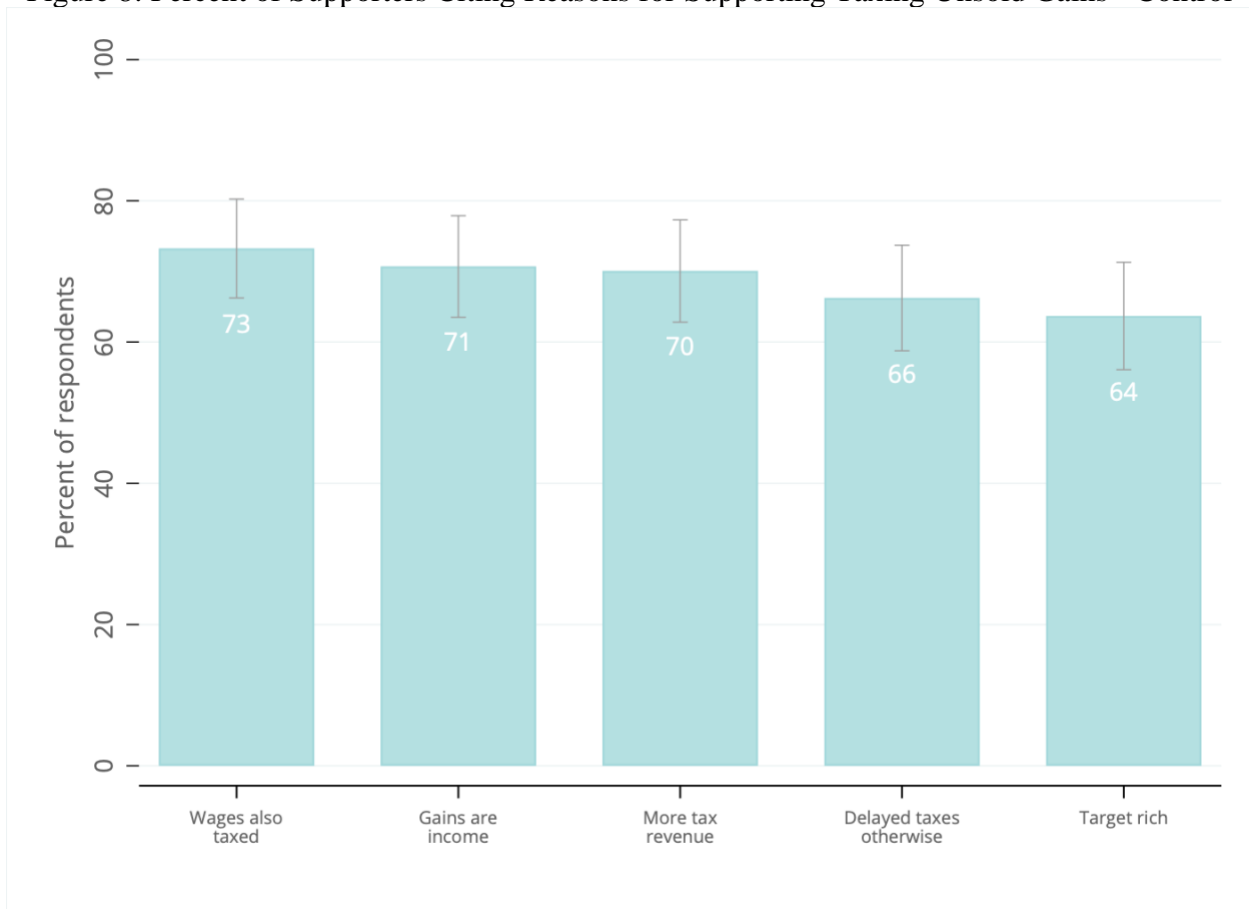
Notes: Bars indicate 95% confidence intervals.

Figure 7: Percent of Opponents Citing Reasons for Opposing Taxing Unsold Gains - Control



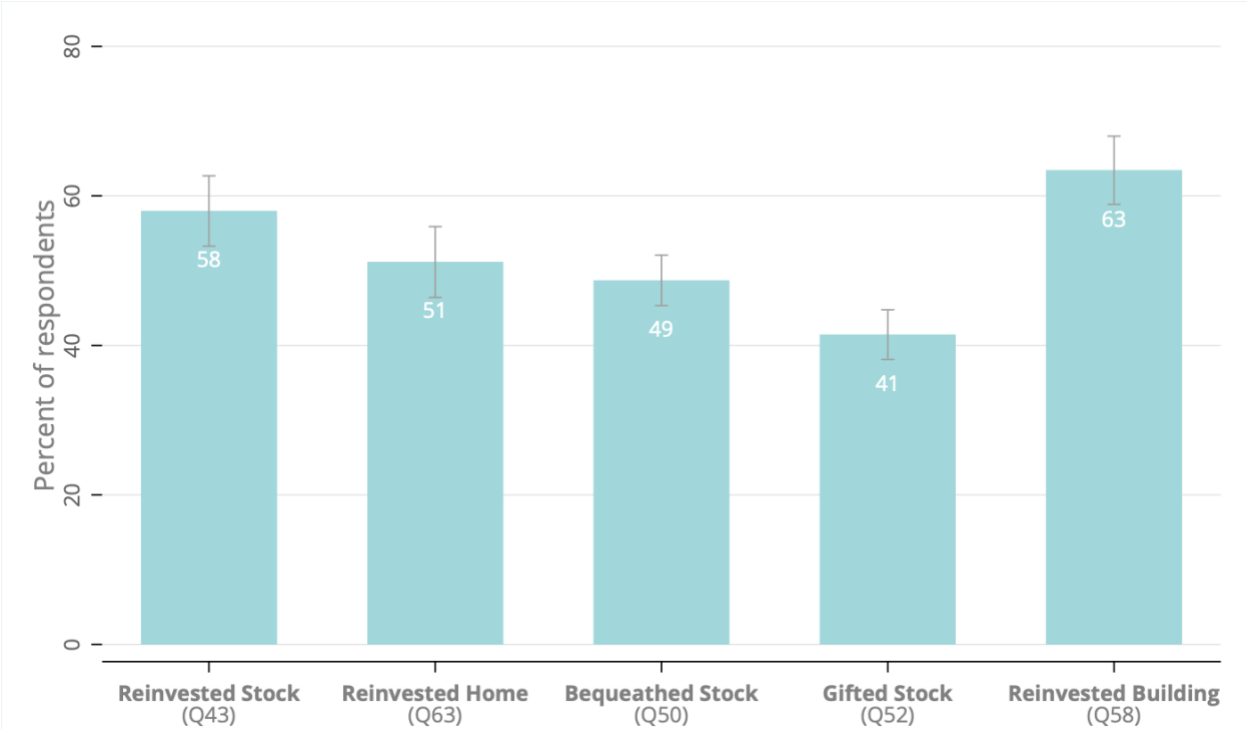
Notes: Bars indicate 95% confidence intervals.

Figure 8: Percent of Supporters Citing Reasons for Supporting Taxing Unsold Gains - Control



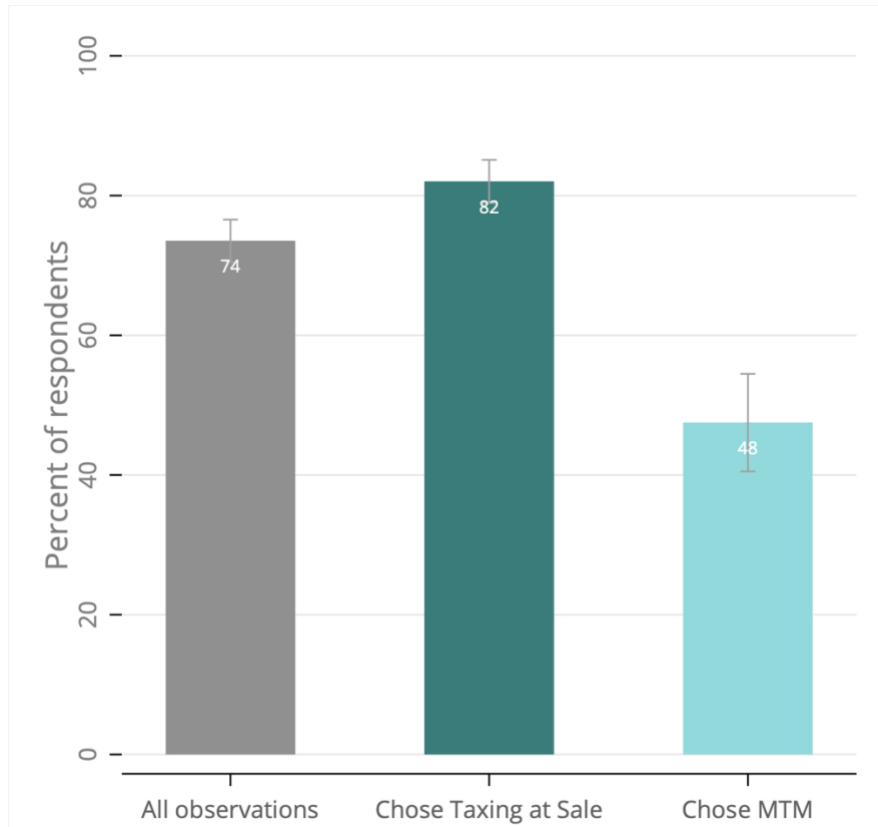
Notes: Bars indicate 95% confidence intervals.

Figure 9: Percent Preferring to Tax Reinvested or Transferred Gains Now Versus at Future Sale – Control



Notes: Bars indicate 95% confidence intervals.

Figure 10: Percent Ignoring Unsold Stock Gains When Tithing



Notes: Control sample only. Bars indicate 95% confidence intervals.

Table 1: Effect of Treatments on Preference for Taxing Unsold Stock Gains

	(1)
	Percent Preferring Taxing Unsold Gains
Both Sides	5.73*** (2.22)
Anti-Tax	-8.34*** (2.39)
Pro-Tax	20.43*** (2.91)
Respond To Objections	15.70*** (2.89)
Mental Accounting	6.85** (2.73)
Anti-Status Quo	5.82** (2.78)
Rich	9.21*** (2.82)
Control	25.21*** (1.50)
Observations	4044
$R^2$	0.028

Robust standard errors in parentheses. Gives results for Q31. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Table 2a: Top 20 Words Associated with Opposing Taxing Unsold Gains - Control

word	t-stat
actual	-6.13
sell	-6.09
gain	-5.43
yet	-4.88
cash	-4.77
realize	-4.77
little	-4.59
hand	-4.30
complicate	-4.30
market	-4.18
stock	-4.16
investment	-3.78
loss	-3.78
sense	-3.72
capital	-3.49
may	-3.36
someone	-3.34
force	-3.34
fluctuate	-3.34
hasnt	-3.18



Table 2b: Top 20 Words Associated with Supporting Taxing Unsold Gains - Control

word	t-stat
get	3.55
wont	2.64
refund	2.40
future	2.33
still	2.05
increase	2.03
run	1.83
back	1.70
thing	1.64
late	1.61
worry	1.52
must	1.52
economy	1.45
share	1.43
responsible	1.42
within	1.42
less	1.42
year	1.34
mean	1.31
help	1.27

## Appendix Tables

Appendix Table 1: Effects of Personal Characteristics on Supporting Taxing Unsold Gains –  
with Demographic Controls

	(1)	(2)	(3)	(4)	(5)
Owns stock in any form (Q106)	-6.66* (3.60)				
Owns stock outside retirement account (Q107)		-6.03* (3.20)			
Correct knowledge of current taxation of unsold stock gains (Q89)			-25.68*** (3.69)		
Unsure of current taxation of unsold stock gains (Q89)			-20.44*** (4.58)		
Understood all/most of survey (Q117)				-14.48*** (4.27)	
Gets financial literacy question correct (Q116)					-7.69** (3.42)
Unsure of financial literacy question (Q116)					-0.57 (5.10)
Constant	25.99* (13.37)	26.25* (13.45)	38.72*** (13.23)	36.14*** (13.67)	29.76** (13.38)
Observations	837	837	837	837	837
<i>R</i> <sup>2</sup>	0.083	0.083	0.14	0.095	0.086

Note: Data from the control survey only. Demographic controls are indicators for education, age, gender, political ideology, and income. Robust standard error in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Appendix Table 2: Effects of Treatments on Reasons to Oppose Taxing Unsold Stock Gains

	(1) Haven't consumed	(2) Liquidity	(3) Taxes too high	(4) Variability	(5) No control over tax	(6) Calculations time-consuming	(7) Unsure of gains	(8) Investment not concluded
Both Sides	-2 (3)	-5* (3)	-2 (3)	0 (3)	2 (3)	3 (3)	-1 (3)	-1 (3)
Anti-Tax	4 (3)	1 (3)	2 (3)	10*** (3)	5* (3)	10*** (3)	5* (3)	2 (3)
Pro-Tax	-15*** (3)	-9*** (3)	-13*** (3)	-10*** (3)	-7** (3)	-10*** (3)	-12*** (3)	-11*** (3)
Respond to Objections	-5 (3)	-5 (3)	-6** (3)	-5 (3)	-3 (3)	-3 (3)	-4 (3)	1 (3)
Mental Accounting	-4 (3)	-1 (3)	-2 (3)	3 (3)	1 (3)	5* (3)	0 (3)	2 (3)
Anti-Status Quo	-2 (3)	1 (3)	-1 (3)	2 (3)	0 (3)	4 (3)	2 (3)	1 (3)
Rich	-12*** (3)	-15*** (3)	-13*** (3)	-10*** (3)	-14*** (3)	-8** (3)	-5* (3)	-15*** (3)
Control	72*** (2)	71*** (2)	70*** (2)	66*** (2)	69*** (2)	65*** (2)	68*** (2)	69*** (2)
Obs	3658	3659	3657	3658	3660	3658	3660	3660
$R^2$	0.014	0.011	0.012	0.016	0.013	0.015	0.01	0.015

Notes: Dependent variables are an indicator for choosing a reason multiplied by 100. Robust standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Appendix Table 3: Effect of Treatments on Reasons to Support Taxing Unsold Stock Gains

	(1)	(2)	(3)	(4)	(5)
	Wages also taxed	Target rich	More tax revenue	Gains are income	Delayed taxes otherwise
Both Sides	-2 (3)	1 (3)	1 (3)	-2 (3)	-1 (3)
Anti-Tax	-13*** (3)	-7** (3)	-10*** (3)	-9*** (3)	-9*** (3)
Pro-Tax	14*** (3)	11*** (3)	15*** (3)	11*** (3)	9*** (3)
Respond to Objections	9*** (3)	2 (3)	7** (3)	6* (3)	4 (3)
Mental Accounting	3 (3)	2 (3)	2 (3)	4 (3)	-3 (3)
Anti-Status Quo	2 (3)	-5 (3)	-3 (3)	-1 (3)	-3 (3)
Rich	11*** (3)	9*** (3)	10*** (3)	17*** (3)	5 (3)
Control	44*** (2)	43*** (2)	50*** (2)	40*** (2)	59*** (2)
Observations	3661	3661	3661	3660	3661
$R^2$	0.023	0.012	0.019	0.022	0.01

Notes: Dependent variables are an indicator for choosing a reason multiplied by 100. Robust standard errors in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

## Appendix – Survey Text

### Yale University Consent Form

You are being invited to take part in a research study. The following information explains why the research is being done and what the research will involve. Please take the time to read the following information carefully.

### **Purpose of the Research:**

We are a non-partisan group of researchers at Yale University and the University of Michigan. Our goal is to learn about people's views about what tax policy should be, particularly how to tax owners of corporate stocks. Your answers will help contribute to our knowledge about these views. You must be eighteen (18) years of age or older to participate.

### **Study Procedures:**

Your participation involves completing a survey, which will take approximately 20 to 30 minutes. You will receive payment if you complete the survey and pass our survey quality checks, which use sophisticated statistical methods to detect incoherent and rushed responses.

**Responding without adequate effort may result in your responses being flagged for low quality, and you may not receive your payment.**

Crucial for the success of our research is that you **read each question carefully and answer honestly**. If you don't know the answer, take your best guess. However, please be sure to spend enough time reading and understanding the questions.

### **Potential Risks:**

There are no known or anticipated risks to you for participating other than a possible loss of confidentiality.

### **Confidentiality:**

All of your responses will be anonymous. Only the researchers involved in this study and research overseers will have access to the information you provide. Your responses will be recorded and stored online. The researchers will not know your name, and no identifying information will be connected to your survey answers in any way. The survey is therefore anonymous. However, your account is associated with a number that the panel administrator must see in order to compensate you, and in some cases these numbers may be associated with public profiles which could, in theory, be searched. For this reason, though the researchers will not be looking at anyone's public profiles, the fact of your participation in the research (as opposed to your actual survey responses) is considered confidential rather than truly anonymous.

### **Contact Information:**

If you have any questions about this study, you may contact:

**Professor Zachary Liscow  
Principal Investigator  
Yale Law School**

**zachary.liscow@yale.edu**

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact:

**Yale University Human Subjects Committee**

**203-785-4688**

**human.subjects@yale.edu**

Additional information is available at <https://your.yale.edu/researchsupport/human-research/research-participants/rights-researchparticipant>.

**Voluntary and Informed Consent:**

Participation in this study is completely voluntary. You are free to decline to participate, to end participation at any time for any reason, or to refuse to answer any question without penalty.

1. Do you agree to participate in this study?

**YES**, I would like to participate in this study, and I confirm that **I am a U.S. resident** and that **I am at least 18 years old**.

**NO**, I would not like to participate.

**I. Demographic Questions**

2. How many people usually live in your household? Please include yourself in the count.

*1 (Just me); 2; 3; 4; 5; 6; 7; 8+*

3. What was your total household income, before taxes, in 2019?

*Less than \$13,000; \$13,000 to \$14,999; \$15,000 to \$19,999; \$20,000 to \$24,999; \$25,000 to \$34,999; \$35,000 to \$49,999; \$50,000 to \$74,999; \$75,000 to \$99,999; \$100,000 to \$149,999; \$150,000 to \$199,999; \$200,000 and over*

4. Are you currently a student?

*Yes, enrolled full time; Yes, enrolled part time; No*

5. What is your age?

*18-24; 25-34; 35-44; 45-54; 55-64; 65-74; 75+*

6. In what state or territory do you live?

*Alabama; Alaska; American Samoa; Arizona; Arkansas; California; Colorado; Connecticut; Delaware; District of Columbia; Florida; Georgia; Guam; Hawaii; Idaho; Illinois; Indiana; Iowa; Kansas; Kentucky; Louisiana; Maine; Maryland; Massachusetts; Michigan; Minnesota; Mississippi; Missouri; Montana; Nebraska; Nevada; New*

*Hampshire; New Jersey; New Mexico; New York; North Carolina; North Dakota; Northern Mariana Islands; Ohio; Oklahoma; Oregon; Pennsylvania; Puerto Rico; Rhode Island; South Carolina; South Dakota; Tennessee; Texas; U.S. Virgin Islands; Utah; Vermont; Virginia; Washington; West Virginia; Wisconsin; Wyoming; Other*

7. In what zip code do you live?

*Free response*

8. Do you consider yourself Hispanic or Latino/a?

*Yes; No*

9. How would you describe yourself? Please pick all that apply.

*Asian; Black or African American; White or Caucasian; Other (please specify); Prefer not to say*

10. What is your gender?

*Male; Female; Other; Prefer not to say*

11. What is the highest degree or level of education you have completed? If you are currently enrolled, please indicate the highest degree you have received.

*Less than a high school diploma; High school degree or equivalent (e.g. G.E.D.); Some college, no degree; Associate degree; Bachelor's Degree; Master's degree; Professional degree (e.g. M.D., J.D.); Doctorate*

12. Are you currently employed?

*Yes, part-time; Yes, full-time; No*

13. Are you currently married?

*Yes; No*

14. What do you consider to be your political affiliation?

*Republican; Democrat; Independent; Other*

15. Which of the following best describes your political beliefs?

*Strongly liberal; Moderately liberal; Slightly liberal; Neither liberal nor conservative; Slightly conservative; moderately conservative; Strongly conservative*

16. Did you vote in the presidential election in 2020?

*Yes; No; Unsure*

## II. Introductory Materials

17. Many questions in this survey ask how you think “stocks” should be taxed. When a person owns stock, that means that she owns a small piece, or “share,” of a company that can increase or decrease in value depending on how well the company is doing.

In this survey, we are talking about stock in large companies like Apple or Disney. Specifically, many people in our questions buy stock in Grocery Corporation (abbreviated

“Grocery Co.”). Grocery Co. is not a real company, but assume that it is a large grocery store chain, whose stock trades in the stock market.

After someone buys stock, she will own it until she sells it. She might sell it a few days after buying it, or wait several years or even decades, to sell it.

Assume that this stock is *not* part of a retirement account like an IRA or 401(k).

### **Comprehension Questions**

**18.** To start, consider questions about how two policies would affect taxpayers.

**Policy 1:** People must pay income tax on increases in the value of their stocks **each year**, even if they **do not sell** the stocks.

Suppose that Pamela bought stock in Grocery Co. last year. It increases in value by \$50,000 this year. She **does not sell** the stock.

Under this policy, does Pamela need to pay income tax this year on the \$50,000 increase in the value of the stock?

*Yes; No* [89% correct]

[If respondents answer yes: “**Correct.** Under this policy, Pamela **must pay** income tax this year on the \$50,000 increase in her stock value, even though she **does not sell** the stock.”]

[If respondents answer no: “**Incorrect.** Under this policy, Pamela **must pay** income tax this year on the \$50,000 increase in her stock value, even though she **does not sell** the stock.”]

**19. Policy 2:** Instead of Policy 1, people only have to pay income tax on increases in the value of their stocks **when they sell** those stocks.

Suppose that Pamela bought stock in Grocery Co. last year. It increases in value by \$50,000 this year. She **does not sell** the stock.

Under this policy, does Pamela need to pay income tax this year on the \$50,000 increase in the value of the stock?

*Yes; No* [89% correct]

[If respondents answer yes: “**Incorrect.** Under this policy, Pamela **does not pay** income tax on the increase in the value of her stock **until she sells it later.**”]

[If respondents answer no: “**Correct.** Under this policy, Pamela **does not pay** income tax on the increase in the value of her stock **until she sells it later.**”]

**20. To help improve our tax policy, we want to know your opinion on how people should be taxed.**

In the upcoming questions, we will tell you about people in various situations and propose a policy for how they should be taxed.

Carefully consider each set of facts and proposed policies. Then tell us your opinion. There are no right or wrong answers.

[High asset treatment does not get the remainder of this screen]



Each proposed policy would apply to everyone in similar situations to the person in the question.

For example, a question might say: “Sam bought a car” and propose that Sam pay a 1% sales tax. In that example, you should assume that the policy would require **all car buyers** to pay a 1% sales tax.

21. [for high-asset survey]

**We are specifically interested in knowing your opinion of how wealthy people should be taxed.** In particular, we are asking you about the taxation only of those who have over \$10 million in wealth, which puts them in the top 1% of American households.

The policies we ask you to consider will apply only to these wealthy Americans, and not to people with less than \$10 million in wealth. For example, a question might say: “Sam bought a car” and propose that Sam pay a 1% sales tax. In that example, you should assume that the policy would require **all car buyers with at least \$10 million of wealth** to pay a 1% sales tax.

[Going forward, a box will appear in all policy scenarios, saying: “**Remember: this policy [“these policies” if multiple policies] would only apply to people with over \$10 million of wealth.**”]

### III. Persuasion Treatments

[Some respondents are randomized into one of these treatments. They will be videos, with the actor in the video randomized across participants.]

22. Template (3 screens):

[Keep names constant here, so no name randomization.]

[1<sup>st</sup> Screen (text)]:

**Facts:** Suppose that Mary bought stock in Grocery Co. at the end of last year.

This year, Mary’s stock in Grocery Co. goes up in value by \$50,000. She **does not sell** any of her stock.

**Proposed Policy:** Mary pays income tax **this year** on the \$50,000 increase in her stock, even though she **does not sell** it.

If her stock later goes back down in value, these taxes are refunded. And, because her gains have already been taxed, she will not have to pay tax on them again when she sells her stock.

[Text unique to each treatment, introducing the video(s). See below.]

[2<sup>nd</sup> screen (text and video)]:

Written:

Simplified Facts: Mary’s stock goes up by \$50,000 this year, but she does not sell.

Proposed Policy: Mary pays tax this year on the \$50,000 increase.

Video:

[text from below]

Written:

The video is approximately one minute. The “next” button will appear when it is finished playing.

[3<sup>rd</sup> screen (text)]:

Thank you for watching. One of the next two questions is on this policy, and some subsequent questions are on variants of this policy.

### 23. B. Persuasion Treatment 2: Pro-Tax Policy Stakes

Please click the “next” button to see a video of an expert describing arguments for this proposed policy.

[Video:]

“This tax is fair. It ensures that everyone—including the rich—pays their fair share, on-time. And it would provide revenue the government can use to strengthen the economy and help its citizens.

Most people are taxed on their *entire income* every year, because their income comes from wages. But there’s a loophole for people owning stocks—who are mostly rich. They are *not* taxed on increases in their stock each year. Instead, they pay tax only when they choose to sell the stock later. And, of course, people prefer paying taxes far in the future to paying today. This means that Mark Zuckerberg can see his Facebook stock go up by **billions of dollars** without paying **any** tax. This is unfair because, by contrast, someone who earns *wages* must pay taxes now. This tax closes that loophole. It makes sure that everyone pays tax when they get richer, whether that income comes from wages or increases in stock value.”

### 24. C. Persuasion Treatment 3: Anti-Policy Stakes

Please click the “next” button to see a video of an expert describing arguments against this proposed policy.

[Video:]

“This is an unfair and radical tax. It would mean taxing something that is just not income. If investors have not sold their stocks, they have not gotten the benefit of their investment yet. They do not even know how much they will eventually make or lose. Worse, investors would have to pay tax even though they have no control over the amount they earn in the stock market. Because the stock market is volatile, they could end up with big surprise tax bills. And some people would actually have to sell their stocks to pay the tax. This would all make the tax system even more complicated and time consuming. Finally, it would punish middle-class families who have stocks they are depending on and job-creators whose investments benefit all of us.”

## 25. E. Persuasion Treatment 5: Both-Sides of Mark-to-Market Taxation of Stocks

Please click the “next” button to see two videos of experts describing arguments for and against this proposed policy.

[Randomize order of videos (with closed captions) of arguments – one is read by Zach; the other is read by Audrey, and both will record a version of each side.]

One person says this: [pro-tax policy]

Another person says this: [anti-tax policy]

## 26. A. Persuasion Treatment 1: Responding to objections on mechanics of MTM

Text at bottom of first page:

Please click the “next” button to see a video of an expert describing arguments in favor of this proposed policy.

Video:

**“Taxing stock gains each year, even if the stocks are not sold, is a good policy for four reasons.**

**First, this tax is fair.** Compare Mary to John, who makes \$50,000 in wages. *John* must pay tax on his wages this year. Like John, Mary got richer by \$50,000 and this tax ensures they *both* pay tax this year on that amount.

**Second, this tax is steady over time,** since people pay tax gradually as stock increases occur. By contrast, waiting to tax people until they sell produces big tax bills because, by then, they have multiple years of gains to pay tax on.

**Third, this tax is simple to calculate** because of technology today. People would get a statement each year telling them how much their stocks increased, so that they know how much tax they owe.

**Fourth, this tax is easy to pay.** Usually people can pay the tax from their bank account. But they always have another option. They can pay the tax simply by selling some of their stock that has gone up in value. And selling has very low fees in today’s markets.”

## 27. D. Persuasion Treatment 4: Mental accounting → Horizontal Equity

Please click the “next” button to see a video of an expert providing information relating to this proposed policy.

[Video]

“Mary’s \$50,000 increase in stock value should be taxed the same as if she’d made \$50,000 from her job. Economically, there’s **no meaningful difference**. So, the tax should be the same. Yes, she has not sold her stock *yet*. But Mary can sell her stock at any time, with no fees. This would give her the *same amount of cash as the job*.

Here's a different angle: imagine Mary did not have the stock gain, but *had* earned \$50,000 from her job. **That would not really change her position.** Mary could just invest her \$50,000 of wages in the stock, **and she'd be in the exact same position as now.**

Whether Mary makes \$50,000 from her job or from seeing her stocks go up, the bottom line is the same: she's \$50,000 better off. And she can spend it or invest it. So, Mary should be taxed the same in either case."

## 28. F. Anti-status-quo treatment

Please click to see a video of an expert comparing this policy to how other assets are taxed today.

[Video]

"Today, under current law, many assets are taxed on changes in value each year, even if they are not sold.

- For example, when people buy certain assets that are similar to stocks, they must pay income tax on increases in the value of those assets each year, even if they do not sell the asset.
- Similarly, when people buy a commercial building, they can reduce their taxes each year to account for the building wearing out and losing value over time, even though they do not sell the building."

## IV. Stock Module

### A. Baseline Stock Questions

[Randomize the order of the quasi-control and quasi-treatment.]

#### 29. (Quasi-Control) Tax Sold Stock

**Facts:** Suppose that Amy bought stock in Grocery Co. at the end of last year.

This year, Amy's stock in Grocery Co. goes up in value by \$50,000 ["\$1 million" for rich treatment]. At the end of this year, she **sells** her stock in Grocery Co.

**Proposed Policy:** Amy pays income tax **this year** on the \$50,000 ["\$1 million" for rich treatment] increase in stock value.

Do you support or oppose this policy? [The order of the "support" and "oppose" is always randomized.]

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose*

[The order "support" and "oppose" is always randomized in the answer choices.]

[74% support (all results are from the control treatment only, unless otherwise noted)]

#### 30. (Quasi-Treatment) Tax Unsold Stock

**Facts:** Suppose that Mary bought stock in Grocery Co. at the end of last year.

This year, Mary’s stock in Grocery Co. goes up in value by \$50,000 [“\$1 million” for rich treatment]. She **does not sell** any of her stock.

**Proposed Policy:** Mary pays income tax **this year** on the \$50,000 [“\$1 million” for rich treatment] increase in her stock, even though she does not sell it.

If Mary’s stock later goes back down in value, these taxes are refunded. And, because her gains have already been taxed, she will not have to pay tax on them again when she sells her stock.

Do you support or oppose this policy?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose [45% support]*

### 31. **Baseline Head-to-head choice**

**Facts:** Suppose that Mary bought stock in Grocery Co. at the end of last year.

This year, Mary’s stock in Grocery Co. goes up in value by \$50,000 [\$1 million for rich treatment]. She **does not sell** any of her stock.

The government is choosing between two policies for taxing people like Mary. **Which do you prefer?** [make each option clickable]

#### **Option 1**

- Mary pays income tax on increases in her stock only **when she sells** her stock in the future.

#### **Option 2 [25% support]**

- Mary pays income tax **this year** on the increase in her stock, even though she **does not sell** it.
- If her stock later goes back down in value, these taxes are refunded. And, because gains have already been taxed, she will not have to pay tax on them again when she sells her stock.

### **B. Free-form Reasoning**

32. [If chose MTM option]: You said that you prefer for Mary to pay income tax on the increase in the value of her stock **this year**, even though she **does not sell** it.

Why do you prefer taxing her this way?

*Free response*

[If chose non-MTM option]: You said that you prefer for Mary to pay income tax on increases in the value of her stock only **when she sells** it in the future.

Why do you prefer taxing her this way?

*Free response*

### C. Structured Reasoning

33. [broken up into three screens: 2 for disadvantages, 1 for advantages; in randomized order. Always have either all the advantages or all the disadvantages first.] [Randomize these in for control & both-sides: 75% of people do get it, and 25% don't For all other treatments, all respondent receive it.]

Thank you for giving us your reasoning. Now, we want to learn-more about which factors mattered to you as you decided which policy to choose. On the next three screens, you will see potential advantages and disadvantages of taxing ["people with more than \$10 in wealth on their" for rich]stock increases each year, even if the stock is not sold. Please tell us whether you agree or disagree that these are important advantages or disadvantages of this tax policy.

34. **In my opinion, an important disadvantage** of taxing unsold stock increases each year ["for those who have over \$10 of wealth"] is that...

- a. *...it creates a lot of a variability in how much tax a person must pay each year since stocks are volatile. [66% agree]*
- b. *...people are taxed even though they do not have control over the amount that they earn in the stock market. [69% agree]*
- c. *...people are taxed even though they do not have money to pay the tax if they have not sold the stocks. [71% agree]*
- d. *...it would be time-consuming for people to calculate gains and losses each year to pay taxes. [65% agree]*
- e. *...people are taxed before they get the benefit of their investment: being able to use the money from a sale to pay for their expenses. [72% agree]*
- f. *...people should not be taxed until they conclude their investment by selling the stock. [69% agree]*
- g. *...taxes on stocks and investments are too high already and this policy would further discourage investment. [70% agree]*
- h. *...instead of waiting for a sale, the policy taxes investors before they know how much they will eventually make on it. [68% agree]*

**In my opinion, an important advantage** of taxing unsold stock increases each year ["for those who have over \$10 of wealth" for rich] is that...

- a. *...wages and other forms of income are taxed every year, and this policy treats stock increases the same way: it taxes them each year. [44% agree]*
- b. *...increases in stock prices mostly benefit the rich, and we should pursue more ways like this policy to make the rich pay more tax. [43% agree]*
- c. *...it creates more tax revenue for the government to use to improve the economy and help its citizens. [50% agree]*
- d. *...people whose stock goes up in value get richer, so they have income and should be taxed. [40% agree]*

e. ...without it, stockowners can delay paying tax for years. [59% agree]

Agree; Unsure; Disagree

### 35. Loss stock

**Facts:** Suppose that Ned bought stock in Grocery Co. at the end of last year.

This year, Ned's stock in Grocery Co. goes down in value by \$50,000 ["\$1 million" for rich]. He **does not sell** any of his stock.

The government is choosing between two policies for taxing people like Ned. **Which do you prefer?**

#### Option 1

- Ned reduces his income taxes to reflect decreases in his stock value only **when he sells** his stock in the future.

#### Option 2 [30% support]

- Ned reduces his income taxes **this year** to reflect the decrease in stock value, even though he **does not sell** his stocks.
  - If Ned's stocks go up in value in the future, he will also pay taxes on those increases each year, even if he **does not sell** his stock.

### 36. Attention Question

To facilitate our research on decision-making, we are interested in knowing certain factors about you, the decision maker. Specifically, we are interested in whether you have taken the time to read the directions; if not, then some of our questions that rely on changes in the instructions will be ineffective. So, in order to demonstrate that you have read the instructions, please ignore the question below and simply put the slider to 15. Thank you very much.

Bearing in mind the instructions above, out of 100 adults in the U.S., how many are currently paying any income tax at all?

*Slider, 0-100, in increments of 5. [68% got this question correct and were able to continue.]*

### D. Mental Accounting Questions

[Include for all treatments.]

#### 37. Tithing:

The survey has asked you several questions about how stocks should be taxed.

The next few questions are not about taxes, but instead about what you would do in various situations, if you owned stock.

Suppose you belong to an organization that requires members to give 10% of each year's income to certain charities. You intend to give exactly 10% to these charities.

Imagine that your salary is \$80,000 this year. In addition, you own some stocks, which go up by \$20,000 this year. You **do not sell** any of the stock.

How much would you donate to the charities this year?

\$8,000 [70%]; \$10,000 [25%]; *Other amount: please specify* [4%]

**“Mailbox Effect” [Order of next 2 questions randomized and on different pages]**

[First screen: “Suppose that the pandemic is over and you have long wanted to take a family vacation that costs about \$2,000, but your budget has been too tight to take the trip.”]

[Second screen: “Suppose again that the pandemic is over and you have long wanted to take a family vacation that costs about \$2,000, but your budget has been too tight to take the trip.”]

**38.** Suppose, in addition, [if question appears second: replace “, in addition,” with “, instead of the stock from the last screen,”] that you own stock in Grocery Co.

- It goes up by \$2,000 this year.
- Assume you will owe no tax whenever you sell your stock.

Would you sell \$2,000 worth of your Grocery Co. and pay for the vacation?

*Yes* [36%]; *No*

**39.** Suppose, in addition, [if question appears second, replace “, in addition,” with “, instead of the stock from the last screen,”] that you own stock in Beverages Inc., which is another company whose stock trades in the stock market.

- The stock price is flat this year, but it pays a \$2,000 dividend check to you at the end of the year. A dividend is cash that a company pays to its shareholders.
- Assume you will owe no tax on it.

Would you use the \$2,000 dividend check and pay for the vacation?

*Yes* [71%]; *No*

**Transition to next module**

**40.** The survey now asks more questions about how stocks should be taxed.

Many questions going forward are about policies for taxing stocks that have gone up in value but have **not been sold**.

Assume that these policies are like the ones you saw earlier for taxing unsold stock in two ways:

1. If the stocks later go back down in value, the taxes paid earlier are refunded.
2. Because the increases in people’s stocks have already been taxed, they will not have to pay tax on them again when they sell their stock.

After reading, please proceed to the next screen.

**D. Consumption Tax Intuitions**

**Borrowing and Freed-up Income**

[Randomized into control & both-sides. Everyone else gets this.]



**41. Facts:** Suppose that Christina bought stock in Grocery Co. at the end of last year. The value of the stock goes up by \$50,000 [\$1 million] this year.

Christina does not want to sell her stock. But she does want to use some of the increase in the value of her stock to pay for personal expenses.

So, instead of selling, she takes out a loan from a bank. She borrows \$40,000 [\$800,000], promising the bank that it can take her stock if she does not repay the loan.

She then spends the \$40,000 [\$800,000] on her personal expenses. She **does not sell** any of the stock.

The government is choosing between two policies for taxing Christina. **Which do you prefer?**

**Option 1**

Christina pays income tax on increases in her stock only **when she sells** her stock in the future.

**Option 2** [36% support]

Christina pays income tax on increases in her stock if **she sells** it or if she **uses the stock to borrow**.

So, she pays income tax **this year** on \$40,000 [\$800,000] of her stock increase.

**Other Consumption Questions**

[Everyone gets this]

**42. Facts:** Stephanie bought stock in Grocery Co. at the end of last year.

This year, Stephanie's stock in Grocery Co. goes up in value by \$50,000 [\$1 million]. At the end of this year, she **sells** her stock in Grocery Co.

The government is choosing between two policies for taxing people like Stephanie. **Which do you prefer?**

**Option 1** [78% support]

Stephanie pays income tax **this year** on the \$50,000 [\$1 million].

**Option 2**

Stephanie **never** pays income tax on the \$50,000 [\$1 million].

[Randomized into control & both-sides. Everyone else gets this.]

**43. Facts:** Amelia bought stock in Grocery Co. at the end of last year.

This year, Amelia's stock in Grocery Co. goes up in value by \$50,000 [\$1 million]. At the end of this year, she **sells** her stock in Grocery Co.

Amelia **reinvests** the money in a different stock.

The government is choosing between two policies for taxing people like Amelia. **Which do you prefer?**

**Option 1**

Amelia pays income tax **this year** on the \$50,000 [\$1 million].

**Option 2** [58% support]

Amelia pays income tax on the \$50,000 [\$1 million] only **when she sells the new stock and spends the money** in the future.

[Randomized into control and both sides. Everyone else gets this.]

**44. Facts:** George earns \$50,000 in his job this year as wages. He spends \$40,000 of it on personal expenses and saves \$10,000 [\$200,000].

The government is choosing between two policies for taxing George. **Which do you prefer?**

**Option 1**

George pays income tax **this year** on his \$50,000 [\$1 million] of wages.

**Option 2** [73% support]

George pays income tax **this year** on the \$40,000 [\$800,000] of his wages he spent.

He pays income tax on the \$10,000 [\$200,000] he saved only **when he spends it** in the future.

**E. Equivalent Liquidity Pairing**

[Randomize in block to control and 1000-person both-sides; exclude from other treatments.]

**45. [in a box with red font] Facts:** Suppose that Megan purchased \$30,000 of stock in Grocery Co. and \$80,000 of stock in Beverages Inc. at the end of last year.

This year, Megan’s stock in Grocery Co. goes up in value by \$50,000, while her stock in Beverages Inc. is flat. This is shown in the table:

	Megan's Purchase Price (End of Last Year)	Current Value (End of This Year)
Grocery Co.	\$30,000	\$80,000
Beverages Inc.	\$80,000	\$80,000

We will ask you two questions regarding these facts, which will be shown in this same box.  
[Randomize order of the next two questions]

**46. [Box with facts at the top]**

Suppose that [“instead,” if shown second] Megan **sells** her stock in Grocery Co. at the end of this year for \$80,000. Recall that this is \$50,000 more than she bought it for.

She **does not sell** her stock in Beverages Inc.

So, at the end of this year, she has \$80,000 in cash from the stock sale and \$80,000 in stocks.

Do you support or oppose Megan having to pay income tax this year on the increase in the value of her stocks?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose [71% support]*

**47. [Box with facts at the top]**

Suppose that [“instead,” if shown second] Megan **sells** her stock in Beverages Inc. at the end of this year for \$80,000, which is what she paid for it originally.

She **does not sell** any of her Grocery Co. stock.

So, at the end of this year, she has \$80,000 in cash from the stock sale and \$80,000 in stocks.

Do you support or oppose Megan having to pay income tax this year on the increase in the value of her stocks?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose [41% support]*

**F. Liquidity Offered through the Tax System**

[Randomize in one of the next two questions to control & 1000-person both-sides.]

**48. Facts:** Suppose Jessica bought stock in Grocery Co. at the end of last year. This year, the value of the stock goes up by \$50,000 [\$1 million]. She **does not sell** any of the stock.

The government is choosing between two policies for taxing people like Jessica. **Which do you prefer?**

**Option 1**

- Jessica pays income tax on increases in her stock only **when she sells** her stock in the future.

**Option 2 [28% support]**

- Jessica can decide whether to:
  - 1. Pay income tax **this year** on the \$50,000 [\$1 million] increase in stock value.
  - OR
  - 2. Wait to pay tax **until she sells the stock** in the future. But if she waits, she'll have to pay interest on the delayed tax.

**49. Facts:** Suppose that Ashley bought stock in Grocery Co. four years ago.

For the first two years, Ashley's stock in Grocery Co. went up by \$150,000 [\$3 million] each year. Last year and this year, it went down by \$50,000 [\$1 million] each year. She **does not sell** any of her stock.

The government is choosing between two policies for taxing people like Ashley. **Which do you prefer?**

**Option 1**

- Ashley pays income tax on increases in her stock only **when she sells** her stock in the future.

### Option 2 [26% support]

- Ashley pays income tax **each year** on increases in the value of stock, even if she does not sell.
  - But—to reduce the variability of how much tax people owe—the tax is based on her **average** change in stock value over the last 4 years.
  - So, Ashley would owe income tax this year on \$50,000 [\$1 million], which is the average of the changes in her stock value over the last 4 years.

## H. Taxing upon Gift or Death

[Include in control, both-sides, and rich. Exclude from other treatments.]

**50. Facts:** Edna bought stock in Grocery Co. at the end of last year. This year, Edna’s stock in Grocery Co. goes up in value by \$50,000 [“\$1 million” for rich treatment]. She **does not sell** any of her stock.

Unfortunately, at the end of this year, Edna dies.

The government is choosing between two policies for taxing Edna’s \$50,000 [“\$1 million” for rich treatment] increase in stock value. **Which do you prefer?**

### Option 1 [49% support]

- Income tax is paid **this year** from Edna’s bank account, before it is given to her heirs.
- But Edna’s heirs **never** pay income tax on the \$50,000 [“\$1 million” for rich treatment].

### Option 2

- **No income tax** is paid from Edna’s bank account.
- But Edna’s heirs pay income tax on the \$50,000 [“\$1 million” for rich treatment] **when they sell the stock** in the future.

**51. Facts** (which are the same as the previous facts, but note that the policy options are different): Edna bought stock in Grocery Co. at the end of last year. This year, Edna’s stock in Grocery Co. goes up in value by \$50,000 [“\$1 million” for rich treatment]. She **does not sell** any of her stock.

Unfortunately, at the end of this year, Edna dies.

The government is choosing between two policies for taxing Edna’s \$50,000 [“\$1 million” for rich treatment] increase in stock value. **Which do you prefer?**

### Option 1 [64% support]

- Income tax is paid **this year** from Edna’s bank account, before it is given to her heirs.
- But Edna’s heirs **never** pay income tax on the \$50,000 [“\$1 million” for rich treatment].

### Option 2

- **No one ever pays** income tax on the gains [“\$1 million” for rich treatment].

**52. Facts:** Jason bought stock in Grocery Co. at the end of last year. This year, Jason’s stock in Grocery Co. goes up in value by \$50,000 [“\$1 million” for rich treatment]. He **does not sell** any of his stock.

At the end of this year, Jason gives the Grocery Co. stock to his daughter.

The government is choosing between two policies for taxing Jason and his daughter. **Which do you prefer?**

**Option 1** [41% support]

- Jason pays income tax **this year** on the \$50,000 [“\$1 million” for rich treatment] increase in stock value.
- Jason’s daughter **never** pays income tax on \$50,000 [“\$1 million” for rich treatment].

**Option 2**

- Jason **never** pays income tax on the \$50,000 [“\$1 million” for rich treatment] increase in stock value.
- Jason’s daughter pays income tax on the \$50,000 [“\$1 million” for rich treatment] **when she eventually sells the stock** in the future.

**I. Taxing Expected Gains**

[Randomized in to control & 1000-person both-sides. Excluded from other treatments.]

**53.** The prices of stocks go up and down, and gains from stocks may quickly disappear. Nevertheless, while the stock market has good and bad years, it has grown an average of 8% per year for the past 100 years.

Now consider the following facts and proposed policy:

[same screen]

**Facts:** Suppose that Ashley bought Grocery Co. stock at the end of last year. It increased in value by 10% this year. She **does not sell** the stock.

Erica bought Beverages Inc. stock at the end of last year. It increased in value by 5% this year. She **does not sell** the stock.

The government is choosing between two policies for taxing people like Ashley and Erica. **Which do you prefer?**

**Option 1**

- Ashley and Erica pay income tax on increases in their stock only **when they sell** their stock in the future.

**Option 2** [20% support]

- To provide people certainty about their tax bills, the government will always assume that stock owners earn an 8% profit on their stocks.
- So Ashley and Erica pay income tax **this year** on 8% of the value of their stocks, even though they **do not sell**.

[Everyone gets this.]

**54. Facts:** Suppose that George makes \$50,000 [“\$1 million” for rich treatment] in wages this year.

Suppose also that Larry’s Grocery Co. stock goes up by \$50,000 [“\$1 million” for rich treatment] in value, but he **does not sell** it.

The government is choosing between two policies for taxing people like Larry and George. **Which do you prefer?**

### Option 1

George pays income tax **this year** on his wages.

Larry pays income tax on the increase in his stock only **when he sells** it in the future.

### Option 2 [24% support]

George pays income tax **this year** on his wages.

Larry pays income tax **this year** on the increase in his stock, even though he **does not sell** it.

## J. Wealth vs. Income Taxation

[Randomize in one of the next two questions to control & 1000-person both-sides, and exclude from other treatments: a new mark-to-market tax and an equivalent wealth tax.]

**55. Facts** [“(which are the same as on the previous screen)” if shown second]: Jennifer bought stock in Grocery Co. for \$500,000 at the end of last year.

At the end of this year, the stock is worth \$550,000, an increase in value of \$50,000. She **does not sell** any of the stock.

[If this question appears second, “Suppose that the policy on the previous screen is not adopted.”]

**Proposed Policy:** Jennifer’s state government requires her to pay income tax at the end of the year on the \$50,000 increase in value. The tax rate is 11%, so that she would pay \$5,500 in taxes. She does not pay tax on the \$50,000 increase in stock value when she sells the stock.

Do you support or oppose this policy?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [38% support]

**56. Facts:** [repeated]

[If this question appears second, “Suppose that the policy on the previous screen is **not adopted.**”]

**Proposed Policy:** Jennifer’s state government requires her to pay a wealth tax at the end of the year. The tax is 1% of the value of stock at the end of the year (\$550,000), so that she would pay \$5,500 in taxes. She does not pay tax on the \$50,000 increase in stock value when she sells the stock.

Do you support or oppose this policy?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [38% support]

## V. Other Asset Module

[The order of these questions is randomized, after the first orienting line. We first randomize the order of the pairs of questions, and then we randomize the order within each pair. Randomize in this module to control & both-sides; exclude from other treatments.]

**57.** You have been asked about taxation regarding stocks. Now you will be asked about the taxation of other types of assets that people own, along with stocks.

Many questions are about policies for taxing assets that have gone up in value but have **not been sold**. Assume that these policies are like the one you saw earlier on taxing unsold stock in two ways:

1. If the assets later go back down in value, the taxes paid earlier are refunded.
2. Because the increases in people’s assets have already been taxed, they will not have to pay tax on them again when they sell their asset.

### **A. Commercial Real Estate**

[Next 2 in anti-status quo treatment]

**58.** (Control - carryover)

**Facts:** Suppose that last year George bought an apartment building as an investment. This year—although George does not make any improvements to the building—its value rises by \$50,000 because of rising real estate values in the neighborhood. He **sells** the building and uses the cash to buy another apartment building.

The government is choosing between two policies for taxing George. **Which do you prefer?**

#### **Option 1**

George pays income tax on the \$50,000 only **when he sells the second building** in the future.

#### **Option 2** [63% support]

George pays income tax **this year** on the \$50,000.

**59.** (Treatment)

**Facts:** Suppose that last year Alex bought an apartment building as an investment. This year—although Alex does not make any improvements to the building—its value rises by

\$50,000 because of rising real estate values in the neighborhood. He **does not sell** the building.

The government is choosing between two policies for taxing Alex. **Which do you prefer?**

**Option 1**

Alex pays income tax on the increase in the value of his building only **when he sells** it in the future.

**Option 2** [23% support]

Alex pays income tax **this year** on the increase in the value of his building, even though he **does not sell** it.

**B. Private Business**

**60.** (Control – never-tax)

**Facts:** Suppose last year Richard bought a small business. This year—although Richard does not make any new investments in the business—the value of his business rises by \$50,000. He **sells** the business.

The government is choosing between two policies for taxing Richard. **Which do you prefer?**

**Option 1** [76% support]

Richard pays income tax **this year** on the \$50,000.

**Option 2**

Richard **never** has to pay income tax on the \$50,000.

**61.** (Treatment)

**Facts:** Suppose last year James bought a small business. This year—although James does not make any new investments in the business—the value of his business rises by \$50,000. He **does not sell** the business.

The government is choosing between two policies for taxing people like James. **Which do you prefer?**

**Option 1**

James pays income tax on the increase in the value of his small business only **when he sells** it in the future.

**Option 2** [31% support]

James pays income tax **this year** on the increase in the value of his small business, even though he **does not sell** it.

**C. Personal Real Estate**

**62.** (Control – never-tax)



**Facts:** Suppose Justin bought his home three years ago. Although Justin does not make any improvements to the home, its value rises by \$50,000 because of rising real estate values in the neighborhood. This year, he sells his home.

The government is choosing between two policies for taxing people like Justin. **Which do you prefer?**

**Option 1** [64% support]

Justin pays income tax this year on the \$50,000.

**Option 2**

Justin never has to pay income tax on the \$50,000.

**63. (Control - carryover)** [always after previous question]

**Facts:** Suppose Justin bought his home three years ago. Although Justin does not make any improvements to the home, its value rises by \$50,000 because of rising real estate values in the neighborhood. This year, he sells his home and uses the money to buy a new home.

The government is choosing between two policies for taxing people like Justin. **Which do you prefer?**

**Option 1**

Justin pays income tax this year on the \$50,000.

**Option 2** [51% support]

Justin pay income tax on the \$50,000 only when he sells the new home in the future.

**64. (Treatment)**

**Facts:** Suppose last year Danielle bought her home. This year—although Danielle does not make any improvements to the home—its value rises by \$50,000 because of rising real estate values in the neighborhood. She does not sell it.

**The government is choosing between two policies for taxing people like Danielle. Which do you prefer?**

**Option 1**

Danielle pays income tax on the increase in the value of her home only when she sells it in the future.

**Option 2** [19% support]

Danielle pays income tax this year on the increase in the value of her home, even though she does not sell it.

**D. Art**

**65. (Treatment)**

**Facts:** Suppose last year Alice bought a valuable painting, which she hangs in her home. This year, the value of her painting rises by \$50,000, but she does not sell it.

**The government is choosing between two policies for taxing people like Alice. Which do you prefer?**

**Option 1**

Alice pays income tax on the increase in the value of her art only **when she sells** it in the future.

**Option 2** [17% support]

Alice pays income tax **this year** on the increase in the value of her art, even though she **does not sell** it.

**E. Publicly-Traded Stocks**

[Randomize this in along with the rest of the other-assets module, but have after the single assets, but before the all assets.]

**66. Facts:** Stephanie bought stock in Grocery Co. at the end of last year.

This year, Stephanie's stock in Grocery Co. pays her a dividend of \$50,000. At the end of this year, she **sells** her stock in Grocery Co.

The government is choosing between two policies for taxing people like Stephanie. **Which do you prefer?**

**Option 1** [80% support]

Stephanie pays income tax **this year** on the \$50,000.

**Option 2**

Stephanie **never** pays income tax on the \$50,000.

**F. All Assets**

**67. (Treatment)**

**Facts:** Suppose that this year, Robert's assets increase in value by \$50,000 in total. His assets include: some corporate stocks, a business he runs, a painting, an apartment building he owns, and his home. He **does not sell** any of them.

The government is choosing between two policies for taxing Robert. **Which do you prefer?**

**Option 1**

Robert pays income tax on the increase in the value of his assets only **when he sells** them in the future.

**Option 2** [24% support]

Robert pays income tax **this year** on the increase in the value of his assets, even though he **does not sell** any of them.

**G. Other Questions**

[Randomize in one of these questions into control & both-sides. Include both questions in anti-status quo Exclude from others.]

68. [For people who did not receive other asset module] You have been asked about taxation regarding stocks. Now you will be asked a question about the taxation of another type of asset that people own.

69. (Depreciation)

**Facts:** Suppose that last year Edward bought an apartment building that he now rents out to others. Buildings wear out over time in relatively predictable ways. The government estimates that this year, wear and tear decreases the value of the building by \$50,000. He **does not sell** the building.

The government is choosing between two policies for taxing people like Edward. **Which do you prefer?**

**Option 1**

Edward **cannot reduce** the income that he is taxed on **this year** to account for his expected losses from wear and tear.

**Option 2** [58% support]

Edward **reduces** the income that he is taxed on **this year** to account for his expected losses from wear and tear, even though he **does not sell** the building.

70. (Original Issue Discount)

**Facts:** Suppose that last year Andrea loaned a company \$25,000 for 5 years with an annual interest rate of 5%. Unlike most loans, however, the company **does not pay interest this year in cash**. Instead, the company will pay Andrea the interest all at once in 5 years.

The government is choosing between two policies for taxing people like Andrea. **Which do you prefer?**

**Option 1** [14% support]

Andrea pays income tax **this year** on the 5% interest, even though she has not received the cash yet.

**Option 2**

Andrea pays income tax only in the **fifth year**, when she gets her interest in cash.

[Randomize this into the control and both-sides. Include for all in other treatments.]

71. Suppose that the government adopts an income tax on increases in the value of stocks each year, even if people **do not sell** the stocks. Would that be a fair tax?

*Yes* [27%]; *No*

## VI. Property Tax & Paper Gains Module

[Randomized in as a whole module for control. Exclude from other treatments.]

72. You have been asked several questions about the income taxation of [“various assets,” “stock” depending whether got other asset module]. You will now be asked questions about the property taxation of people’s homes, based on these facts:

**Facts:** Michelle owns her home. It is in a subdivision with essentially identical homes. Suppose that she bought her home last year for \$250,000. The value of her home increases from \$250,000 last year to \$300,000 this year (based on sales prices of the essentially identical homes next door).

These facts apply to the following few screens and will be shown at the top of the screen.

73. (blue box on top)

Suppose that Michelle’s local government places a property tax on her home. Michelle’s property taxes will be a fixed percentage of the government’s “valuation” of the property.

**Policy Question:** What valuation should Michelle’s local government use when taxing her property?

*(slider from “\$200,000 or less” to “\$400,000 or more”, in 5,000 increments)*

[Mean: \$ 273,237]

74. [if chooses less than \$300,000] On the previous screen, you chose a valuation of less than \$300,000. Why did you make that choice?

75. *Free form* [46% chose less than \$300,000]

(blue box on top)

Suppose that Anne purchased a nearly identical house next to Michelle’s for \$300,000 this year.

Again, suppose that Anne and Michelle’s local government places a property tax on Anne’s home. Anne’s property taxes will be a fixed percentage of the government’s “valuation” of the property.

**Policy Question:** What valuation should her local government use when taxing Anne’s property this year?

*(slider from “\$200,000 or less” to “\$400,000 or more,” in 5,000 increments)*

[Mean: \$289,612]

## B. Liquidity

76. (blue box on top)

Suppose that, if the government values Michelle’s house at more than the \$250,000 she paid for it, she has two options. She can pay the full amount of property tax this year. Or she can delay paying the “extra” tax due—on the portion of the valuation above \$250,000—until she sells her house. If Michelle waits, she will pay interest on the tax she delayed paying.

**Policy Question:** What valuation should her local government use when taxing Michelle’s property this year?

*(slider from “\$200,000 or less” to “\$400,000 or more,” in 5,000 increments)*

[Mean: \$274,721]

77. **Facts:** Abigail owns her home. Suppose that she bought her home last year for \$250,000.

Abigail's house is in a neighborhood with homes of quite different sizes and values. This year, home prices in her neighborhood were all over the map. Some houses went up in value, while others fell.

The government estimates—based on sales of somewhat similar houses—that Abigail's house increased in value from \$250,000 to \$300,000 this year.

Suppose that Abigail's local government places a property tax on her home. Abigail's property taxes will be a fixed percentage of the government's "valuation" of the property.

**Policy Question:** What valuation should Abigail's local government use when taxing her property?

*(slider from "\$200,000 or less" to "\$400,000 or less," in 5,000 increments)*

[Mean: \$276,210]

78. This is a question about how the tax system works today. Does your state currently impose a limit on how much the government's property tax valuations can rise each year?

*Yes [18%]; No [10%]; Unsure [72%]*

## VII. What Rate Should Apply to Mark-to-Market on Stocks

[Randomize in the block of the next 3 questions to the control & both-sides. Include for all in rich. Exclude from other treatments.]

79. **Facts:** Samantha bought stock in Grocery Co. at the end of last year. The value of the stock goes up by \$50,000 [\$1 million for rich] this year. She **does not** sell any of the stock.

George bought stock in Beverages Inc. at the end of last year. The value of the stock goes up by \$50,000 [\$1 million for rich] this year. He then **sells** the stock.

**Suppose that current law is to tax increases in the value of stocks each year, even if the stocks are not sold.** So both Samantha and George will have to pay income tax on the \$50,000 [\$1 million for rich] increase in the value of their stocks.

You will now be asked three questions on the tax rate that Samantha and George should pay on the \$50,000 [\$1 million for rich] increase in their stock value given that law.

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Recall that **Samantha did not sell her stock, but George did sell.**

The tax rate that Samantha should pay on the increase in the value of her stock should be:

*Lower than the tax rate that George should pay [36%]; The same as the tax rate that George should pay [57%]; Higher than the tax rate that George should pay [7%]*

[Randomize order of the next two]

80. [same screen] Suppose that Samantha also earns \$50,000 [\$1 million for rich] in wages.

How should the tax rate on wages and the tax rate on increases in the value of her stock compare? The tax rate on increases in the value of her stock should be:

*Lower than the tax rate on her wages [27%]; The same as the tax rate on her wages [63%];  
Higher than the tax rate on her wages [10%]*

- 81.** [same screen] Suppose that Samantha also earns \$50,000 [\$1 million for rich] in dividends from her Grocery Co. stock. Recall that dividends are cash a company pays to its shareholders.

How should the tax rate on dividends and the tax rate on increases in the value of her stock compare? The tax rate on increases in the value of her stock should be :

*Lower than the tax rate on her dividends [22%]; The same as the tax rate on her dividends [70%]; Higher than the tax rate on her dividends [8%]*

[Give everyone in all surveys this question]

- 82.** You have already seen the next question. We are asking you again, now that you have thought about the issue some more:

**Facts:** Suppose that Kyle bought stock in Grocery Co. at the end of last year.

This year, Kyle's stock in Grocery Co. goes up in value by \$50,000. He **does not sell** any of his stock.

The government is choosing between two policies for taxing Kyle. **Which do you prefer?**

**Option 1**

Kyle pays income tax on increases in his stock only **when he sells** his stock in the future.

**Option 2 [23% support]**

Kyle pays income tax **this year** on the increase in his stock, even though he **does not sell** it.

## VIII. Knowledge of Current Tax Law

[Everyone gets the intro and following 2 questions.]

- 83.** You have answered several questions about how tax law should work. In the following questions, we are interested in your understanding of how tax law works today. In particular, we are asking about the taxation of stock in Grocery Co., which is not held in a retirement account

- 84.** Suppose Mary owns Grocery Co. stock. This year, she receives \$50,000 [“\$1,000,000” for rich treatment] in dividends from the stock.

Under existing law, must Mary pay income tax this year on the \$50,000 [“\$1,000,000” for rich treatment] of dividends this year?

*Yes [74%]; No [8%]; Unsure [18%]*

- 85.** Suppose Mary owns Grocery Co. stock. This year, the value of that stock increases by \$50,000 [“\$1,000,000” for rich treatment], and she **sells** it, but **reinvests** the proceeds in a different stock.

Under existing law, must Mary pay income tax this year on the \$50,000 [“\$1,000,000” for rich treatment]?

*Yes* [58%]; *No* [17%]; *Unsure* [25%]

[Next two questions: only control, both-sides, and rich get them; others don't]

- 86.** Mary bought stock in Grocery Co. at the end of last year. This year, Mary's stock in Grocery Co. goes up in value by \$50,000 [“\$1,000,000” for rich treatment]. She **does not sell** any of her stock.

Unfortunately, at the end of this year, Mary dies.

Under existing law, must income tax be paid this year from Mary's assets on the \$50,000 [“\$1,000,000” for rich treatment] increase in stock value?

*Yes* [43%]; *No* [27%]; *Unsure* [30%]

- 87.** Mary bought stock in Grocery Co. at the end of last year. This year, Mary's stock in Grocery Co. goes up in value by \$50,000 [“\$1,000,000” for rich treatment]. She **does not sell** any of her stock.

At the end of this year, Mary gives the Grocery Co. stock to her daughter Selma.

Under existing law, must Mary pay income tax this year on the \$50,000 [“\$1,000,000” for rich treatment] increase in stock value?

*Yes* [39%]; *No* [30%]; *Unsure* [31%]

[Only get next question if got depreciation question above, so that will be control and both-sides some of the time, and anti-status quo all of the time.]

- 88.** Suppose that last year Edward bought an apartment building that he now rents out to others.

Buildings wear out over time in relatively predictable ways. The government estimates that this year, wear and tear decreases the value of the building by \$50,000 [“\$1,000,000” for rich treatment]. He **does not sell** the building.

Under existing law, may Edward reduce his income tax this year to reflect expected wear and tear on the building?

*Yes* [51%]; *No* [25%]; *Unsure* [24%]

[Everyone gets next question and follow-up]

- 89.** Suppose Mary owns Grocery Co. stock. This year, the value of that stock increases by \$50,000, but she **does not sell** any of it.

Under existing law, must Mary pay income tax this year on the \$50,000 [“\$1,000,000” for rich treatment] increase?

*Yes* [29%]; *No* [49%]; *Unsure* [22%]

- 90.** [If says “yes”] In the last question, you answered that, if Mary's stock goes up in value by \$50,000 [“\$1,000,000” for rich treatment] this year, but she **does not sell** any of it, she must pay tax on that increase this year.

This answer is **incorrect**.

Under current law, Mary pays income tax on increases in her stock **only when she sells** the stock. So, Mary does not pay income tax this year on it.

The survey now returns to questions about your views on what the law should be.

[If says “no” or did not answer or “unsure”] In the last question, [“you answered that” if answered or “one of the answer choices was that” if didn’t answer or answered unsure], if Mary’s stock goes up in value by \$50,000 [“\$1,000,000” for rich treatment] this year, but she **does not sell** any of it, she does not need to pay tax on that increase this year.

This answer is **correct**.

Under current law, Mary pays income tax on increases in her stock **only when she sells** the stock. So, Mary does not pay income tax this year on it.

The survey now returns to questions about your views on what the law should be.

## IX. Other Mark-to-Market Questions

### **A. Revenue-Neutral Version of Baseline**

[randomized order with next question]

91. [“The next two questions ask you to choose between two new taxes to meet the government’s general revenue needs:” if appears first”]

Suppose that the government must raise new revenue by choosing one of two policies. Both policies would raise the same amount of revenue. **Which do you prefer?**

#### **Option 1** [33% support]

A new income tax on increases in the value of stocks each year, even if people **do not sell** the stocks.

- The tax rate is the **same as the current rate** for stock sales.

#### **Option 2**

A new income tax on increases in the value of stocks only on those who **do sell** their stocks.

- The new tax rate is **higher than the current rate**.

92. [“The next two questions ask you to choose between two new taxes to meet the government’s general revenue needs:” if appears first”]

Suppose that the government must raise new revenue by choosing one of two policies. Both policies would raise the same amount of revenue. **Which do you prefer?**

#### **Option 1** [47% support]

A new income tax [for rich: “for those with more than \$10 million of wealth”] on increases in the value of stocks each year, even if people **do not sell** the stocks. The tax rate is the same as the current rate for stock sales.

#### **Option 2**



A new income tax on everyone [for rich: “with more than \$10 million of wealth”]. It raises everyone’s [for the rich “each of their” instead of “everyone’s”] tax rates (on all sources of income) by the same amount.

**93. Status quo vs. MTM to protect Social Security** [Randomized into control and both-sides; everyone else gets this]

The government is now considering increasing some taxes to protect Social Security.

The government is choosing between two policies for taxing stock increases. **Which do you prefer?**

**Option 1**

**No policy change:** People pay income tax on increases in their stock only when they sell their stock.

- No new revenue is dedicated to protecting Social Security.

**Option 2** [41% support]

**A new income tax** on increases in the value of stocks each year, even if people do not sell the stocks.

- This new tax revenue is **dedicated to protecting Social Security**.

**94. Withholding question [Rich only]**

Suppose that the previous policy is not adopted. And the government is again considering increasing some taxes to protect Social Security.

Suppose that the government is now choosing between two policies for taxing stock increases. **Which do you prefer?**

**Option 1**

**No policy change:** People pay income tax on increases in their stock only when they sell their stock.

- No new revenue is dedicated to protecting Social Security.

**Option 2** [59% support (rich treatment)]

**A new “withholding” tax** on increases in the value of stocks each year, even if people do not sell the stocks.

- This year, people pay *a fraction* (10%) of the amount they will ultimately owe on their stock increases occurring this year.
- In each later year, people pay tax on another fraction (10%) of the amount they will ultimately owe on this year’s increases. This will continue until their full gain has been taxed or they sell the stock.

This new tax revenue is **dedicated to protecting Social Security**.

## B. Transition Rules

[Randomize in these next 2 questions as a pair for control, both-sides. Have for all participants in rich. Exclude from all other treatments.]

95. Assume that the federal government begins taxing households annually on increases in the value of their stock, even if it has not been sold. The government would face the question of what to do about increases in the value of stock that happened in the past.

Suppose, for example, that Mary bought her stocks for \$10,000 [“\$100,000” for rich] many years ago, and, before this year, they had increased in value to \$60,000 [“\$1,100,000” for rich] without any of the stock ever being sold. So, the stock has gained \$50,000 [\$1 million for rich] in value.

Do you support or oppose the federal government taxing Mary today on the whole \$50,000 [\$1 million for rich] increase that has already occurred?

(You will be asked what rate should apply in the next question.)

*Yes* [20%]; *No: the government should have to wait until Mary sells to tax her gain.*

96. Assuming that this tax is adopted, at what rate should Mary be taxed this year on her past increase in the value of the stocks? [same screen as previous question]

*Same rate as if these gains occurred all this year* [61%]; *Higher rate as if these gains occurred all this year* [7%]; *Lower rate as if these gains occurred all this year* [32%]

## X. Alternative Policies

[Randomize module into control and both-sides. All rich get this. All on one page, except for last one.]

97. Mary’s annual salary from her job is \$50,000 [“\$1,000,000” for rich treatment]. Do you support or oppose Mary having to pay income tax on that 50,000 [“\$1,000,000” for rich treatment]?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [77% support]

98. Mary wins \$50,000 [“\$1,000,000” for rich treatment] in the lottery. Do you support or oppose Mary having to pay income tax on that 50,000 [“\$1,000,000” for rich treatment]?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [79% support]

99. Mary receives an unexpected \$50,000 [“\$1,000,000” for rich treatment] bonus in her job. Do you support or oppose Mary having to pay income tax on that \$50,000 [“\$1,000,000” for rich treatment]?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [73% support]

100. Do you support or oppose higher federal taxes on dividends?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [29% support]

[Next question for rich only]

**101.** Do you support a federal wealth (as opposed to income) tax that taxes the value of all assets a given percentage each year?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [43% support]

[Next question on its own page]

**102.** Do you support or oppose higher federal taxes on corporations?

*Strongly support; Weakly support; Neither support nor oppose; Weakly oppose; Strongly oppose* [69% support]

## XI. Legitimacy and Partisan Framing

[Randomize in for control and both-sides. All rich get this.]

**103.** Suppose that people must pay income tax on increases in the value of their stocks every year, even if they do not sell. But they do not pay tax again when they sell.

How, if at all, would this tax affect your voluntary compliance in paying the taxes owed?

*Make me more likely to voluntarily comply* [17%]; *Have no impact on my voluntary compliance* [62%]; *Make me less likely to voluntarily comply* [21%]

**104. Directly inject partisanship** [Only rich get this]

The next question is similar to an earlier question, but gives some additional context to these policy proposals.

Over the last year, leading Democrats in the U.S. Senate have proposed increasing some taxes to protect Social Security.

The government, in fact, is now choosing between two policies for taxing stock increases. **Which do you prefer?**

### **Option 1**

**No policy change:** People pay income tax on increases in their stock only **when they sell** their stock.

- No new revenue is dedicated to protecting Social Security.

### **Option 2** [50% support (Rich treatment)]

**A new income tax** on increases in the value of stocks each year, even if people **do not sell** the stocks.

- This new tax revenue is **dedicated to protecting Social Security.**
- Endorsed by leading **Democrats**

## XII. Legitimacy, Asset Ownership, Policy Views, and Financial Literacy

### A. Policy Views [Everyone gets this]

105. Please indicate how strongly you agree or disagree with the following statements.

- a. Taxes are too high. [71% agree]
- b. Taxes on dividends and sales of stock are too high. [45%]
- c. The deficit is too high. [73%]
- d. The government spends too much money. [75%]
- e. We should take from the rich to give to the poor. [46%]
- f. It is worth sacrificing economic growth to have greater equality. [36%]
- g. People deserve to keep the money they earn. [84%]
- h. The rich pay too little in taxes. [72%]

*Strongly agree; Somewhat agree; Neither agree nor disagree; Somewhat disagree; Strongly disagree*

### B. Ownership of Assets [Everyone gets next two]

106. Do you own any of the following:

- Stocks
- Mutual funds
- Exchange traded funds

either directly or in a retirement account (401(k), IRA etc.)?

*Yes; No [55% yes]*

107. Do you own any of the following:

- Stocks
- Mutual funds
- Exchange traded funds

that are not in a retirement account (401(k), IRA etc.)?

*Yes; No [35% yes]*

[Get next 4 only if are randomized into other-asset module]

108. Do you own your home?

*Yes; No [64% yes]*

[include next question in anti-status quo]

109. Do you own a building other than your home that you rent out to others?

*Yes; No [3% yes]*

110. Do you own a business that typically makes at least \$10,000 a year of profit?  
*Yes; No [7% yes]*

111. Do you own pieces of art that in total are valued in excess of \$10,000?  
*Yes; No [4% yes]*

[All treatments have from here to the end.]

### C. Knowledge on Distributional Questions

112. We now would like to ask you some informational questions about current economic circumstances and about current policy. Please give your best answer.

Think about the U.S. stock market.

Of all the stock owned by Americans, how much do you think belongs to the wealthiest 10% of households?

*Slider from 0-100% (Wolff says 84%). [70.4%]*

113. What share of American households have wealth of \$10 million or more?  
*Slider from 10%-0% with a lot of gradation (Correct is 1%). [3.4%]*

### D. Financial Literacy [These 3 questions are on the same page.]

We would like to ask you some questions about the economic circumstances of people in various situations. Please give your best answer.

114. Suppose Bob and Sue both recently won money in the lottery. Bob won \$50,000 on December 31 of last year. Sue won \$50,000 the next day, on January 1 of this year.

Bob had to pay tax on his winnings at the end of **last year** (immediately after he won).

Sue had to pay tax on her winnings at the end of **this year** (nearly a year after she won).

Who is better off?

*Bob [22%]; Sue [35%]; They are equally well off [36%]; Don't know [7%]*

115. Do you think that the following statement is true or false: Buying a single company stock usually provides a safer return than a stock mutual fund?

*True [11%]; False [44%]; Don't know [45%]*

116. Assume a friend inherits \$10,000 today and his sibling inherits \$10,000 3 years from now. Who is better off because of the inheritance?

*My friend [49%]; His sibling [9%]; They are equally well off [27%]; Don't know [14%]*

### D. Confusion/Bias

117. How well did you feel like you understood the survey?

*I understood all of the survey [33%]; I understood most of the survey [46%]; I understood some of the survey [16%]; I understood little of the survey [4%]; I understood none of the survey [0%]*

118. Which one of the following best captures your view about the survey?

*It is trying to get an unbiased understanding of my opinions [82%]; It is trying to influence me to **support** taxing increases in stock value before they are sold. [15%]; It is trying to influence me to **oppose** taxing increases in stock value before they are sold. [3%]*

- 119.** Please let us know if there was anything in the survey you thought was confusing or biased. We appreciate your help!

*Free response.*