**Appendix A: US TAPS Survey**

The wording of our hypotheses varies very slightly among the three registration documents, so we concentrate here in describing the first survey. All details appear in our registration documents at <http://egap.org/registration/665>.

 While the use of online, opt-in surveys can lead to concerns about unobserved factors leading to samples that are not representative of the national population, a recent comparison of online survey versus other survey formats (mail-out, telephone, etc.) finds few differences based on survey mode.[[1]](#footnote-1) Furthermore, TAPS uses individual demographic data and residential addresses to build a nationally representative sample based on observable characteristics and provides a computer and internet access to panelists that lack them, guaranteeing a nationally-representative sample.[[2]](#footnote-2) More importantly for our study, we harness the power of randomization to achieve balance between treatment and control groups.

Our original research design asked a small number of questions in a survey experiment with block randomization of two treatment conditions: the state of the economy and the primacy of domestic or global causes of economic performance. The United States is an open economy with a record of relatively slow economic growth following the Great recession of 2007–2008. Consequently, we had to tread carefully if we wanted to motivate respondents to think about approval of policy-makers under different circumstances. Rather than framing the US economy as open or close, we varied emphasis on whether “global market forces” affected economic outcomes, thus manipulating the salience of openness. Similarly, we did not present recent economic growth as extremely positive or extremely negative, but invited respondents to think about economic growth in recent decades as faster or slower than the country’s historic average. Though these treatments may lack enough power to motivate respondents to look at policy-maker approval from certain points of view, we judged this to be a superior alternative to a heavy-handed effort to manipulate salience of growth and openness to an extent that respondents would not find believable.

CONTROL GROUP

Our basic control group *retrospective evaluation question* is as follows:

*Question 1 (Control)*

How much blame or credit do you place on policy makers for US economic

growth in past decades?

1. A great deal of blame or credit

2. Some blame or credit

3. Very little blame or credit

4. No blame or credit

5. Don’t know

SLOW GROWTH FRAMES

*Question 1c: Slow Growth and Domestic Treatment*

Economic growth can be affected by government policy and the decisions of companies. Some experts have noted that over the past decades US economic growth has been relatively *slow* compared to the US historical average. How much blame do you place on government policy makers for this economic growth?

*Question 1d: Slow Growth and Globalization Treatment*

Economic growth can be affected by government policy, the decisions of companies and *global market forces*. Some experts have noted that over the past decades US economic growth has been relatively *slow* compared to the US historical average. How much blame do you place on policy makers for this economic growth?

FAST GROWTH FRAMES

The *prospective evaluation question* is almost identical to our first retrospective question, with only a change in focus on evaluation of expected growth in 2016. For example, our question for the slow growth, domestic treatment is as follows:

*Question 2a: Slow Growth and Domestic Treatment*

Economic growth can be affected by government policy and the decisions of companies. If the US economy is in recession and is growing at a slow rate in 2016, how much blame would you place on policy makers for this economic growth.

1. A great deal of blame

2. Some blame

3. Very little blame

4. No blame

5. Don’t know

Similarly, the *vote choice* *question* manipulates frames on economic growth and globalization. The *vote choice question* was only included in Experiment #1. The fast growth, domestic treatment frame for vote choice appears next:

*Question 3a: Fast Growth and Domestic Treatment*

Economic growth can be affected by government policy and the decisions of companies. If the US economy has recovered and is growing at a fast rate in 2016, how likely are you to vote for the Democratic Presidential candidate?

1. Very likely

2. Likely

3. Undecided

4. Unlikely

5. Very Unlikely

**Appendix B. Randomization checks across treatment groups**

In the following tables, we show the sample mean (and sample standard deviation) of individual level characteristics across treatment groups in the three different surveys. Because we could only add a relatively small number of questions, the individual-level characteristics that we consider here vary depending on individual-level items that the surveys already included. In all cases, we show balance in socioeconomic characteristics (income, education, gender, age); where possible, we include behavioral traits like religiosity or party identification. We never find statistically significant differences in individual characteristics across treatment groups, which is consistent with successful randomization.

**Table B1.** Balance across treatment groups, US 2014

|  |  |  |
| --- | --- | --- |
|  | Treatment |  |
|  | 1 | 2 | 3 | 4 | Control |
| Marital status | 2.32 | 2.66 | 2.08 | 2.55 | 2.38 |
|  | (1.26) | (1.3) | (1.41) | (1.29) | (1.35) |
| Religious attendance | 3.64 | 3.61 | 3.72 | 3.5 | 3.63 |
|  | (1.76) | (1.74) | (1.61) | (1.72) | (1.73) |
| Household income | 6.42 | 6.3 | 6.67 | 5.88 | 6.14 |
|  | (3.94) | (3.86) | (4.05) | (4.02) | (3.95) |
| Age | 51.28 | 51.56 | 52.11 | 52.74 | 51.93 |
|  | (15.86) | (16.33) | (15.92) | (15.71) | (15.27) |
| Female | 0.49 | 0.51 | 0.48 | 0.49 | 0.56 |
|  | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) |
| Obama approval | 2.71 | 2.63 | 2.67 | 2.67 | 2.61 |
|  | (1.13) | (1.1) | (1.09) | (1.13) | (1.13) |
| Democrat | 0.29 | 0.27 | 0.27 | 0.26 | 0.32 |
|  | (0.45) | (0.45) | (0.45) | (0.44) | (0.47) |
| Republican | 0.18 | 0.17 | 0.22 | 0.22 | 0.16 |
|  | (0.39) | (0.38) | (0.41) | (0.41) | (0.37) |
| Independent | 0.23 | 0.23 | 0.21 | 0.23 | 0.23 |
|  | (0.42) | (0.42) | (0.41) | (0.42) | (0.42) |

**Table B2.** Balance across treatment groups, US 2015

|  |  |
| --- | --- |
|  | Treatment |
|  | 1 | 2 | 3 | 4 |
| Marital status | 2.22 | 2.21 | 2.74 | 2.34 |
|  | (1.28) | (1.32) | (1.36) | (1.33) |
| Religious attendance | 3.67 | 3.75 | 3.52 | 3.58 |
|  | (1.76) | (1.7) | (1.69) | (1.71) |
| Household income | 6.51 | 6.11 | 6.16 | 6.32 |
|  | (4.16) | (3.87) | (4.02) | (3.74) |
| Age | 53.87 | 52.37 | 51.99 | 50.78 |
|  | (15.3) | (15.3) | (16.3) | (15.6) |
| Female | 0.48 | 0.48 | 0.51 | 0.51 |
|  | (0.5) | (0.5) | (0.5) | (0.5) |
| Obama approval | 2.65 | 2.69 | 2.7 | 2.62 |
|  | (1.11) | (1.1) | (1.14) | (1.14) |
| Democrat | 0.28 | 0.25 | 0.29 | 0.3 |
|  | (0.45) | (0.43) | (0.45) | (0.46) |
| Republican | 0.19 | 0.19 | 0.2 | 0.18 |
|  | (0.39) | (0.4) | (0.4) | (0.39) |
| Independent | 0.22 | 0.26 | 0.23 | 0.2 |
|  | (0.41) | (0.44) | (0.42) | (0.4) |

**Table B3.** Balance across treatment groups, Canada survey

|  |  |
| --- | --- |
|  | Treatment |
|  | 1 | 2 | 3 | 4 |
| Female | 0.45 | 0.5 | 0.49 | 0.53 |
|  | (0.5) | (0.5) | (0.5) | (0.5) |
| Personal Finances | 2.22 | 2.17 | 2.21 | 2.2 |
|  | (0.77) | (0.75) | (0.73) | (0.75) |
| Vote choice in 2011 | 3.49 | 3.52 | 3.59 | 3.55 |
|  | (2.36) | (2.45) | (2.36) | (2.47) |
| Immigrant | 1.16 | 1.15 | 1.16 | 1.15 |
|  | (0.36) | (0.36) | (0.36) | (0.36) |
| Education | 4.01 | 3.91 | 3.91 | 4.01 |
|  | (1.69) | (1.59) | (1.56) | (1.6) |
| Income | 4.91 | 4.65 | 4.59 | 4.8 |
|  | (2.56) | (2.5) | (2.42) | (2.5) |
| Employment | 4.57 | 4.68 | 4.79 | 4.72 |
|  | (3.49) | (3.55) | (3.49) | (3.57) |
| Race | 5.88 | 5.6 | 5.72 | 5.68 |
|  | (3.91) | (3.63) | (3.83) | (3.72) |
| Religion | 2.71 | 2.48 | 2.44 | 2.54 |
|  | (2.58) | (2.34) | (2.19) | (2.27) |
| Religious Attachment | 2.8 | 2.85 | 2.74 | 2.84 |
|  | (1.46) | (1.41) | (1.4) | (1.44) |
| First Language | 1.47 | 1.52 | 1.5 | 1.51 |
|  | (0.66) | (0.68) | (0.65) | (0.66) |

**Appendix C. Summary results of Experiment #1**

In our first experiment we collected participants’ *attributions of responsibility* for past and future growth as well as their *intention to vote* for the incumbent Democratic Party in the 2016 elections. These questions appeared after receiving one of four different treatments, each of which combined an economic growth frame with a globalization frame, as explained in the main text.[[3]](#footnote-3)

 We first inspect attribution responsibility for past economic outcomes. After receiving a frame, participants were asked: “How much blame do you place on policy makers for this economic growth?” Participants registered answers to the responsibility attribution questions based on four-point ordered scales, from “no blame/credit” to “a great deal of blame/credit”, with an additional “don’t know” option. In this first survey, we did not offer the possibility of blaming other actors for economic outcomes.

 Figure C1 shows the survey-weighted distribution of responses to this item across the four different treatments and in the control group; the numbers on top of each bar represent the survey-weighted percentage of respondents that express each opinion (the numbers add up to 100 across all plots in the figure.) Figure C1 shows that individuals in the control group tend to attribute ample responsibility to politicians. However, when primed to believe that past growth has been relatively fast, participants notoriously refuse to provide credit to politicians. In contrast, when primed to believe that past growth was slow, they are quick to apportion blame to them.

 For the sake of presentation, we re-coded information in Figure C1 into a “Highly responsible” category, which includes responses of 1 or 2, and a “Not very responsible” category for all other categories. (Alternative codifications, including elimination of “don’t know” responses from the denominator, yield very similar results.) These recoded categories appear in Table C1. We first compare responses between the “domestic” and “globalization” treatments in Panel 1 (Table 1). When we prime respondents to recall slow growth in the recent past, 48% of respondents assign policy-makers the highest levels of blame for slow growth in the “domestic” treatment (column 2), which is substantively identical to the 50% of respondents in the “global” treatment (column 4). When we prime respondents to recall fast economic growth, only 3% of respondents gave the government high levels of credit. Again, this estimate is basically identical for both the “domestic” and “global” treatments. The finding that the “global market forces” frame does not generate different attributions of blame (credit) for low (high) economic growth runs counter to our expectations based on the *globalization asymmetry* and *blame mitigation* hypotheses. In Panels 2 and 3 we show that similar results obtain when we analyze *prospective* *evaluations* of the economy or *vote* *intentions* as outcomes, with one exception: the fast/slow growth asymmetry in intentions to vote for the incumbent government disappears in the *globalization* treatments, but continues to be marked in the *domestic* treatments, which is consistent with the *blame mitigation* hypothesis.

**Table C1:** Globalization, growth, and responsibility attributions: US 2014

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Survey |  | **Domestic Fast** | **Domestic Slow** | **Global****Fast** | **Global****Slow** | **Control** |
| **Panel 1** |  | **Politicians responsible for past economic outcomes?** |
| US 2014(N=2000) | Highly responsible | 0.03[0.01,0.05] | 0.48[0.37,0.58] | 0.03[0.01,0.05] | 0.50[0.39,0.61] | 0.45[0.35,0.55] |
| Not very responsible | 0.97[0.95,0.99] | 0.52[0.42,0.63] | 0.97[0.95,0.99] | 0.50[0.39,0.61] | 0.55[0.45,0.65] |
| **Panel 2** |  | **Politicians responsible for future economic growth?** |
| US 2014(N=2000) | Highly responsible | 0.03[0.01,0.06] | 0.40[0.30,0.51] | 0.04[0.02,0.08] | 0.48[0.37,0.59] | 0.40[0.29,0.52] |
| Not very responsible | 0.97[0.94,0.99] | 0.60[0.49,0.70] | 0.96[0.92,0.98] | 0.52[0.41,0.63] | 0.60[0.48,0.71] |
| **Panel 3** |  | **Respondents’ likelihood of voting for incumbent (democrats)** |
| US 2014(N=2000) | Likely or very likely | 0.38[0.29,0.48] | 0.28[0.20,0.37 | 0.31[0.22,0.42] | 0.30[0.22,0.40] | 0.36[0.28,0.46] |
|  | All other categories | 0.62[0.52,0.71] | 0.72[0.63,0.80] | 0.69[0.58,0.78] | 0.70[0.60,0.78] | 0.64[0.55,0.72] |

Note: Survey weighted estimates, 95% confidence levels in brackets.

**Figure C1.** “How much responsibility do you give policy makers for this economic growth?” (United States 2014, survey-weighted responses)



1. See Stephen Ansolabehere and Brian F. Schaffner. 2014. “Does Survey Mode Still Matter? Findings from a 2010 Multi-Mode Comparison”, *Political Analysis* 22(3), pp. 285-303. [↑](#footnote-ref-1)
2. Technical details on the TAPS survey can be found online at http://taps.wustl.edu/. [↑](#footnote-ref-2)
3. In addition to the four treatments, we included in the first survey a control group of participants that received no frames but for which we still collected outcomes. [↑](#footnote-ref-3)