Beliefs about Government Debt and Political Attitudes:

Pre-Analysis Plan*

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Abstract

We examine whether people's beliefs about government debt affect their attitudes towards government spending and taxation. We first ask all of our respondents about their estimate of the current debt-to-GDP ratio in the United States. Then, we inform half of the participants about the actual current debt-to-GDP ratio. Thereafter, all of our respondents complete a series of questions measuring their attitudes towards government spending and taxation using self-reports and behavioral measures. In this document, we outline our plan for analysis of the data, including the main specifications of interest, the dimensions of heterogeneity, and corrections for multiple hypothesis testing.

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1 Motivation

Government debt in many of the biggest economies in the world has reached very high levels and keeps increasing. For example, the debt-to-GDP ratio in the United States has reached 104.81 percent in 2016. The high levels of government debt have important implications for the tax burden of future generations, the sustainability of public finances and the possibility of a fiscal crisis and a government debt default. The European sovereign debt crisis as well as the recent debt ceiling crises in the U.S. have highlighted the potential negative consequences of high levels of indebtedness.

Little is understood on people's beliefs and preferences regarding government debt. However, understanding people's beliefs and preferences is crucial for optimal government policy. In particular, it is important to understand whether people's demand for government spending and taxation depends on people's beliefs about the degree of indebtedness of the government.

In this paper, we address these issues in the context of a survey experiment that we intend to field in the United States. In the experiment, we elicit people's beliefs about the current debt-to-GDP ratio and then examine how correcting people's biases in beliefs about this statistic affects their attitudes towards government spending and taxation measured both using self-reports and behavioral measures.

We plan to recruit 800 people on Amazon Mechanical Turk (MTurk), who we plan to resurvey four weeks after taking part in the main experiment. This allows us to examine whether treatment effects persist over time. In future work, we plan to replicate the results from MTurk using an online panel representative of the US population in terms of age, gender and region.

We hypothesize that most individuals under-estimate the degree of indebtedness and that individuals who realize that there is more debt than they thought will be in favor of cutting government spending or increasing taxes. We also shed light on mechanisms by examining how beliefs about the degree of indebtedness affect people's trust in the government, their beliefs about rent-seeking and inefficiencies in the public sector, their beliefs about the sustainability of public finances and the levels of government spending and taxation people expect for themselves and for future generations.

We contribute to the literature asking whether the provision of economically relevant information can change people's political attitudes (Alesina et al., 2017; Gilens, 2001; Grigorieff et al.,

2016; Kuklinski et al., 2000; Lawrence and Sides, 2014). Overall, the evidence on the impact of information on policy preferences is mixed. While Kuziemko et al. (2015) find that providing people with information about income inequality in the U.S. does not affect their demand for redistribution, Cruces et al. (2013) and Karadja et al. (2016) show that informing people about their position in the income distribution changes their redistributive preferences.

Our paper is most closely related to Lergetporer et al. (2016) and West et al. (2016) who show that providing people with information about current levels of government spending on different categories and education, respectively, sharply decreases people's support for spending increases in these categories. In our paper we look at a different kind of misinformation, namely misinformation about the debt-to-GDP ratio. Our setting allows us to shed light on whether voters are forward-looking and on how their beliefs about fiscal sustainability are affected by information. Finally, our design enables us to provide evidence on the mechanisms through which our findings may operate by collecting rich data on people's beliefs about the government.

Moreover, we contribute to the literature on the determinants of preferences for redistribution (Alesina and Giuliano, 2010; Alesina and La Ferrara, 2005; Fisman et al., 2015; Giuliano and Spilimbergo, 2014; Roth and Wohlfart, 2016). Our paper extends this literature by providing the first evidence on the role of people's beliefs about government debt in the formation of attitudes towards redistributive policies of the government such as spending on income support and social insurance programs.

The current literature on people's attitudes towards government spending and taxation mostly relies on self-reports. We add to this literature by introducing two behavioral measures: first, we measure people's willingness to donate money to an NGO advocating for downsizing the government. Second, we capture people's willingness to sign a petition advocating for the introduction of a balanced budget rule. Moreover, we introduce a new measure of people's preferences over debt- vs. tax-financed government spending programs.

Our paper also adds to the largely theoretical literature on the political economy of government debt (Alesina and Passalacqua, 2015; Alesina and Tabellini, 1990; Persson and Svensson, 1989). By examining whether people's beliefs about future taxes and future government spending change in response to changes in beliefs about government debt, we provide direct experimental evidence on whether voters understand the notion of the intertemporal budget constraint of the

¹For an excellent overview on the related literature on persuasion, see DellaVigna and Gentzkow (2010).

government.^{2,3}

Our paper also contributes to the small correlational literature examining whether voters punish governments for running budget deficits, which provides indirect evidence on voters' preferences over government debt.⁴ We also speak to the debate whether misinformation plays an important role in the emergence of political budget cycles.⁵ Finally, our paper is related to the literature that examines how conflicting interests of voters of different generations affect the equilibrium levels of government debt, government spending and taxation (Müller et al., 2016; Song et al., 2012).

2 Experimental Design

2.1 Main experiment

Our experiment is structured as follows: First, we ask all respondents some questions about their demographics (age, gender, political affiliation). Second, we inform all participants about the debt-to-GDP ratio in 1970⁶ and ask them to estimate the current debt-to-GDP ratio in the U.S.. Third, only respondents in the treatment group receive information about the actual debt-to-GDP ratio in the U.S. in 2016 (104.81 percent).

Then, we ask all of our respondents whether they think that there is too much government debt in the U.S. and whether the government should reduce the amount of debt. Thereafter, we ask them a series of questions on their attitudes towards the amount of government spending in general and on different spending categories. Subsequently, our respondents answer a series of questions on whether income taxes of different income groups should be increased or decreased,

²More generally, we contribute to the literature discussing the relevance of "fiscal illusion" and in particular "debt illusion", i.e. the notion that people perceive the costs of a particular spending program more accurately if it is tax-financed rather than debt-financed.

³The assumption that voters understand the government's intertemporal budget constraint is one of the key assumptions underlying the Ricardian Equivalence Theorem (Barro, 1974; Buchanan, 1976).

⁴For example, Peltzman (1992) documents that voters in the U.S. penalize governments for spending increases, but do not react to deficit spending. Brender and Drazen (2008) show that voters punish budget deficits rather than rewarding them. Alesina et al. (1998) provide evidence that fiscal austerity increases rather than decreases re-election probabilities using opinion poll data, while Alesina et al. (2012) find that fiscal adjustment does not affect re-election probabilities using actual election results. This literature suffers from several methodological problems such as reverse causality which Alesina and Passalacqua (2015) succinctly summarize in their review article.

⁵Shi and Svensson (2006) document the importance of political budget cycles in a large panel of countries. Importantly, they find that political budget cycles are a lot weaker if the share of informed voters is higher. Akhmedov and Zhuravskaya (2004) document regional political budget cycles in Russia and show that they are weaker, among others, with greater voter awareness, government transparency and media freedom.

⁶We include this anchor in order to make sure that people's subsequent estimate of the debt-to-GDP is meaningful to them.

whether the government should introduce a wealth tax and whether the Estate tax should be increased or decreased.

We also add a question that allows us to understand our respondents' preferences over debtvs. tax-financed government spending. Half of our respondents are asked whether they support the introduction of a temporary investment program on infrastructure which is financed by a temporary tax increase, while the remaining respondents are asked whether they are supportive of the same investment program financed by issuing new debt. This novel measure allows us to test whether people's beliefs about the level of government debt affect their preferences over the way new government spending is financed.

Subsequently, we explore mechanisms, such as our respondents' expectations about future taxation and government spending as well as their beliefs about the sustainability of public finances. Moreover, we measure our respondents' trust towards the government and their beliefs about the effectiveness of the government and about the corruption of politicians.

Then all respondents complete two novel behavioral measures⁷ that capture their attitudes towards government spending and the size of the government. First, they are given \$5 and can decide how much to keep for themselves or how much to donate to the Cato Institute, which is an NGO advocating for downsizing the government. Second, we give all of our respondents the opportunity to sign a real online petition⁸ on the White House webpage in favor of introducing a balanced-budget rule.

Finally, we ask our respondents a series of questions on their demographics. The detailed experimental instructions can be found in Appendix A.

2.2 Follow-up experiment

In the follow-up experiment, which will take place four weeks after the main experiment, we will not administer any additional treatment. We will again ask our respondents about their views regarding government spending and taxation. At the very end of the follow-up experiment we also ask people about their estimate of the current debt-to-GDP ratio. The detailed experimental instructions can be found in Appendix B.

⁷We randomize the order in which the behavioral measures is presented.

⁸Individuals in the treatment and in the control group receive different links to identical petitions. This in turn allows us to observe the actual number of signatures for the petition at the treatment group level. People on the treatment group receive the following link https://petitions.whitehouse.gov/petition/government-needs-introduce-balanced-budget-rule, while people in the control group receive the following link https://petitions.whitehouse.gov/petition/government-needs-introduce-balanced-budget-rule-0

3 Setting and Sample Size

We will run this experiment on Amazon Mechanical Turk, an online platform which is widely used to conduct experiments. We will only recruit participants who currently live in the United States. Moreover, workers must have completed at least 500 tasks, and they must have an overall rating of more than 95 percent. For the main experiment, we plan to recruit 800 participants. For the follow-up, we will try to re-interview as many participants as we can, but unfortunately, we cannot give a precise estimate of how many participants we will be able to recontact.

3.1 Power calculation

To have 80 percent power to detect an effect size of one-fifth of a standard deviation at a 5 percent significance level, we need 400 subjects in each treatment cell, or 800 subjects in total. For the main experiment, we therefore plan to recruit 800 participants. It is worth noting that in our main specification we will include control variables which will increase our effective power. If our controls explain 15 percent of the variation, we will have a power of 80 percent to detect effect sizes of approximately .16 of a standard deviation.

For the follow-up, we will try to re-interview as many participants as we can. Based on previous experience with re-interviews on mTurk, we expect to successfully re-interview at least 80 percent of the subjects, which still gives us over 80 percent power to detect an effect size of .22 of a standard deviation.

4 Main Hypothesis and Mechanisms

4.1 Main Hypothesis

We hypothesize that individuals who underestimate the debt-to-GDP ratio and who receive the information about the actual debt-to-GDP ratio will be in favor of cutting government debt, by lowering spending or by increasing taxes.

4.2 Mechanisms

We consider four main mechanisms through which beliefs about the debt-GDP-ratio could affect attitudes towards government spending and taxation:

- Intertemporal government budget constraint: If people are aware of the intertemporal budget constraint of the government, changing their beliefs about government debt should affect their expectations about future taxes or future government spending. If they expect taxes to increase or government spending to decrease in the future, they might prefer the government to cut current government spending or to increase current taxes. This has particular empirical predictions that depend on the respondent's age and, assuming that individuals care about the resources available to their children in the future, whether the respondent has children. In particular, we would expect younger people and people with children who learn that there is more debt than they thought to more strongly adjust their preferences regarding government spending and taxation.
- Beliefs about fiscal sustainability: People who learn that there is more government
 debt than they thought there was could update their beliefs about the probability of a
 fiscal crisis. If people's subjective probability of a fiscal crisis increases, they might be
 more inclined to either cut government spending or to increase taxes.
- Trust in the government: Changes in beliefs about the debt-to-GDP ratio could affect people's trust towards the U.S. government. Specifically, after learning that the debt-to-GDP ratio has reached a higher level than they previously thought they could become less likely to think that the government can be trusted to do what is right. Therefore, respondents may prefer to downsize the government.
- Beliefs about the effectiveness of the government and the corruption of politicians: Once people learn about the large amount of government debt, they may update their beliefs about the wastage that occurs in the bureaucratic process. Specifically, such wastage could occur through corruption of politicians or a general lack of effectiveness of the government. Thus, they may be more inclined to cut the size of the government.

5 Analysis

5.1 Baseline Balance

We will test for baseline balance for the following variables:

- Estimate of the debt-to-GDP ratio.
- Gender.

- Age.
- log income (income is the midpoint of the interval specified by the respondent).
- Number of children
- Employment status (dummies for unemployed, part-time employed, employed full-time, retired and student).
- Education (dummy for person with at least bachelor degree).
- Political orientation (taking value one for Republicans and zero otherwise).

We will regress each of these variables on a treatment indicator to see if there are imbalances. We will account for multiple hypothesis testing by regressing the treatment indicator on all of the variables, and we will conduct a joint F-test, to see if the coefficients are jointly different from zero.

5.2 Main Specifications

First, we simply compare the behavior of people in the treatment group with that of people in the control group. We regress our outcome variables y_i on a treatment indicator, $Treatment_i$, which takes the value one for people who receive the information treatment, and the value zero for all the other participants:

$$y_i = \pi_0 + \pi_1 Treatment_i + \Pi^T \mathbf{X_i} + \varepsilon_i$$

where X_i is a vector of control variables, including all of the variables we use in the baseline balance check and ε_i is an individual-specific error term.⁹ We also present our results without any additional control variables.

5.3 Tax- vs. Debt-Financed Spending Program

We ask our respondents for their support of an infrastructure program and randomly assign whether this program is tax-financed or debt-financed. This allows us to cleanly identify whether people's support for the exact same investment program hinges on whether it is financed by

⁹We report robust standard errors for all estimations.

debt or by a temporary tax increase. To analyze whether our treatment has differential effects depending on whether a proposed spending program is tax-financed or debt-financed, we create the dummy variable $Debt_i$, which takes value one for participants who are asked about support for a debt-financed infrastructure program and value zero for participants who are asked about support for a tax-financed program. We estimate the following specification:

$$y_i = \pi_0 + \pi_1 Treatment_i \times Debt_i + \pi_2 Treatment_i + \pi_3 Debt_i + \Pi^T \mathbf{X_i} + \varepsilon_i$$

The coefficients π_1 and π_2 capture effects of our treatment on support for the program that potentially differ depending on the mode of financing. We are also interested in the coefficient π_3 , which captures whether people in the control group differentially support tax-financed and debt-financed infrastructure investments.

5.4 Heterogeneous Treatment Effects

We will also check whether there are important heterogeneous treatment effects caused by our information treatment. For all of the heterogeneity analysis, we look at the same outcomes as in the main analysis.¹⁰ Specifically, we will estimate the following equation, where $interaction_i$ refers to the interaction variable:

$$y_i = \pi_0 + \pi_1 Treatment_i \times interaction_i + \pi_2 Treatment_i + \pi_3 interaction_i + \Pi^T \mathbf{X_i} + \varepsilon_i$$

We will explore heterogeneity along the following dimensions:

- Belief that the debt-to-GDP ratio is low: Our information treatment is designed to be more effective for people who have highly biased beliefs about the debt-to-GDP ratio. We therefore create an indicator variable taking the value one for subjects who estimate the debt-to-GDP ratio to be lower than 90 percent.¹¹
- Size of bias about the debt-to-GDP ratio: We also use a continuous winsorized¹² measure of the bias in beliefs people have about the debt-to-GDP ratio pre-treatment,

¹⁰The different families of outcomes and the corresponding indices are defined below, in the section "Use of indices" (section 5.6.1).

¹¹We also assess the robustness of this result to using dummy variables taking value one for people whose estimates of the debt-to-GDP ratio are lower than 60 percent or for those with estimates below the true value.

 $^{^{12}}$ We winsorize the data at an estimate of the debt-to-GDP ratio of 200 (i.e. a bias of 95.19) to make sure that our results are not driven by outliers.

which is given by people's estimate of the debt-to-GDP ratio minus 104.81 (the actual debt-to-GDP ratio in 2016).

- Political Orientation: We code this variable such that it takes value one for all respondents who say that they are Republicans.
- Age: We use age as a continuous variable to examine heterogeneity. We expect young individuals to respond more strongly to the treatment as they are more likely to see higher taxes and lower government spending in the future which might become necessary to reduce government debt.
- Children: We use a dummy variable taking value one if the respondent reports having at least one child. If people care about the resources available to their children we would expect stronger responses to our treatment among people who have children.
- **High Income:** This variable takes value one for all respondents who have a household income of above 50,000 US dollars.
- **High Education:** This variable takes value one for all respondents who have at least completed a bachelor degree.

5.5 Main Specifications: Mechanisms

We examine in how far the information treatment affects the following set of variables which we collect to test for mechanisms. In particular, we collect data on the following potential mechanisms:

- Trust in the government: We collect data on people's trust in the government.
- Beliefs about politicians and the government: We collect data on people's beliefs about the wastage occurring through corruption of politicians or a general lack of effectiveness of the bureaucratic process.
- Expected future taxes: We collect data on the level of taxation they expect for themselves in the future and for future generations.
- Expected future government spending: We collect data on the level of government spending they expect for themselves in the future and for future generations.

• Beliefs about fiscal sustainability: We collect data on people's beliefs about fiscal sustainability.

5.6 Multiple Hypothesis Adjustment

To deal with the issue of multiple hypotheses testing, we adopt two strategies.

5.6.1 Use of Indices

First, we group our explicit outcome measures into different families of outcomes, and create an index for each family. We use the method described in Anderson (2008) to create the various indices.¹³

We define the families of outcomes as follows:

• Perception of the amount of government debt:

- There is too much government debt in the United States.
- The government should reduce the amount of government debt.

• Attitudes towards government spending: 14

- Do you think the overall amount of government spending should be increased, decreased, or remain the same? [It should be increased a lot; It should be increased a little; It should remain as it is; It should be decreased a little; It should be decreased a lot.]
- Do you think the amount of government spending on Defense and National Security should be increased, decreased, or remain the same?
- Do you think the amount of government spending on Public Infrastructure should be increased, decreased, or remain the same?
- Do you think the amount of government spending on Schooling and Higher Education should be increased, decreased, or remain the same?

¹³We recode the variables such that high values correspond to reducing the amount of government spending and increasing the amount of taxation. We normalize these variables, using the mean and standard deviation in the control group. Then, we calculate the covariances between the variables that are part of the same family of outcomes and use the inverse of the covariance matrix in order to weight the outcomes. For more details see Anderson (2008).

¹⁴The choice of spending categories and their description closely follows Alesina et al. (2017).

- Do you think the amount of government spending on Social Security, Medicare, Disability Insurance and Supplementary Security Income should be increased, decreased, or remain the same?
- Do you think the amount of government spending on Social Insurance and Income Support Programs should be increased, decreased, or remain the same?
- Do you think the amount of government spending on Health should be increased, decreased, or remain the same?
- Do you think the amount of government spending on the Environment should be increased, decreased, or remain the same?

• Attitudes towards taxation:¹⁵

- Do you think the overall amount of taxes raised by the government should be increased, decreased, or remain the same?
- Do you think that income taxes for the top 10 percent (richest) of households should be increased, decreased or remain the same?
- Do you think that income taxes for the next 40 percent (10 percent of households earn more than them, 50 percent less) should be increased, decreased or remain the same?
- Do you think that income taxes for the bottom 50 percent (poorest) should be increased, decreased or remain the same?
- Do you think that the government should introduce a wealth tax, such that every year each household with net assets (assets minus liabilities) greater than 1,000,000 dollars, would have to pay a small fraction (less than 1 percent) of the total net asset value to the government?
- The Federal Estate tax is a tax imposed on the transfer of wealth from a deceased person to his or her heirs. Do you think the Federal Estate tax should be increased, decreased or remain the same?
- **Petition:** We compute an index of people's willingness to sign a petition:
 - Intention to sign: This variable takes value one for individuals saying that they
 want to sign the petition.

¹⁵The choice of taxation categories and their description closely follows Alesina et al. (2017).

Self-reported signing: This variable takes value one for individuals saying that they
did sign the petition.

5.6.2 Accounting for the False Discovery Rate

The second method uses the "sharpened q-value approach" (Anderson, 2008; Benjamini et al., 2006). We use the same families of outcomes as the ones defined above. For each family of outcomes, we control for a false discovery rate of 5 percent, i.e. the expected proportion of rejections that are type I errors (Anderson, 2008).

5.6.3 Analysis of real petition signatures

We also use people's actual signature of the online petition. This variable is not available at the individual level, only at the group level. We can compare the proportion of individuals actually signing the petition for the control and treatment group. We will test for differences between the treatment and the control group using the "Mann–Whitney U test". We cannot test for heterogeneous treatment effects for this particular variable as we only observe the outcome at the group level (i.e. for the treatment and control group) and not at the individual level.

5.7 Analysis of Follow-up experiment

The analysis of the follow-up experiment will follow closely that of the main experiment. In the follow-up we only analyze the self-reported questions - as we do not collect any data using behavioral measures.

6 Definition of Variables

In general, we will drop from the analysis variables which have very limited variation, as they are not informative. Specifically, we will drop variables for which more than 95 percent of observations have the same value. If these variables are part of an index, we will recalculate the index without them.

6.1 Main Outcomes

For simplicity, we will consider all of the self-reported measures on attitudes toward government spending as continuous. For instance, when participants need to state to what extent they agree with a particular statement, we will code "Strongly disagree" as 1, "Disagree" as 2, ..., and "Strongly agree" as 5.

6.2 Behavioral Measures

For the donation to the Cato institute, we will look at the amount donated by participants, and we will treat it as a continuous variable.

For the petition, we record a series of variables. We first have a variable which indicates whether people have the intention to sign the petition, but we also have a variable which indicates whether people report having signed the petition. Finally, we can count the numbers of signatures that there are on the petition pages, to see whether the reported number of signatures is close to the actual number of signatures. In the analysis, we will use all of these variables as outcome measures.

6.3 Coding of background questions

When the background questions are used as controls in the regression, they will be coded as follows:

- Gender will be coded as a dummy.
- Age will be coded continuously.
- Children will be coded as one if the respondent reports to have children.
- State will be coded as four regional dummies (Northeast, Midwest, South, and West). 16
- Household income will be coded as the log of the midpoint of the interval specified by the respondent.
- Education will be coded as a dummy for whether the respondent has at least a two-year college degree.
- Employment status will be coded as one dummy for each category.
- Party affiliation will be coded as a dummy equal to one if the respondent considers himself
 as a Republican and zero otherwise.

 $^{^{16}}$ We will follow the regional classifications of the United States Census Bureau.

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Appendix A: Main Experiment

Introduction and consent

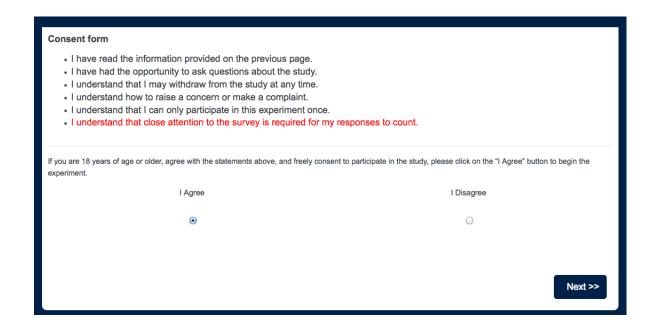
This study is conducted by researchers from Goethe University Frankfurt and the University of Oxford.

Participants will be asked to answer a few questions about their opinions, as well as a set of demographic questions. Participation in the study typically takes 8 minutes and is strictly anonymous.

In order to be paid, it is necessary to finish the survey. If you complete the survey, you will receive a fixed payment of 90 cents. You may also receive an additional bonus.

Each person is only allowed to participate in the experiment once. If you encounter a technical problem, please do not restart the experiment, but contact us at dphiloxfordecon@gmail.com

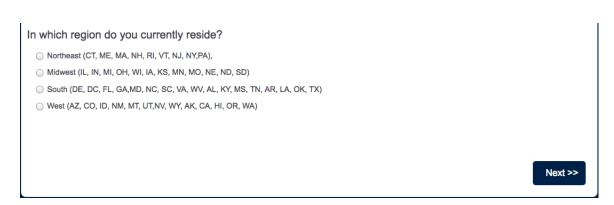
If participants have further questions about this study or their rights, or if they wish to lodge a complaint or concern, they may contact us at dphiloxfordecon@gmail.com

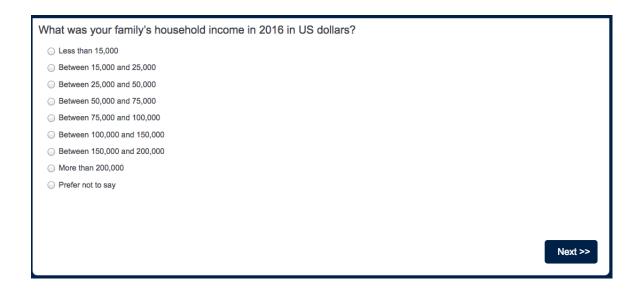


Demographics

The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please choose "Very strongly interested" and "Not at all interested" as your answer in the next question.
How interested are you in politics?
□ Vanuetrandu interceted
 □ Very strongly interested □ Very interested
□ A little bit interested
☐ Almost not interested
☐ Not at all interested
Next >>
Which of these describes you more accurately?
○ Male
) Female
Next >>
What acts can usually heat describe your political ariestation?
What category would best describe your political orientation?
Republican Democrat
Other
Next >>

What is your age?	
○ 18 - 24	
O 25- 34	
O 35 - 44	
O 45 - 54	
O 55 - 64	
○ 65 or older	
	Next >>





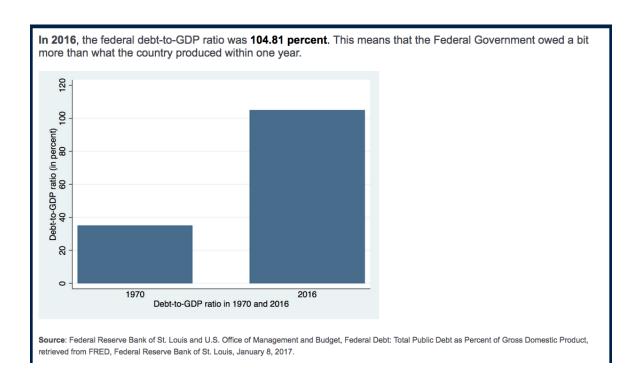
Belief about the debt-to-gdp ratio

We will now ask you one question about the debt-to-GDP ratio in the United States.				
The debt-to-GDP ratio is the ratio between a country's government debt and its gross domestic product (GDP). By government debt we mean the total amount owed by the Federal government . This is often referred to as the "national debt". Gross domestic product (GDP) is the market value of all final goods and services that are produced by an economy within one year .				
In 1970 the debt-to-GDP ratio was 34.78 percent . This means that the Federal Government owed around a third of what the country produced within one year.				
What do you think was the debt-to-GDP ratio in 2016? Please enter your answer in the text entry field below. (in percent)				
I think the debt-to-GDP ratio in 2016 was (in percent):				
Next >>				

Information treatment

We now would like to provide you with information about the debt-to-GDP ratio in the US.

Next >>



Perception of government debt



Attitudes towards government spending

We would now like to ask you some questions about your opinions on different aspects of government spending.				
	Next >>			
Do you think the overall amount of government spending should be increased, decreased or remain the same?				
○ It should be increased a lot.				
○ It should be increased a little.				
○ It should remain as it is.				
○ It should be decreased a little.				
○ It should be decreased a lot.				

We will now introduce you to some categories of government spending:

Defense and National Security, which refers to the costs of the defense department and the costs of supporting security operations in foreign countries.

Public Infrastructure, which includes, among others, transport infrastructure like roads, bridges, airports and water infrastructure.

Schooling and Higher Education including help for children from low income families to attend school and university.

Social Security, Medicare, Disability Insurance and Supplementary Security Income, which provide income support and help with healthcare expenses to the elderly and the disabled.

Social Insurance and Income Support Programs. This covers help to the unemployed (through unemployment insurance) and help to low income families (through Food Stamps and Earned Income Tax Credit).

Public spending on health, such as Medicaid for the poor (a healthcare program for low-income families) or tax subsidies to help poor families.

Environment, which refers to spending in order to protect the environment.

We will now ask you some questions on whether you think that government spending in the different categories should be increased, decreased or remain the same.

Next >>

remain the same?	government spending on Defense and National Security should be increased, decreased or
It should be increased a lot.	
It should be increased a little.	
It should remain as it is.	
It should be decreased a little.	
It should be decreased a lot.	
Do you think the amount of gremain the same?	government spending on Schooling and Higher Education should be increased, decreased or
It should be increased a lot.	
It should be increased a little.	
It should remain as it is.	
 It should be decreased a little. 	
It should be decreased a lot.	
Do you think the amount of game?	government spending on Public Infrastructure should be increased, decreased or remain the
It should be increased a lot.	
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Do you think the amount of government spending on Health should be increased, decreased or remain the same?
○ It should be increased a lot.
○ It should be increased a little.
○ It should remain as it is.
○ It should be decreased a little.
It should be decreased a lot.
Do you think the amount of government spending on the Environment should be increased, decreased or remain the same?
○ It should be increased a lot.
○ It should be increased a little.
It should remain as it is.
It should be decreased a little.
It should be decreased a lot.
Next >>

Attitudes towards taxation

We will now ask you some questions on your opinion about taxation in the US.				
Do you think the overall amount of taxes raised by the government should be increased, decreased or remain the same?				
○ It should be increased a lot.				
○ It should be increased a little.				
○ It should remain as it is.				
It should be decreased a little.				
It should be decreased a lot.				
Next >>				

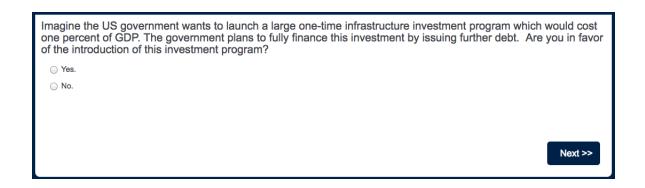
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The income tax rate is the percentage of your income that you pay in federal income tax. We will now ask you whether you think that income tax rates for different groups of earners should be increased, decreased or remain the same.
Do you think that income taxes for the top 10 percent (richest) of households should be increased, decreased or remain the same?
Taxes for them should be increased a lot.
Taxes for them should be increased a little.
Taxes for them should remain as they are.
Taxes for them should be decreased a little.
Taxes for them should be decreased a lot.
Do you think that income taxes for the next 40 percent (10 percent of households earn more than them, 50 percent less) should be increased, decreased or remain the same?
Taxes for them should be increased a lot.
Taxes for them should be increased a little.
Taxes for them should remain as they are.
Taxes for them should be decreased a little.
Taxes for them should be decreased a lot.

Do you think that income taxes for the bottom 50 percent (poorest) should be increased, decreased or remain the	same?
☐ Taxes for them should be increased a lot.	
Taxes for them should be increased a little.	
○ Taxes for them should remain as they are.	
Taxes for them should be decreased a little.	
Taxes for them should be decreased a lot.	
	Next >>

Do you think that the government should introduce a wealth tax , such that every year each household with net assets (assets minus liabilities) greater than 1,000,000 dollars, would have to pay a small fraction (less than 1 percent) of the total net asset value to the government?
The government should introduce a wealth tax.
The government should not introduce a wealth tax.
The Federal Estate tax is a tax imposed on the transfer of wealth from a deceased person to his or her heirs. Do you think the Federal Estate tax should be increased, decreased or remain the same?
○ It should be increased a lot.
○ It should be increased a little.
○ It should remain as it is.
○ It should be decreased a little.
○ It should be decreased a lot.
Next >>

Debt- vs. tax-based government spending

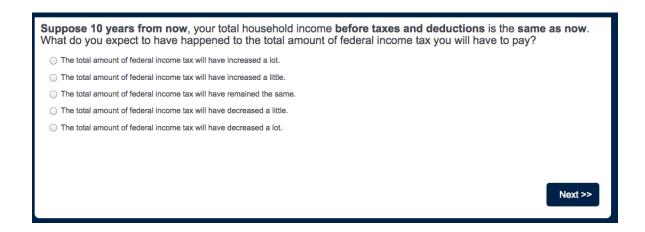
Debt-based government spending

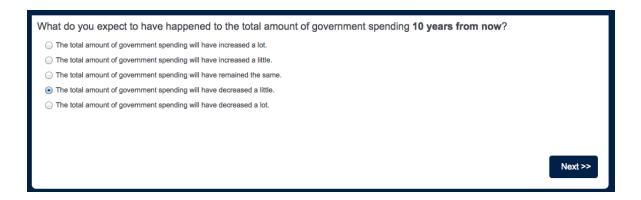


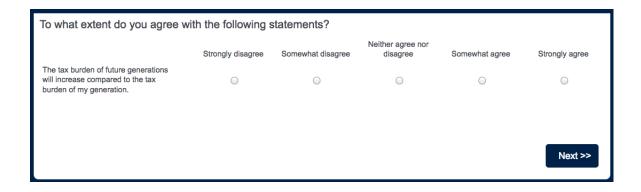
Tax-based government spending

Imagine the US government wants to launch a large one-time infrastructure investment program which would cost one percent of GDP. The government plans to fully finance this investment by increasing taxes temporarily for one year. Are you in favor of the introduction of this investment program?
○ Yes.
○ No.
Next >>

Expectations

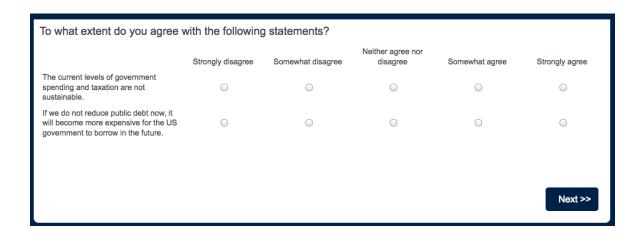






To what extent do you agree with the following statements?					
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Future generations will see lower levels of government spending than the current generation.	0	•	0	0	0
					Next >>

Sustainability of public finances



Trust in government

People have different ideas about the government in Washington. These ideas don't refer to Democrats or Republicans in particular, but just to the government in general. We want to see how you feel about these ideas.					
To what extent do you agree v	with the following	statements?			
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
The government in Washington can be trusted to do what is right.	0	0	0	0	0
The government makes good use of taxpayers' money.	0	0	0	0	0
The government's bureaucracy is not very efficient.	0		0	0	0
The government is forward-looking in its spending and taxation.	0	0	0	0	0
					Next >>

To what extent do you agree	with the following	g statements?			
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Politicians in the US work to enrich themselves and the lobbies they support, instead of working for the benefit of the majority of the citizens.	0	0	0	0	0
					Next >>

Donation to NGO

Every twentieth participant taking part in this survey will receive an extra \$5. They will have to choose how much money they want to keep for themselves, and how much money they want to donate to the Cato Institute, an NG advocating for downsizing the government.	
Here is a description of the mission the Cato Institute has:	
"The Cato Institute seeks to help policymakers and the public understand where federal spending goes and how to reform each government department. It describes the failings of agencies and identifies specific programs to cut. We believe that cutting the federal budget would enhance personal freedom, increase prosperity, and leave a positive fiscal legacy to the next generation."	
If you do receive an extra \$5, how much money would you donate to the Cato Institute?	
If you do receive all extra \$5, now much money would you donate to the Gato institute:	
Amount donated to the Cato Institute:	
\$0	\$5
	Next >>

Petition

We will now give you the option to sign a real online petition.

Next >>
Consider the following petition, and decide whether you would like to sign it or not.
The government needs to introduce a balanced budget rule!
"We propose the introduction of a balanced budget amendment. A balanced-budget amendment is a constitutional rule requiring that the government cannot spend more than its income . It requires a balance between the projected receipts and expenditures of the government. A balanced budget rule is designed to prevent the government from accumulating debt."
○ I want to sign this petition.
○ I do not want to sign this petition.
Next >>
Vendeted that you want to store this could be written that you have the store
You stated that you want to sign this petition. To sign this petition, please click on the link below:
https://petitions.whitehouse.gov/petition/government-needs-introduce-balanced-budget-rule
Next >>
Did you sign the petition?
○ Yes
○ No
Next >>

The government needs to introduce a balanced budget rule!

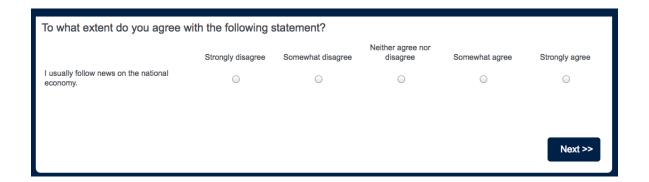
Created by C.R. on January 21, 2017

We propose the introduction of a balanced budget amendment. A balanced-budget amendment is a constitutional rule requiring that the government cannot spend more than its income. It requires a balance between the projected receipts and expenditures of the government. A balanced budget rule is designed to prevent the government from accumulating debt.		Sign This Petition Needs 99,999 signatures by February 20, 2017 to get a response from the White House	
■ BUDGET & TAXES	Fi 🗷 y	1 SIGNED	100,000 GOA
		First Name *	
		Last Name *	
		Email Address *	
		THE WHITE HOUSE THIS AND OTHER IS:	MAY SEND ME EMAILS ABOUT SUES.
		Sigr	n Now
		BY SIGNING THIS PETITION OF PARTICIPATION AND PE	N YOU AGREE TO THE TERMS

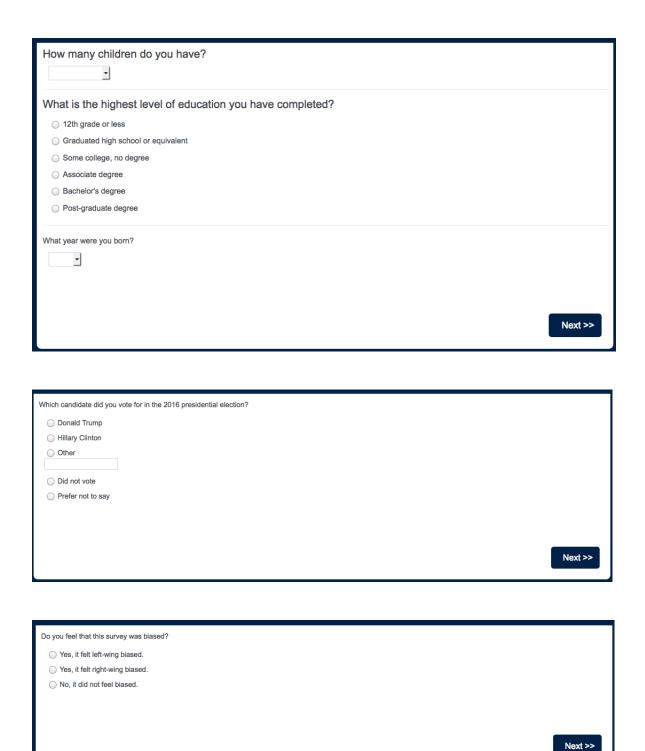
Reminder: If you signed the petition, you will receive a confirmation email from the White House Petition website. To confirm your signature, please click on the link provided in that email.

Next >>

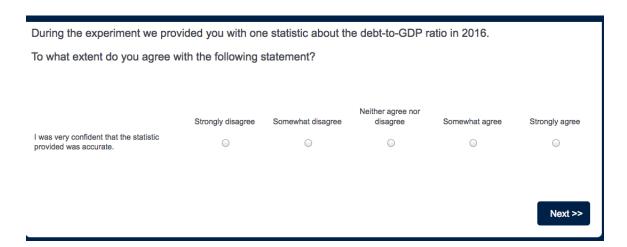
More demographics



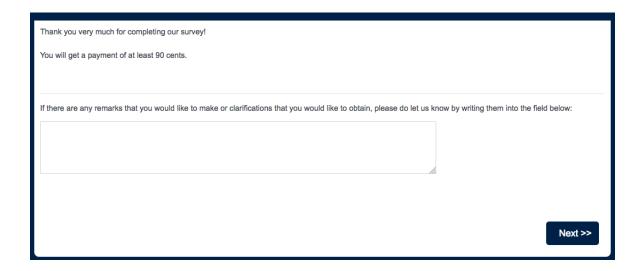
Which of these describes your current situation most accurately?	
○ Employed full-time	
○ Employed part-time	
○ Unemployed and looking for a job	
○ Unemployed but not looking for a job	
○ Retired	
○ Student	
Other:	
	Next >>



Trust in provided info



Debriefing



Appendix B: Follow-up Experiment

Introduction and consent

This study is conducted by researchers from Goethe University Frankfurt and the University of Oxford.

Participants will be asked to answer a few questions about their opinions, as well as a set of demographic questions. Participation in the study typically takes 2 minutes and is strictly anonymous.

In order to be paid, it is necessary to finish the survey. If you complete the survey, you will receive a fixed payment of 40 cents.

Each person is only allowed to participate in the experiment once. If you encounter a technical problem, please do not restart the experiment, but contact us at dphiloxfordecon@gmail.com

If participants have further questions about this study or their rights, or if they wish to lodge a complaint or concern, they may contact us at dphiloxfordecon@gmail.com

Consent form I have read the information provided on the previous page. I have had the opportunity to ask questions about the study. I understand that I may withdraw from the study at any time. I understand how to raise a concern or make a complaint. I understand that I can only participate in this experiment once. I understand that close attention to the survey is required for my responses to count. If you are 18 years of age or older, agree with the statements above, and freely consent to participate in the study, please click on the "I Agree" button to begin the experiment. I Agree I Disagree Next >>

Attitudes towards government spending

We would now like to ask you some questions about your opinions on different aspects of government spending.	
	Next >>
Do you think the overall amount of government spending should be increased, decreased or remain the same?	
It should be increased a lot.	
It should be increased a little.	
It should remain as it is.	
It should be decreased a little.	
It should be decreased a lot.	
	Next >>

We will now introduce you to some categories of government spending:

Defense and National Security, which refers to the costs of the defense department and the costs of supporting security operations in foreign countries.

Public Infrastructure, which includes, among others, transport infrastructure like roads, bridges, airports and water infrastructure.

Schooling and Higher Education including help for children from low income families to attend school and university.

Social Security, Medicare, Disability Insurance and Supplementary Security Income, which provide income support and help with healthcare expenses to the elderly and the disabled.

Social Insurance and Income Support Programs. This covers help to the unemployed (through unemployment insurance) and help to low income families (through Food Stamps and Earned Income Tax Credit).

Public spending on health, such as Medicaid for the poor (a healthcare program for low-income families) or tax subsidies to help poor families.

Environment, which refers to spending in order to protect the environment.

We will now ask you some questions on whether you think that government spending in the different categories should be increased, decreased or remain the same.

Next >>

remain the same?	vernment spending on Defense and National Security should be increased, decreased or
It should be increased a lot.	
It should be increased a little.	
It should remain as it is.	
It should be decreased a little.	
It should be decreased a lot.	
Do you think the amount of government the same?	vernment spending on Schooling and Higher Education should be increased, decreased or
It should be increased a lot.	
 It should be increased a little. 	
 It should remain as it is. 	
 It should be decreased a little. 	
It should be decreased a lot.	
Do you think the amount of governme?	vernment spending on Public Infrastructure should be increased, decreased or remain the
It should be increased a lot.	
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It should be decreased a little.	
It should be decreased a lot.	
	vernment spending on Social Security, Medicare, Disability Insurance and Supplementary creased, decreased or remain the same?
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Do you think the amount of government spending on Health should be increased, decreased or remain the same?	
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O It should be decreased a little.	
O It should be decreased a lot.	
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○ It should be decreased a little.	
It should be decreased a lot.	
Next:	>>

Attitudes towards taxation

We will now ask you some questions on your opinion about taxation in the US.
Do you think the overall amount of taxes raised by the government should be increased, decreased or remain the same?
○ It should be increased a lot.
○ It should be increased a little.
○ It should remain as it is.
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It should be decreased a lot.
Next >>

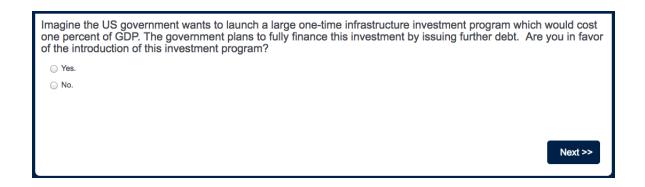
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Taxes for them should be increased a lot.
Taxes for them should be increased a little.
Taxes for them should remain as they are.
Taxes for them should be decreased a little.
Taxes for them should be decreased a lot.
Do you think that income taxes for the next 40 percent (10 percent of households earn more than them, 50 percent less) should be increased, decreased or remain the same?
Taxes for them should be increased a lot.
Taxes for them should be increased a little.
Taxes for them should remain as they are.
Taxes for them should be decreased a little.
Taxes for them should be decreased a lot.

Do you think that income taxes for the bottom 50 percent (poorest) should be increased, decreased or remain the same?	
Taxes for them should be increased a lot.	
Taxes for them should be increased a little.	
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Taxes for them should be decreased a little.	
Taxes for them should be decreased a lot.	
Next >	>

Do you think that the government should introduce a wealth tax , such that every year each household with net assets (assets minus liabilities) greater than 1,000,000 dollars, would have to pay a small fraction (less than 1 percent) of the total net asset value to the government?
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The Federal Estate tax is a tax imposed on the transfer of wealth from a deceased person to his or her heirs. Do you think the Federal Estate tax should be increased, decreased or remain the same?
○ It should be increased a lot.
○ It should be increased a little.
○ It should remain as it is.
○ It should be decreased a little.
○ It should be decreased a lot.
Next >>

Debt- vs. tax-based government spending

Debt-based government spending



Tax-based government spending

Imagine the US government wants to launch a large one-time infrastructure investment program which would cost one percent of GDP. The government plans to fully finance this investment by increasing taxes temporarily for one year. Are you in favor of the introduction of this investment program?
○ Yes.
○ No.
Next >>

Belief about the debt-to-gdp ratio

We will now ask you one question about the debt-to-GDP ratio in the United States.
The debt-to-GDP ratio is the ratio between a country's government debt and its gross domestic product (GDP). By government debt we mean the total amount owed by the Federal government . This is often referred to as the "national debt". Gross domestic product (GDP) is the market value of all final goods and services that are produced by an economy within one year .
In 1970 the debt-to-GDP ratio was 34.78 percent . This means that the Federal Government owed around a third of what the country produced within one year.
What do you think was the debt-to-GDP ratio in 2016? Please enter your answer in the text entry field below. (in percent)
I think the debt-to-GDP ratio in 2016 was (in percent):
Next >>

Debriefing

Thank you very much for completing our survey!
You will get a payment of at least 90 cents.
If there are any remarks that you would like to make or clarifications that you would like to obtain, please do let us know by writing them into the field below:
Next >>