# Market-Based Policies, Public Opinion, and Information

Grant D. Jacobsen\*
University of Oregon

# January 2020

#### Abstract

This paper experimentally examines the extent to which individuals support a market-based approach to public policy and how support levels respond to being presented with policy analysis indicating market-based policies are more cost-effective. The findings are as follows. First, absent being presented with any policy analysis, individuals tend to oppose a market-based approach to policy. Second, providing individuals with policy analysis, in which specific types of market-based policies are described as more cost-effective than non-market-based alternatives, increases general support for a market-based approach to policy. Third, the increase in support for a market-based approach to policy is larger when a nonpartisan research organization produces the analysis than a partisan organization.

JEL Codes: H1, D7

Keywords: market-based policies; public opinion; policy analysis; information

<sup>\*</sup>Post: 1209 University of Oregon, 119 Hendricks Hall, Eugene, OR, 97403-1209, Tel: (541) 346-3419, Email: gdjaco@uoregon.edu. I am thankful for helpful comments from Stefano Dellavigna, Ilyana Kuziemko, Matthew Kotchen, Matthew Lang, and Bree Lang. I acknowledge financial support from the University of Oregon.

### 1 Introduction

Market-based public policies operate through price incentives as opposed to mandates, standards, or other non-price-based approaches. While market-based policies are perhaps most prominent in the area of environmental policy, where Pigouvian taxes and cap-and-trade schemes have increasingly displaced command-and-control regulation, a market-based approach can be applied in most areas of policy. There are a variety of types of market-based policies. Some market-based policies effectively provide payments from the government to individuals or firms, such as housing vouchers, school vouchers, or the earned-income tax credit. Other market-based policies require payments to be made to the government, such as gasoline taxes or alcohol taxes. A third type of market-based policy involves the creation of a market for compliance, such as tradable emissions permits. Non-market-based approaches, in contrast, do not use markets or prices and typically involve direct government provision of a public service (e.g., public schools), standards (e.g., the minimum wage), or bans (e.g., alcohol prohibition in dry U.S. counties).

Market-based policies have two primary advantages over non-market-based approaches. First, they are more flexible. For example, firms can comply with a pollution tax by cutting emissions in a wide variety of ways whereas an environmental technology mandate requires firms to respond along only one dimension. Similarly, a housing voucher provides assistance that households can use to find a variety of types of housing, whereas public housing provides assistance only if a household chooses to live in a government-provided unit. Secondly, market-based policies preserve or create incentives that are likely to be welfare-enhancing. For example, under a pollution tax, firms have incentives to find innovative ways of controlling pollution. Firms do not have such an incentive under a technology mandate. The advantages of market-based policies with respect to flexibility and incentives make them appealing from the standpoint of cost-effectiveness and economic efficiency.

Due to the advantages outlined above, economists tend to favor market-based policies. Whaples (2006, 2009) surveys American Economic Association (AEA) economists and reports that they favor housing vouchers, energy taxes, payments to organ donors, and other positions aligned with markets, concluding that economists "often favor using market-based

solutions to address a range of problems." Fuller and Geide-Stevenson (2007) survey AEA economists and find that when asked whether they agree that "pollution taxes or marketable pollution permits are a more economically efficient approach to pollution control than emissions standards," 63 percent of economists agree, 30 percent agreed with provisos, and only 6 percent disagree.

While economists tend to support a market-based approach to policy, this support has not led to widespread adoption or political support of market-based policies. Fuller and Geide-Stevenson (2007) survey delegates from the 2000 national conventions. When asked the same question about pollution control described in the previous paragraph, the most frequent response for both Republican and Democrats was "disagree."

There are numerous potential explanations for why politicians may be hesitant to endorse market-based policies, but one potential reason is that a market-based approach to policy is not supported by their constituents. Such a position from the public would not be surprising, as the public tends to be suspicious of market mechanisms. Caplan (2007) terms this phenomenon "anti-market bias," which originates in part because the public equates "market payments with transfers, ignoring their incentive properties." There is some evidence that anti-market bias may be growing, at least if support for capitalism versus socialism can be taken as a proxy. Recent survey evidence indicates that the share of 18-29 year-olds that have a positive view of socialism (51%) is greater than the share that have a positive view of capitalism (45%) (Newport, 2018).

This paper evaluates public opinion on a market-based approach to policy and one factor which may affect support: the provision of policy analysis from research organizations. Part of the rationale for evaluating how this particular margin affects support is that there appears to be poor understanding of how market-based policies work and their potential benefits with respect to economic efficiency. Blinder (1987) discusses a survey of sixty-three environmentalists, congressional staffers, and industry lobbyists regarding tradable emissions permits. None of the respondents could correctly explain the standard economic rationale supporting tradable permits.

This paper contributes to the literature on the determinants of support for various types of public policy (see DellaVigna and Gentzkow (2010) and Druckman and Lupia (2016) for

reviews).<sup>1</sup> While much of this literature has focused on how economic and demographic characteristics are correlated with election outcomes for referenda (e.g., Kahn, 2002), little research has examined how variation in the design of a policy affects support. One exception to this trend is the Kotchen, Boyle, and Leiserowitz (2013), which presents survey evidence that mean willingness-to-pay for reducing greenhouse-gas emissions does not vary substantially regardless of whether the manner in which emissions are reduced is through a cap-and-trade program, a carbon tax, or direct regulation.

## 2 Material and Methods

This paper is based on an experimental survey administered through Amazon's Mechanical Turk (mTurk), which has become a common platform for academic research. As discussed in Horton et al. (2011), the appeal of mTurk is that it provides access to a large and diverse subject pool and typically requires less time and money to administer than experiments administered on more traditional platforms. There remains uncertainty about the credibility with which results obtained from mTurk can be extrapolated to the general population. However, research suggests that results obtained through mTurk are often similar to those based on more conventional experimental settings (Horton et al., 2011; Amir et al., 2012; Goodman et al., 2013).<sup>2</sup> Below, I describe the design of the experiment (see Table 1 for an overview of key experimental features). Complete survey language is available in the Online Supplementary Material.

At the beginning of the survey, subjects supplied information on their demographic, economic, and political traits. They were then told that they would be presented with information on various public policies. All individuals in the treatment groups were also told that they would receive information related to the cost-effectiveness of policy options. Among treatment individuals, subjects were randomly informed that the information on cost-effectiveness was based on policy analysis produced by either a liberal, nonpartisan, or conservative research organization.

<sup>&</sup>lt;sup>1</sup>A related body of literature examines determinants of contributions to various types of public goods (e.g., Costa and Kahn, 2013).

<sup>&</sup>lt;sup>2</sup>See Jacobsen (2019) for further discussion related to the external validity of results obtained through surveys administered on Mechanical Turk.

In the next part of the survey, participants were asked to state their preference between two types of policy options in five different areas of policy. Prior to making each decision, they were given a brief description of each of the two policy options. For treatment individuals, they were also told that research indicated that one of the options was more cost-effective, with the source of the analysis being determined by whichever treatment group (liberal, nonpartisan, or conservative research organization) they had been assigned to at the beginning of the survey. The pairs of options were as follows: carbon tax vs. biofuel standard, health insurance tax credits vs. government-provided insurance, housing vouchers vs. public housing, earned income tax credit vs. minimum wage, cash transfers in low-income countries vs. traditional aid programs. The first option listed in these pairs was always described as more cost-effective. The first options are also the market-based options, but nothing was communicated to subjects about "market-based" policies at this stage of the experiment. The first part of the experiment was analyzed in Jacobsen (2019), which finds that the treatment affected individuals choices across the specific pairs of policy choices.

The second part of the survey aimed to assess general preferences for a market-based approach to policy. In particular, after stating their policy preferences in each area, individuals were informed that a carbon tax, housing vouchers, tax credits for health insurance, cash transfers to low-income households, and the earned income tax credit are all examples of market-based policies because they operate through financial incentives as opposed to direct government intervention. They were also informed that policies that are not market-based include biofuel standards, public housing, government-provided health insurance, most traditional aid programs, and the minimum wage. Individuals were then asked which types of policies they generally prefer: market-based policies on non-market-based policies.<sup>3,4</sup>

Summary statistics from the experiment are reported in Table 2, both overall and by individual ideology. As shown in Jacobsen (2019), relative to data from the general population recorded in the American Community Survey, the mTurk sample is more likely to be male,

<sup>&</sup>lt;sup>3</sup>In order to avoid order effects, the order in which "market-based" and "non-market-based" was placed in the response menu was randomized across surveys.

<sup>&</sup>lt;sup>4</sup>The survey ended with a debriefing page that informed subjects that the information on cost-effectiveness presented during the survey was non-factual (i.e. neither necessarily correct or incorrect). The design of the experiment was approved by the University of Oregon's institutional review board. Further details on the survey design, such as subject recruitment and compensation, are available in Jacobsen (2019).

younger, less likely to be married, more likely to be born in the U.S., more likely to be white, more educated, and more likely to be employed. However, most of the differences are small in magnitude.<sup>5</sup>

### 3 Results and Discussion

I begin the analysis with Figure 1, which presents the proportion of respondents with a general preference for a market-based approach to policy among individuals in the control group and individuals in the treatment groups. Absent any information on cost-effectiveness, less than half of the subjects (45 percent) support a market-based approach to policy. For individuals that were presented with research on cost-effectiveness, support increases by 7.5 percentage points, crossing the 50 percent threshold. The results indicate that individuals tend to slightly oppose a market-based approach to policy, but become increasingly supportive of a market-based approach when presented with information indicating that market-based policies are more cost-effective.

In the next part of the analysis, I investigate how the effect of the treatment varies depending on the type of research organization that conducts the analysis. All regressions are based on linear probability models of the form,

Outcome<sub>i</sub> = 
$$\alpha + T'_i \beta + X'_i \gamma + \epsilon_i$$
, (1)

where  $T_i$  is a vector of variables related to treatment,  $X_i$  is a vector of control variables comprised of individual characteristics, including gender, age, marital status, having children, U.S. born, registered voter, race, education, employment, and income, and  $\epsilon_i$  is an error term.<sup>6</sup> Results are similar if a probit model is employed.

Table 3 reports results of how being presented with research on cost-effectiveness affects general preferences for a market-based approach to policy. The first column reports results

<sup>&</sup>lt;sup>5</sup>Before moving to the results, it is worth acknowledging again that this paper has a strong connection to Jacobsen (2019) and that both studies are based on output from one experimental survey. The key distinction between the two papers is that Jacobsen (2019) focuses primarily on research organizations and when they effect public opinion (across types of individuals, types of research organizations, and different areas of policy). The present paper focuses instead on the public's general preference for a market-based approach to policy.

<sup>&</sup>lt;sup>6</sup>Forty observations are excluded from the regression models due to survey non-response for some control variables.

that pool all treatment individuals together. The results are very similar to those in Figure 1 and indicate that, on average, the treatment led to about a 7 percentage point increase in support for a market-based approach. Column 2 allows the effect of policy analysis to vary depending on whether the research organization is partisan. Research conducted by nonpartisan organizations increases support by 11 percentage points on average. Research conducted by partisan organizations, in contrast, does not have a statistically significant effect on support. In column 3, separate effects are estimated for liberal and conservative organizations. In these results, liberal research organizations have a statistically significant effect on support for market-based policies. Analysis provided through conservative organizations does not have a statistically significant effect on support for a market-based approach to policy.

Table 4 presents results that are analogous to column 3 of Table 3, except that the model is estimated separately across subsamples depending on an individual's ideology. The primary insight from Table 4 is that research on cost-effectiveness is effective at increasing general support for a market-based approach to policy for individuals with either liberal or moderate political views, which are the two groups of individuals who are most likely to oppose market-based policies absent the treatment. Conservatives, about three-quarters of which support a market-based approach to policy, do not alter their opinion on market-based policies in response to treatment.

## 4 Conclusion

Market-based policies hold the promise of enhancing social welfare by increasing the economic efficiency of government interventions. Despite the appeal of market-based policies, non-market-based approaches remain common in practice. This paper investigates public opinion on market-based public policy and how it interacts with information using a survey experiment. Absent being provided with any sort of policy analysis, individuals tend to oppose market-based policies. Once provided with policy analysis indicating that market-based policies are more cost-effective than non-market-based alternatives, the majority of respondents favor a market-based approach to policy. The increase is most evident when the analysis is conducted by a non-partisan research organization. Collectively, the results

suggest that increasing the production and dissemination of non-partisan policy analysis may lead to social benefits.

## 5 References

- Amir, O., Rand, D. G., and Gal, Y. K. (2012). "Economic games on the Internet: The effect of \$1 stakes," *PLoS ONE*, vol. 7(2), e31461.
- Blinder, A. (1987). *Hard Heads, Soft Hearts: Tough-Minded Economics for a Just Society.*Reading, MA: Addison-Wesley.
- Caplan, B. (2007). The Myth of the Rational Voter: Why Democracies Choose Bad Policies. Princeton, N.J.: Princeton University Press.
- Costa, D. L. and Kahn, M. E. (2013). "Do Liberal Home Owners Consume Less Electricity? A Test of the Voluntary Restraint Hypothesis," *Economics Letters*, vol. 119: pp. 210-212.
- DellaVigna, S. and Gentzkow, M. (2010). "Persuasion: Empirical Evidence," *Annual Review of Economics*, vol. 2: pp. 643-669.
- Druckman, J. N. and Lupia, A. (2016). "Preference Change in Competitive Political Environments," *Annual Review of Political Science*, vol. 19: pp. 13-31.
- Fuller, D. and Geide-Stevenson, G. (2006). "Consensus on Economic Issues: A Survey of Republicans, Democrats, and Economists," *Eastern Economic Journal*, vol. 33: pp. 81-94.
- Goodman, J. K., Cryder, C. E., and Cheema, A. (2013). "Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples," *Journal of Behavioral Decision Making*, vol. 26: pp. 213-224.
- Horton, J. J, Rand, D. G., and Zeckhauser, R. J. (2011). "The Online Laboratory: Conducting Experiments in a Real Labor Market," *Experimental Economics*, vol. 14: pp. 399-425.
- Kahn, M. E. (2002). "Demographic Change and the Demand for Environmental Regulation," *Journal of Policy Analysis and Management*, vol. 21(1): pp. 45-62.
- Jacobsen, G. D. (2019). "How Do Different Sources of Policy Analysis Affect Policy Preferences? Experimental Evidence from the United States," *Policy Sciences*, vol. 52: pp. 315-342.
- Kotchen, M. J., Boyle, K. J., and Leiserowitz, A. A. (2013). "Willingness-to-pay and policy-instrument choice for climate-change policy in the United States," *Energy Policy*, vol. 55: pp. 617-625.
- Newport, F. (2018). "Democrats More Positive About Socialism Than Capitalism," Gallup News. August 13, 2018. Online at: https://news.gallup.com/poll/240725/democrats-positive-socialism-capitalism.aspx
- Whaples, R. (2006). "Do Economists Agree on Anything? Yes!," *Economist's Voice*, vol. 3(9): pp. 1-6.

Whaples, R. (2009). "The Policy Views of American Economic Association Members: The Results of a New Survey," *Econ Journal Watch*, vol. 6(3): pp. 337-348.

# 6 Figures and Tables

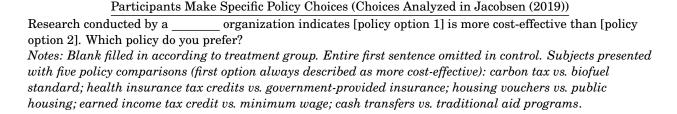
Table 1: Overview of Key Experimental Features

#### Research on Cost-Effectiveness

- Control: No information on cost effectiveness throughout survey
- Treatment 1: Cost-effectiveness research produced by a liberal (Democrat-leaning) organization.
- Treatment 2: Cost-effectiveness research produced by a nonpartisan organization.
- Treatment 3: Cost-effectiveness research produced by a conservative (Republican-leaning) organization.

#### Participants Given Information on Two Policy Options

*Example:* Governments often implement programs to increase health care coverage, especially for low-income households. There are a variety of policies that can be used to increase access to health care. One option is to provide tax credits to individuals that buy private insurance. These tax credits would cover a significant portion of the costs of health care coverage. Another option is to directly provide low-income households with government-provided insurance.



Participants State Preference for Market-Based or Non-Market-Based Approach to Policy
A carbon tax, housing vouchers, tax credits for health insurance, cash transfers to low-income households, and the earned income tax credit are all examples of "market-based" policies because they operate through financial incentives as opposed to direct government intervention. Policies that are not "market-based" include biofuel standards, public housing, government-provided health insurance, most traditional aid programs, and the minimum wage. Which type of policies do you generally prefer? [Options: Non-Market-Based Policies: Market-Based Policies]

*Notes:* The order in which items in the menu of possible response options appeared was randomized across subjects. Experiment implemented through Amazon's Mechanical Turk. The experiment was approved by the University of Oregon's IRB.

**Table 2: Summary Statistics** 

|   |             |           | Sample Restricted by Ideology |          | Ideology |
|---|-------------|-----------|-------------------------------|----------|----------|
|   | Full Sample |           | Liberal                       | Moderate | Conserv. |
| Variable  | Mean        | Std. Dev. |                               | Means    |          |
| Outcome   |             |           |                               |          |          |
| General Pref. for Market-Based Policies (1 = Yes) | 0.51        | 0.50      | 0.29                          | 0.52     | 0.72     |
| Individual Characteristics                        |             |           |                               |          |          |
| Ideology: Liberal                                 | 0.38        | 0.48      | 1.00                          | 0.00     | 0.00     |
| Ideology: Moderate                                | 0.26        | 0.44      | 0.00                          | 1.00     | 0.00     |
| Ideology: Conservative                            | 0.36        | 0.48      | 0.00                          | 0.00     | 1.00     |
| Registered Voter                                  | 0.95        | 0.22      | 0.96                          | 0.91     | 0.97     |
| Gender (1 = Male)                                 | 0.55        | 0.50      | 0.53                          | 0.63     | 0.51     |
| Age   | 36.96       | 11.55     | 35.09                         | 35.60    | 39.90    |
| Marriage Status (1 = Married)                     | 0.38        | 0.49      | 0.27                          | 0.35     | 0.53     |
| Children (1 = Has Children)                       | 0.42        | 0.49      | 0.28                          | 0.40     | 0.58     |
| US Born (1 = US Born)                             | 0.97        | 0.16      | 0.97                          | 0.96     | 0.98     |
| Race: African American / Black                    | 0.06        | 0.23      | 0.06                          | 0.07     | 0.05     |
| Race: Asian / Asian American                      | 0.07        | 0.25      | 0.09                          | 0.09     | 0.03     |
| Race: European American / White                   | 0.81        | 0.39      | 0.77                          | 0.75     | 0.89     |
| Race: Hispanic / Latino                           | 0.06        | 0.23      | 0.08                          | 0.06     | 0.03     |
| Race: Other                                       | 0.00        | 0.00      | 0.00                          | 0.00     | 0.00     |
| Educ: Less than High School Degree                | 0.00        | 0.07      | 0.00                          | 0.01     | 0.01     |
| Educ: High School Graduate / GED                  | 0.12        | 0.33      | 0.11                          | 0.14     | 0.13     |
| Educ: Some College                                | 0.26        | 0.44      | 0.29                          | 0.25     | 0.24     |
| Educ: Associate's Degree                          | 0.14        | 0.35      | 0.12                          | 0.15     | 0.15     |
| Educ: Bachelor's Degree                           | 0.37        | 0.48      | 0.39                          | 0.37     | 0.35     |
| Educ: Master's Degree                             | 0.07        | 0.26      | 0.08                          | 0.05     | 0.09     |
| Educ: Doctoral Degree                             | 0.01        | 0.08      | 0.01                          | 0.01     | 0.01     |
| Educ: Professional Degree                         | 0.02        | 0.13      | 0.01                          | 0.02     | 0.02     |
| Emp: Full-Time                                    | 0.59        | 0.49      | 0.57                          | 0.61     | 0.59     |
| Emp: Part-Time                                    | 0.10        | 0.30      | 0.10                          | 0.10     | 0.11     |
| Emp: Self-Employed                                | 0.15        | 0.36      | 0.20                          | 0.13     | 0.12     |
| Emp: Unemployed                                   | 0.05        | 0.22      | 0.06                          | 0.06     | 0.04     |
| Emp: Student                                      | 0.03        | 0.16      | 0.03                          | 0.03     | 0.02     |
| Emp: Not in Labor Force                           | 0.08        | 0.27      | 0.05                          | 0.08     | 0.12     |
| Income: Less than 15k                             | 0.22        | 0.41      | 0.25                          | 0.23     | 0.18     |
| Income: 15k-50k                                   | 0.51        | 0.50      | 0.56                          | 0.50     | 0.47     |
| Income: More than 50k                             | 0.27        | 0.45      | 0.19                          | 0.27     | 0.36     |

*Notes:* Each observation represents a survey respondent. Data based on experiment outlined in Table 1. There are 1,443 observations and 543, 380, and 521 liberals, moderates, and conservatives, respectively.

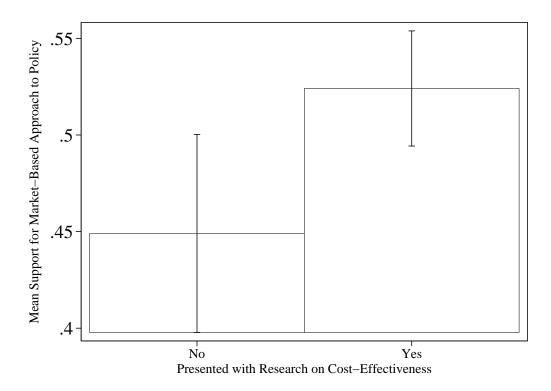


Figure 1: **Preference for Market Based Approach to Policy by Treatment Group.** Bars represent 95-percent confidence intervals. Mean support levels are 7.5 percentage points greater when individuals are presented with research on cost-effectiveness (standard error = 3.0 percentage points; *p*-value = .013). There are 363 individuals in the "No" category and 1,080 individuals in the "Yes" category.

Table 3: Estimates of the Effect of the Treatment on General Preference for Market-Based Policies

|                         | (1)     | (2)      | (3)      |
|-------------------------|---------|----------|----------|
| Research from Any Org.  | 0.066** |          |          |
|                         | (0.028) |          |          |
| Res. Org.: Nonpartisan  |         | 0.110*** | 0.110*** |
|                         |         | (0.035)  | (0.035)  |
| Res. Org: Partisan      |         | 0.043    |          |
|                         |         | (0.030)  |          |
| Res. Org.: Liberal      |         |          | 0.076**  |
|                         |         |          | (0.035)  |
| Res. Org.: Conservative |         |          | 0.011    |
|                         |         |          | (0.035)  |
|                         |         |          |          |
| Control Group Mean      | 0.45    | 0.45     | 0.45     |
| R-squared               | 0.157   | 0.160    | 0.162    |
| Obs.                    | 1403    | 1403     | 1403     |

Notes: Dependent variable is whether an individual indicated a general preference for market-based policies. The omitted experimental group is the control group that received no information on cost-effectiveness. All models are linear probability models. All models include controls for gender, age, marital status, having children, U.S. born, registered voter, race, education, employment, and income. White-corrected standard errors are reported in parentheses. One, two, and three stars indicate 10 percent, 5 percent, and 1 percent significance, respectively. In column 2, the two reported coefficients are significantly different (p < .05). In column 3, the coefficients on *Res. Org.: Nonpartisan* and *Res. Org: Conservative* are significantly different (p < .05), but the other pairwise comparisons across reported coefficients are not significant.

Table 4: Estimates of the Effect of the Treatment on General Preference for Market-Based Policies by Individual Ideology

|                         | Liberal | Moderate | Conservative |
|-------------------------|---------|----------|--------------|
|                         | (1)     | (2)      | (3)          |
| Res. Org.: Liberal      | 0.121** | 0.131*   | -0.009       |
|                         | (0.057) | (0.079)  | (0.057)      |
| Res. Org.: Nonpartisan  | 0.132** | 0.199**  | 0.008        |
|                         | (0.054) | (0.083)  | (0.053)      |
| Res. Org.: Conservative | 0.024   | 0.089    | -0.049       |
|                         | (0.054) | (0.080)  | (0.059)      |
| Control Group Mean      | 0.22    | 0.39     | 0.71         |
| R-squared               | 0.046   | 0.064    | 0.090        |
| Obs.                    | 534     | 366      | 503          |

Notes: Dependent variable is whether an individual indicated a general preference for market-based policies. The omitted experimental group is the control group that received no information on cost-effectiveness. Samples are restricted to individuals with the ideology reported in the column headings. All models are linear probability models. All models include controls for gender, age, marital status, having children, U.S. born, registered voter, race, education, employment, and income. White-corrected standard errors are reported in parentheses. One, two, and three stars indicate 10 percent, 5 percent, and 1 percent significance, respectively.

# A Online Supplementary Material

# A.1 Language of Survey

This section reports the language used in the survey. Each subsection represents a survey page. All information on a survey page was presented simultaneously. Respondents clicked an arrow after completing a page in order to move to the next page. For survey questions, possible answers are included in brackets. Any boldface that appears below was also used in the survey. No italicized font appeared in the survey. Italics are used below to either indicate language that varied by treatment or to insert comments to clarify survey structure (in which case, the sentence is preceded by "Note:").

## A.1.1 Disclosure and Consent Page

This research is conducted by academic researchers. The goal of the research is to enhance understanding of how individuals form their views on public policies. Regardless of your political ideology, this is an important area of research and you are contributing toward to our knowledge as a society by completing this survey.

In this survey, you will be provided with some information about public policy and will be asked questions related to your opinions about public policy, as well as some general demographic questions.

## It is very important that you:

- 1) Answer honestly
- 2) Carefully read the information presented throughout the survey

You should be able to comfortably complete the survey in 15 minutes.

Additional details related to informed consent:

There are no foreseen risks to your participation in this survey. While it is hard to completely eliminate any possibility of a breach in confidentiality or privacy, no personally identifiable information will be collected in this survey and all data will be stored on password-protected computers. The information that you give in the study will be anonymous (your name will not be recorded and we will not collect detailed geographic information or IP addresses).

If you have any questions about the research, you may contact us at econpolicy-lab@gmail.com. If you have questions regarding your rights as a research subject, please contact the University of Oregon's Research Compliance Services at researchcompliance@uoregon.edu.

You have the right to withdraw from the study at any time without penalty. Because data are anonymous, you may not withdraw after the data is submitted. Payment will not be given for incomplete or unfinished surveys or surveys completed abnormally quickly.

How to withdraw from the study: Your participation in this study will not be finalized until you have completed it. You can withdraw at any time by closing the browser window or exiting to a different web site.

You may print or save a copy of this page for your own records.

## A.1.2 Background Information - Page 1

What is your gender? [Male; Female; Other]

What is your year of birth? [Drop down menu comprised of 1916-1988]

What is your marital status? [Single; Married]

Do you have children [Yes; No]

How would you describe your ethnicity/race? [European American / White; African American / Black; Hispanic / Latino; Asian / Asian American; Other]

Were you born in the United States? [Yes; No]

In which state do you currently reside? [Drop down menu of 50 states, DC, PR]

## A.1.3 Background Information - Page 2

What is the highest level of school you have completed or the highest degree you have received? [Less than high school degree; High school graduate (high school diploma or equivalent including GED); Some college but no degree; Associate degree in college (2-year); Bachelor's degree in college (4-year); Master's degree; Doctoral degree; Professional degree (JD, MD)]

Which statement best describes your current employment status? [Full-time employee; Part-time employee; Self-employed or small business owner; Unemployed and looking for work; Student; Not in labor force (for example, retired of full-time parent)]

In what range does your income fall? [\$0-\$15,000; \$15,000-\$50,000; Over \$50,000]

Who did you vote for in the 2016 election? Or who would you have voted for if you had voted? [Hillary Clinton; Donald Trump; Other]

On policy matters, where do you see yourself on the liberal/conservative spectrum? [Conservative; Moderate; Liberal]

Are you registered to vote? [Yes; No]

#### A.1.4 Survey Preview

The remainder of the survey consists of information and questions about your preferences in 5 different areas of public policy. There are also two more general questions at the end of the survey. **Please take your time and complete your responses carefully.** 

#### A.1.5 Treatment - Cost Effectiveness

In the following portions of the survey, you will be presented with information on various policies. Some of this information includes information on the cost-effectiveness of different policy options. Cost-effectiveness is a measure of the expenditures required to achieve a certain outcome. As a general example, consider two options: "A" and "B". If A is more cost effective than B, then A can be used to achieve a similar result as B at a lower overall cost.

The cost-effectiveness information that is presented in this survey is based on research and analysis conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization]. Note 1: for the "non-partisan" treatment group, the following was also included at the end of this section "(Non-partisan organizations are politically neutral, they are not aligned with a political

party)." Note 2: This page was omitted from survey for control group.

What type of organization conducted the cost-effectiveness research that will be presented as part of this survey? [Conservative organization; Non-partisan organization; Liberal organization]

# A.1.6 Climate Change Policy - Page 1 - Attention Check

Limiting greenhouse gas (GHG) emissions—and the associated negative effects from climate change—has been a policy goal for many governments.

There are a variety of policy options available that could be employed to reduce the amount of GHG emissions.

One option is to implement a carbon tax. Because a carbon tax would require firms to pay a fee if they released GHG emissions, it would give firms an incentive to find alternative methods of production that led to lower levels of GHG emissions.

Another option is a biofuel standard. Biofuels are alternatives to gasoline or oil that are derived from plants. Powering a vehicle through biofuels typically leads to the release of fewer GHG emissions than powering a vehicle through a conventional fuel such as gasoline or oil. Biofuel standards require a certain fraction (i.e. 20%) of fuel for automobile sources must come from biofuels.

Research conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization] organization indicates that a carbon tax is more cost-effective than a biofuel standard. Note: This paragraph omitted from survey for control group.

Which of the following is NOT a climate change policy option that was described above? [Carbon Tax; Endangered Species Act; Biofuel Standard]

#### A.1.7 Climate Change Policy - Page 2 - Preference

Note: This page also included the background information on the two policies. That is, all of the language from the previous page, with the exception of the question at the bottom of the previous page, was also included on this page.

Which climate change policy do you prefer? [Carbon Tax; Biofuel Standard]

#### A.1.8 Health Policy - Page 1 - Attention Check

Governments often implement programs to increase health care coverage, especially for low-income households.

There are a variety of policies that can be used to increase access to health care.

One option is to provide tax credits to individuals that buy private insurance. These tax credits would cover a significant portion of the costs of health care coverage.

Another option is to directly provide low-income households with government-provided insurance.

Research conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization] organization indicates tax credits are more cost-effective than government-provided insurance. Note: This paragraph omitted from survey for control group.

Which of the following is NOT a health policy option that was described above? [Health Insurance Tax Credits; Government-Provided Insurance; HMOs]

## A.1.9 Health Policy - Page 2 - Preference

Note: This page also included the background information on the two policies. That is, all of the language from the previous page, with the exception of the question at the bottom of the previous page, was also included on this page.

Which health policy do you prefer? [Health Insurance Tax Credits; Government-Provided Insurance]

## A.1.10 Housing Policy - Page 1 - Attention Check

Providing affordable housing for low-income households has often been considered a public policy priority.

There are a variety of policy options available that could be employed to increase the affordability of housing to low-income households.

One option is to provide housing vouchers. Households that receive vouchers do not need to pay the full amount of their rent. Instead, they pay the difference between the actual rent and the amount of the voucher. The voucher amount is paid to landlords by the government.

Another option is for the government to provide public housing. Public housing is built by the government. Rental prices in public housing are set at a below-market rate in order to keep prices affordable.

Research conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization] organization indicates housing vouchers are more cost-effective than public housing. Note: This paragraph omitted from survey for control group.

Which of the following is NOT a housing policy option that was described above? [Housing Vouchers; Public Housing; Property Taxes]

## A.1.11 Housing Policy - Page 2 - Preference

Note: This page also included the background information on the two policies. That is, all of the language from the previous page, with the exception of the question at the bottom of the previous page, was also included on this page.

Which housing policy do you prefer? [Housing Vouchers; Public Housing]

## A.1.12 Labor Policy - Page 1 - Attention Check

Increasing the earnings of low-income workers has often been a labor policy objective for many governments.

There are a variety of policies that can be used to increase the earnings of low-income workers.

One option is the earned income tax credit. The earned income tax credit effectively subsidizes low-income earnings (i.e. for each \$1 earned, the government gives the household an additional \$0.40 dollars in their tax refund).

Another option is a minimum wage. The minimum wage sets the minimum allowable hourly rate that workers are allowed to be paid.

Research conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization] organization indicates the earned income tax credit is more cost-effective than the minimum wage. Note: This paragraph omitted from survey for control group.

Which of the following is NOT a labor policy option that was described above? [Minimum Wage; Earned Income Tax Credit; Corporate Tax]

## A.1.13 Labor Policy - Page 2 - Preference

Note: This page also included the background information on the two policies. That is, all of the language from the previous page, with the exception of the question at the bottom of the previous page, was also included on this page.

Which type of labor policy do you prefer? [Minimum Wage; Earned Income Tax Credit]

## A.1.14 Development Policy - Page 1 - Attention Check

Developed countries often provide funding to organizations to implement aid programs to reduce poverty in poor nations.

There are a variety of policies that can be used to reduce poverty in poor nations.

One option is to provide cash transfers. Cash transfers are direct monetary payments to low-income households.

Another option is to use traditional aid programs based on in-kind assistance or supplyside policies. Examples of traditional aid programs include building schools, adult literacy campaigns, de-worming programs, and the provision of agricultural technology.

Research conducted by a [liberal (i.e. Democrat-leaning); non-partisan; conservative (i.e. Republican-leaning) organization] organization indicates cash transfers are more cost-effective than traditional aid programs. Note: This paragraph omitted from survey for control group.

Which of the following is NOT an aid policy option that was described above? [Cash Transfers; Traditional Aid Programs; Elections]

## A.1.15 Development Policy - Page 2 - Preference

Note: This page also included the background information on the two policies. That is, all of the language from the previous page, with the exception of the question at the bottom of the previous page, was also included on this page.

Which type of aid policy do you prefer? [Cash Transfers; Traditional Aid Programs]

#### A.1.16 General Question on Market-Based vs Non-Market-Based Policies

A carbon tax, housing vouchers, tax credits for health insurance, cash transfers to low-income households, and the earned income tax credit are all examples of "market-based" policies because they operate through financial incentives as opposed to direct government intervention. Policies that are not "market-based" include biofuel standards, public housing, government-provided health insurance, most traditional aid programs, and the minimum wage. Which type of policies do you **generally** prefer? [Non-Market-Based Policies; Market-Based Policies]

## A.1.17 Debriefing

Thank you for your participation. Depending on the survey you completed, you may have been presented with information on the cost-effectiveness of the policy options described earlier in this survey. This cost-effectiveness information was non-factual (i.e. neither necessarily correct nor incorrect). It was added to the survey as part of an experimental examination of how individuals respond to different sources of information.

#### A.1.18 Opportunity for Comments

If you have any comments on this survey, please enter them here: