A   Supplementary Information for "Compensation and Tax Fairness: Evidence from Four Countries"

Contents

A.1 Case Selection

Figure A.1: Market Inequality and Redistributive Effort

Note: This graph shows mean estimates of the gini index of inequality in equivalized household market income and absolute redistribution from the Standardized World Income Inequality Database. Graph includes most recent estimates for countries with estimates not older than 2010. Three countries with negative absolute redistribution values are excluded.

A.2 Survey Description

In terms of presentation, two profiles were presented side-by-side on the same screen, with the following prelude (examples are taken from the US survey, others are equivalent):

> Many observers in the United States have discussed the possibility of changing the federal income tax code to address multiple issues. The design of a new tax system raises a number of questions, including whether and why some people should pay higher rates than others. We are interested in what you think about this.

We will show you profiles of random individuals. You will be shown pairs of individuals, along with several of their attributes. For each comparison we would like to know which of the two individuals you think should pay a higher tax rate. In total, we will show you five comparison pairs.

Bear in mind that when we talk about tax rates we mean the percentage of their income that someone pays in taxes. People with different incomes who pay the same rate actually pay different amounts (i.e., 30% of an income of $100,000 is $30,000, but of an income of $50,000 it is $15,000).

Please take your time when reading the attributes of each individual. People have different opinions about this issue, and there are no right or wrong answers.

This introduction was followed by a screen similar to figure A.2.

Figure A.2: Example of Choice-Based Conjoint Survey

Attributes	Individual 1	Individual 2
Percentage of income paid in sales taxes	10%	1%
Source of income	Receives annuity from lottery prize	Owns business that was bailed out by government
Annual income	$40,000	$160,000

Which of the two individuals would you personally prefer to charge a higher tax rate to?

Individual 1	Individual 2

In order to maximize the number of observations and allow respondents to familiarize themselves with the format of the experiment, each subject saw 5 pairs of profiles.[1] After the first pair of profiles, they were asked to justify their choice in an open ended question. In addition to completing their 5 choice tasks, respondents were asked to fill a survey asking for their socio-demographic information (age, gender, education, household

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[1]Attribute order was randomized across respondents.

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income, partisanship, employment status, race, marital status, ideology and zip code of residence). They were also asked to answer a question regarding their general preferences for progressivity, used to measure adherence to equal treatment:[2]

> Do you think everyone should pay the same share of their income in taxes or some people should pay a higher share than others?

A.3   Formative Study

The sources of income used in the experiments were the result of formative studies conducted on independent samples in each country with the purpose of identifying sources of income that i) would be interpreted as the product of effort, social background, state benefit and luck, respectively; ii) were relatively orthogonal to one another; and iii) were independent of level of income. In each study, respondents were presented with different sources of income and were asked to express their agreement with the statement that each source of income resulted from luck, effort, state benefit and social background on a 7-point likert scale. While the same sources of income were tested in each country, the sources selected were those that were interpreted similarly regardless of whether they were the same or not. Indeed, the same source of income may be interpreted differently in different cultural contexts and ultimately what mattered was that they were perceived in a similar way.

Results for the sources of income selected in each country are included below. Each figure shows four histograms with the distribution of responses for the selected source of income in each country.

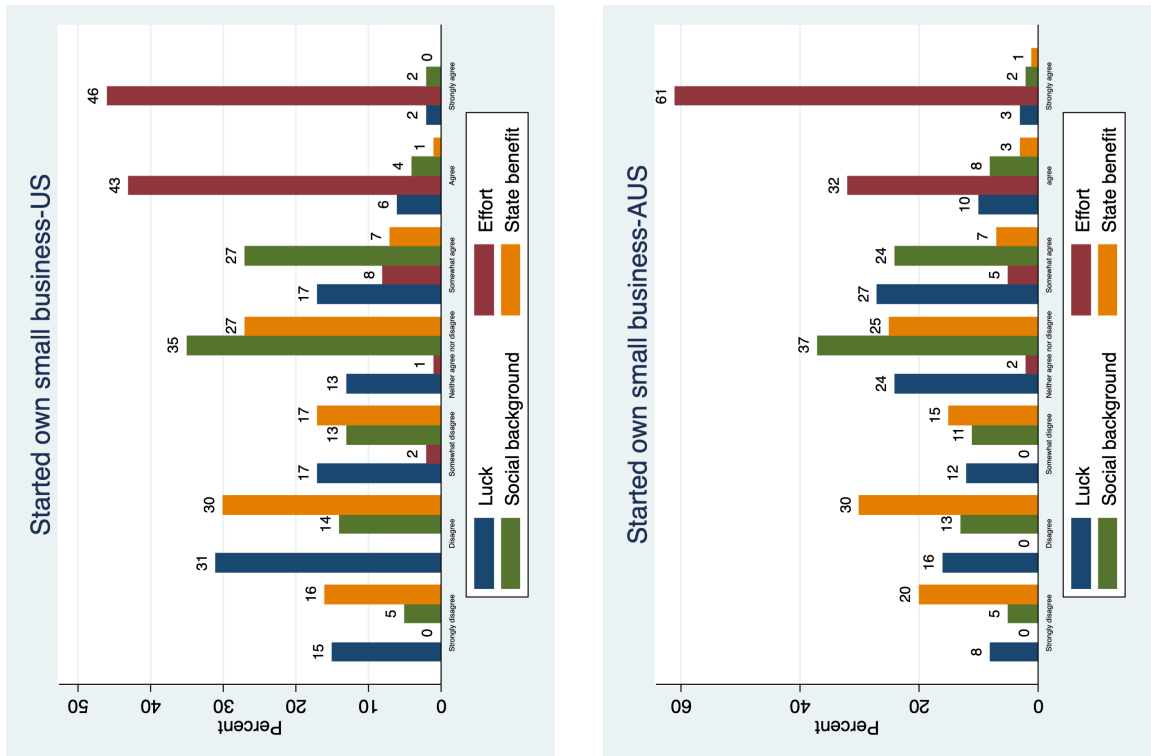[2]The survey also included an attention screener. All results are robust to dropping inattentive respondents.
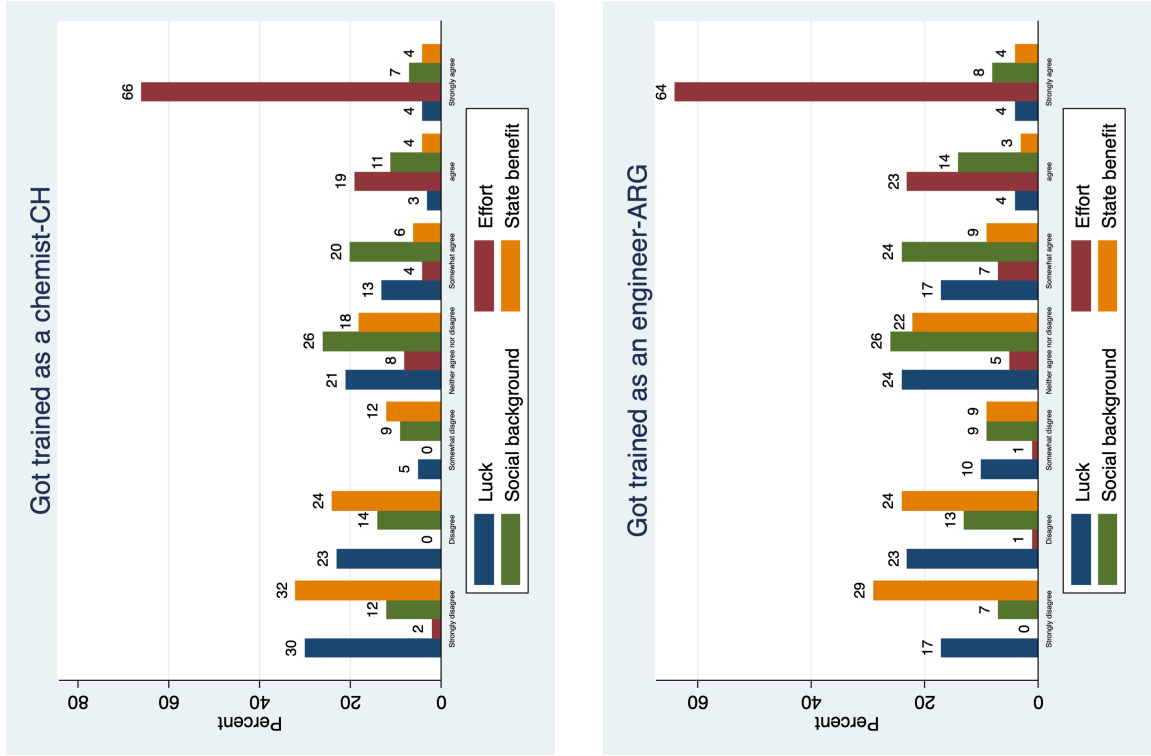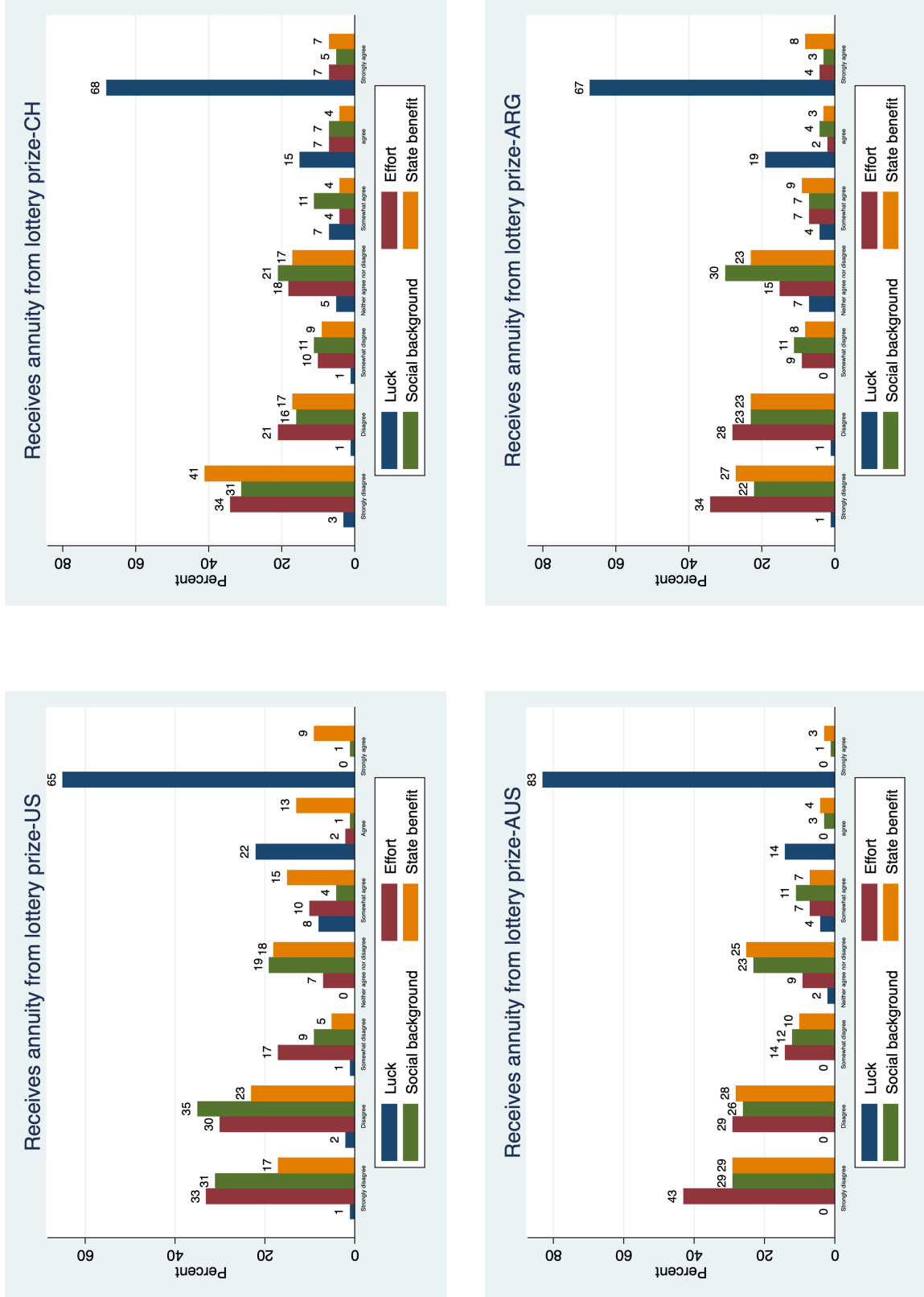
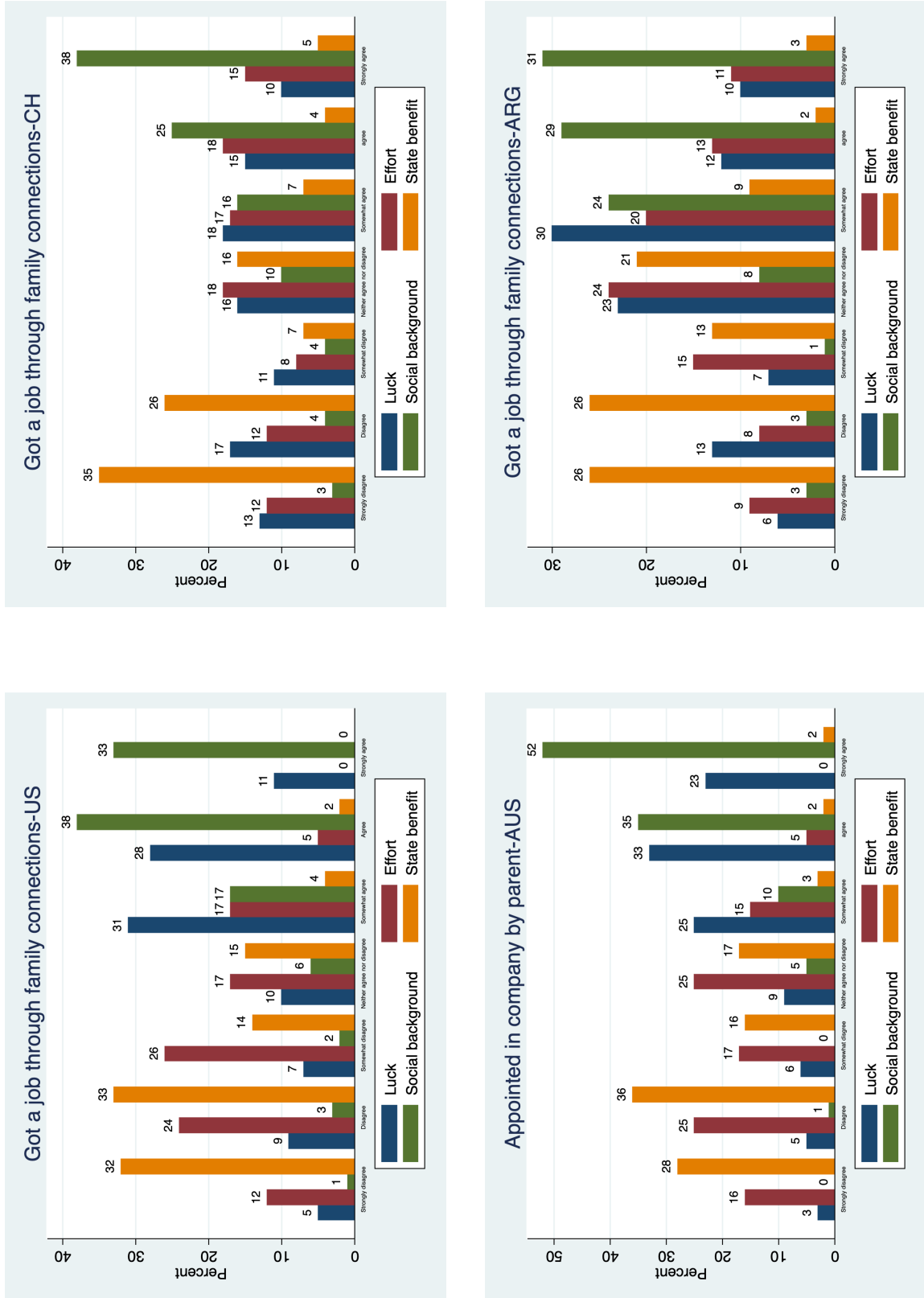Figure A.3: Effort

Figure A.4: Luck

Figure A.5: Social Background

Figure A.6: State Benefit
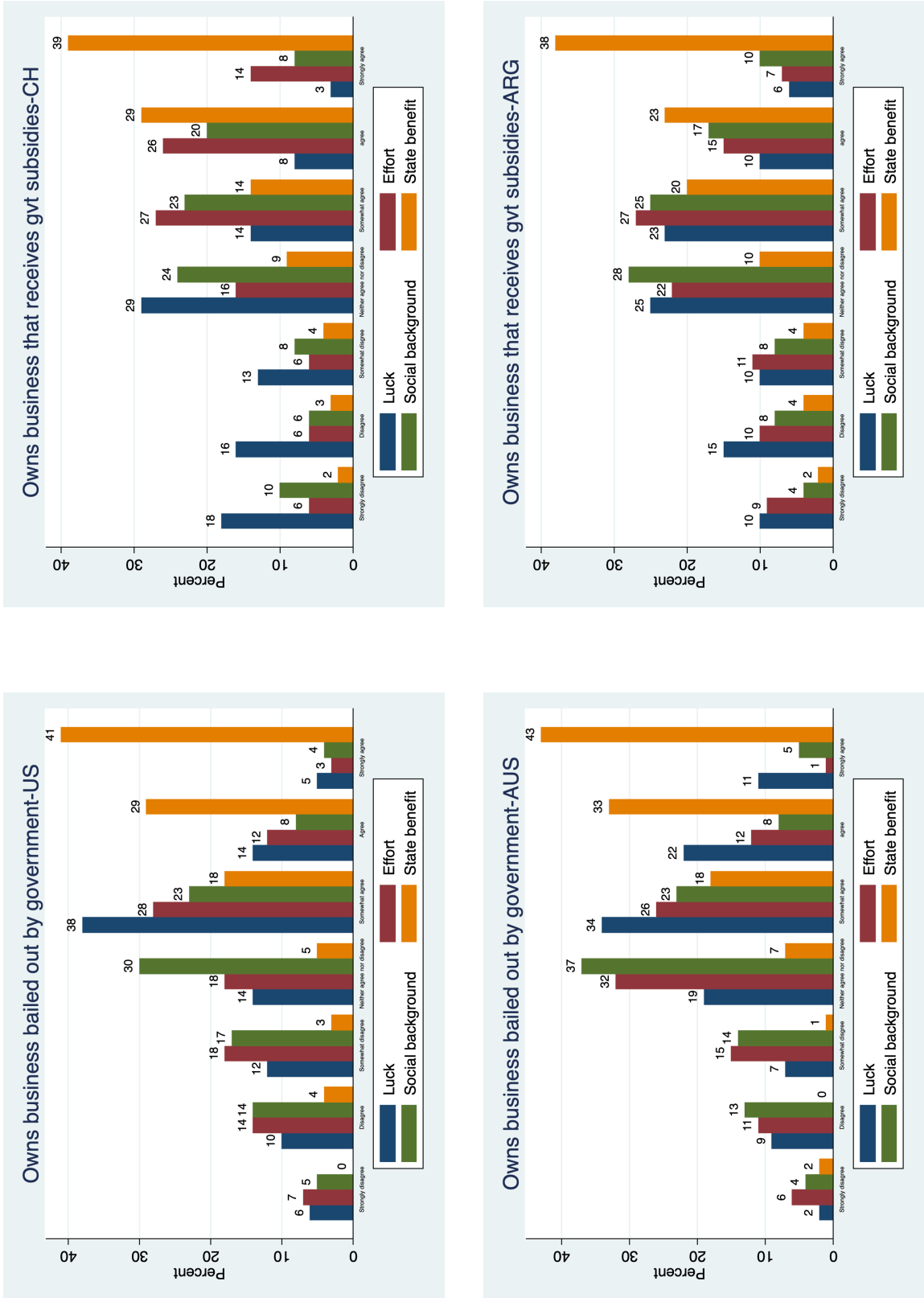
A.4 Attribute Levels by Country

Table A.1: Attributes and Attribute Levels by Country

Attributes	Attribute Levels			
	Argentina	**Chile**	**Australia**	**US**
Level of income	$25,000	$350,000	$40,000	$30,000
	$60,000	$800,000	$90,000	$80,000
	$100,000	$1,500,000	$160,000	$150,000
Source of income	Receives annuity from lottery prize	Receives annuity from lottery prize	Receives annuity from lottery prize	Receives annuity from lottery prize
	Got trained as an engineer and found a job	Got trained as a chemist and found a job	Started own small business	Started own small business
	Got a job through family connections	Got a job through family connections	Appointed by parent in company they direct	Got a job through family connections
	Owns a company that receives government subsidies	Owns a company that receives government subsidies	Owns business that was bailed out by government	Owns business that was bailed out by government
% of income paid in sales taxes	5%	5%	1%	1%
	10%	10%	5%	5%
	15%	15%	10%	10%

Note: Levels of income are in local currencies. To comply with standard practices in each country, monthly incomes were used in Chile and Argentina and annual incomes in the US and Australia.

A.5   US Sample and Weights

As stated in the paper, the US survey was conducted on a sample of 2,000 MTurk respondents. The task was published in four batches between the 17th and 18th of October 2017, with the condition that respondents could not participate more than once. The first two batches, of 500 and 1,000 respondents had the restriction that only workers located in the US and with an approval rate of 90% or above could participate. The last two batches, of 300 and 200 respondents, had the additional restriction that respondents had to have annual household incomes above $100,000 and below $25,000, respectively. This was done with two objectives. The first was to ensure sufficient power for analyses involving splitting the sample by income (testing for the presence of self-interest). The second was to make sure representative population weights could be constructed without having to rely on a small number of observations of underrepresented high and low income respondents.

Once the sample was ready, entropy balancing weights (Hainmueller 2012) were constructed to adjust the sample to the margins of the adult population on age, gender, education, race, household income, partisanship and census region. Table A.2 presents the distribution of socio-demographics in the raw sample, the weighted sample, and the population. Weights range between 1 and 15.

Table A.2: Distribution of Socio-Demographics

Group	Raw Sample	Weighted Sample	Population
Gender: Male	.50	.49	.49
Race: White	.79	.78	.78
Age: 18-29	.29	.21	.21
Age: 30-49	.55	.34	.34
Age: 50+	.17	.45	.45
Education: Some college or less	.33	.60	.60
Education: College graduate	.51	.29	.29
Education: Post-graduate	.16	.11	.11
HH Income: $9,999 or less	.06	.05	.05
HH Income: $10,000-$19,999	.09	.07	.07
HH Income: $20,000-$29,999	.11	.08	.08
HH Income: $30,000-$39,999	.10	.09	.09
HH Income: $40,000-$49,999	.09	.08	.08
HH Income: $50,000-$79,999	.20	.21	.21
HH Income: $80,000-$99,999	.09	.11	.11
HH Income: $100,000+	.25	.32	.32
Region: Northeast	.20	.18	.18
Region: Midwest	.21	.21	.21
Region: South	.40	.38	.38
Region: West	.19	.23	.24
Party ID: Democrat	.44	.35	.35
Party ID: Republican	.22	.28	.28

NOTES. Population data comes from the 2016 Current Population Survey Annual Social and Economic Supplement, except for party identification data, which comes from the 2016 ANES Time Series Study.

Figure A.7: Weighted and Unweighted MMs for US
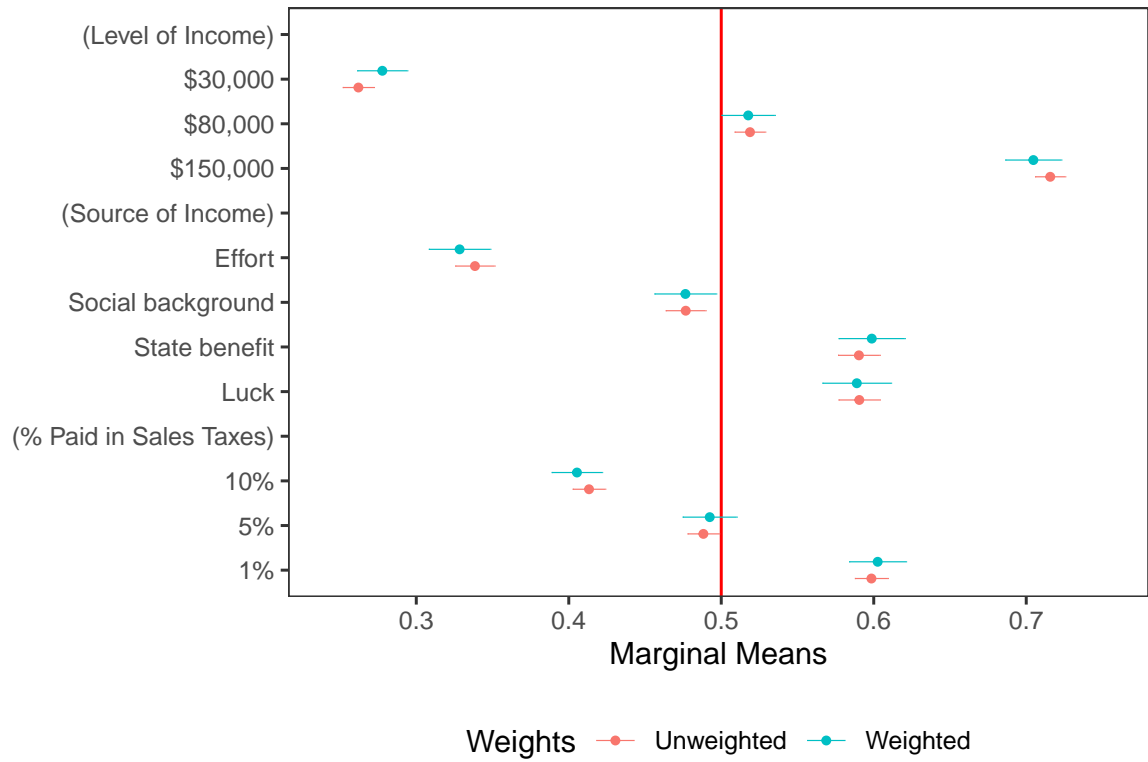
Note: This plot shows marginal mean outcomes from forced choice conjoint experiments, with and without entropy balancing weights. Standard errors clustered by respondent. Bars represent 95% confidence intervals.

A.6 Additional Results: by Percentage Paid in Sales Taxes

Figure A.8: Marginal Mean Outcomes by Percentage Paid in Sales Taxes in Profile
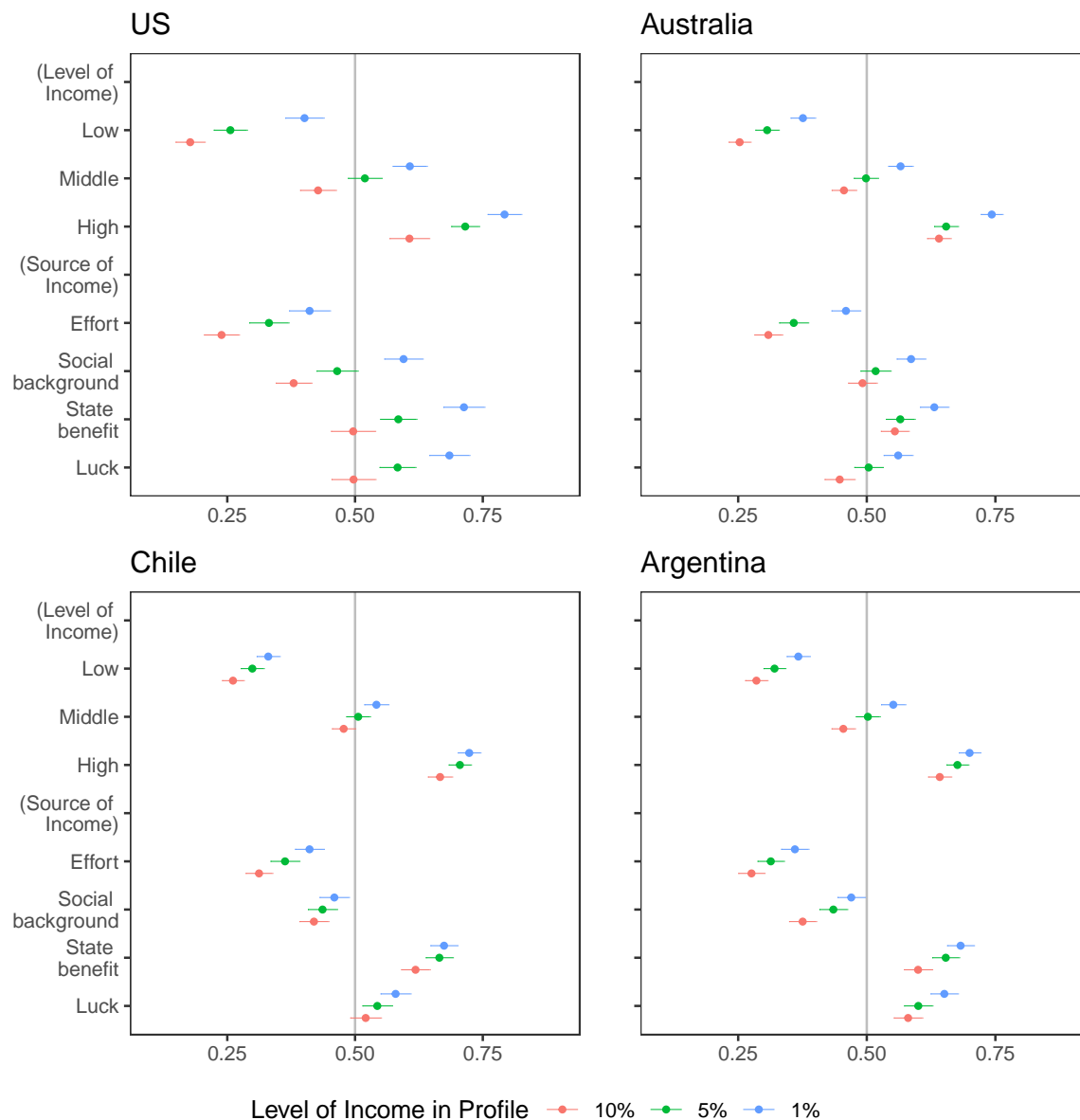
Note: Plots show marginal mean outcomes from forced choice conjoint experiment, estimated separately for profiles with different shares of income paid in sales taxes. Estimates are clustered by respondent. US estimates use entropy balancing weights described in SI section A.5, all other estimates are unweighted. Bars represent 95% confidence intervals.

A.7 Alternative Explanations: Equal Treatment

Figure A.9: Marginal Mean Outcomes by Equal Treatment Beliefs
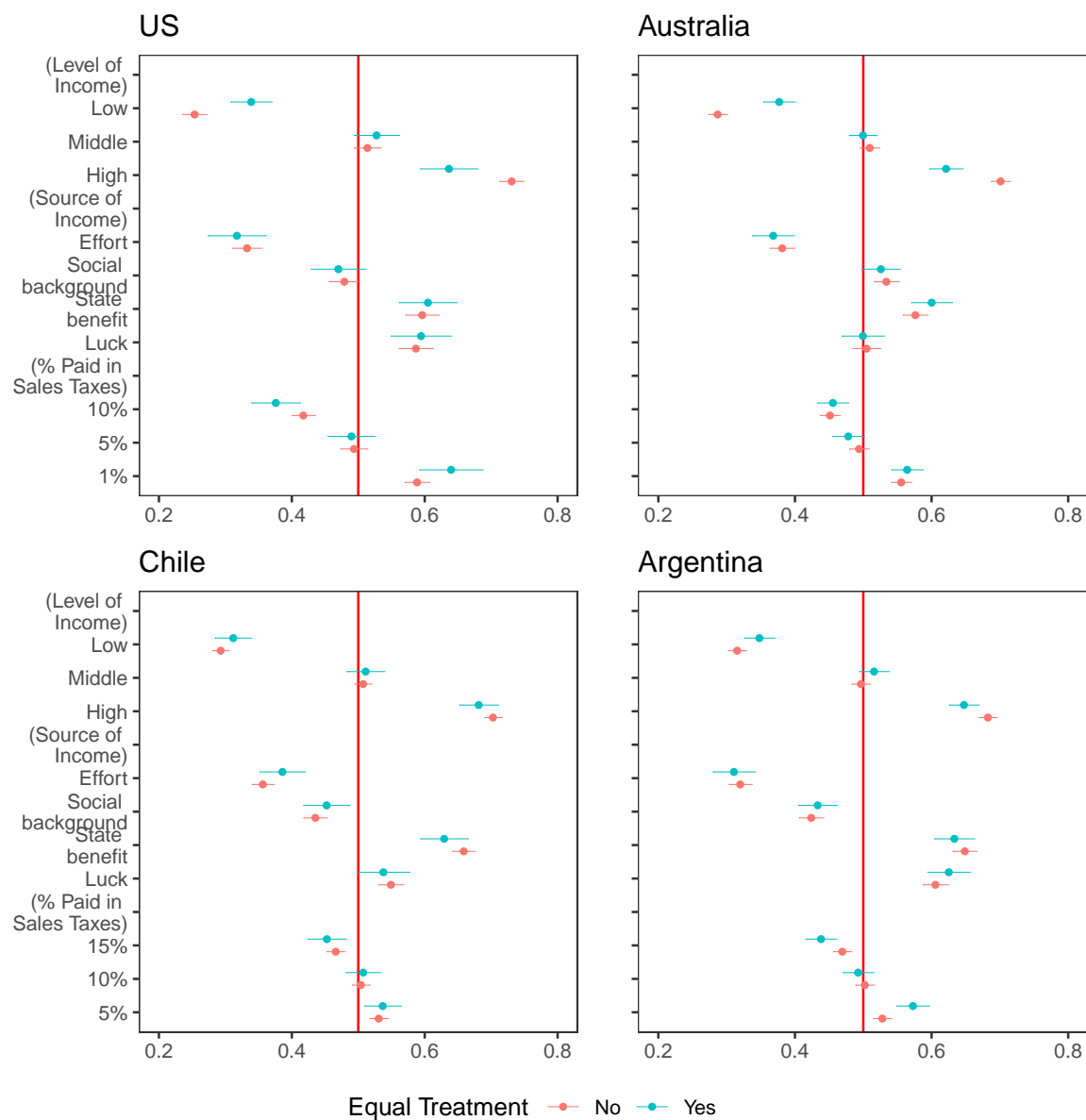
Note: Plots show marginal mean outcomes from forced choice conjoint experiment, estimated separately for two different groups of respondents: those who think everyone should pay the same share of their income in taxes, and those who think some people should pay more than others. Estimates are clustered by respondent. US estimates use entropy balancing weights described in section A.5, all other estimates are unweighted. Bars represent 95% confidence intervals.

A.8 Average Marginal Component Effects

Figure A.10: Conditional AMCEs by Level of Income in Profile
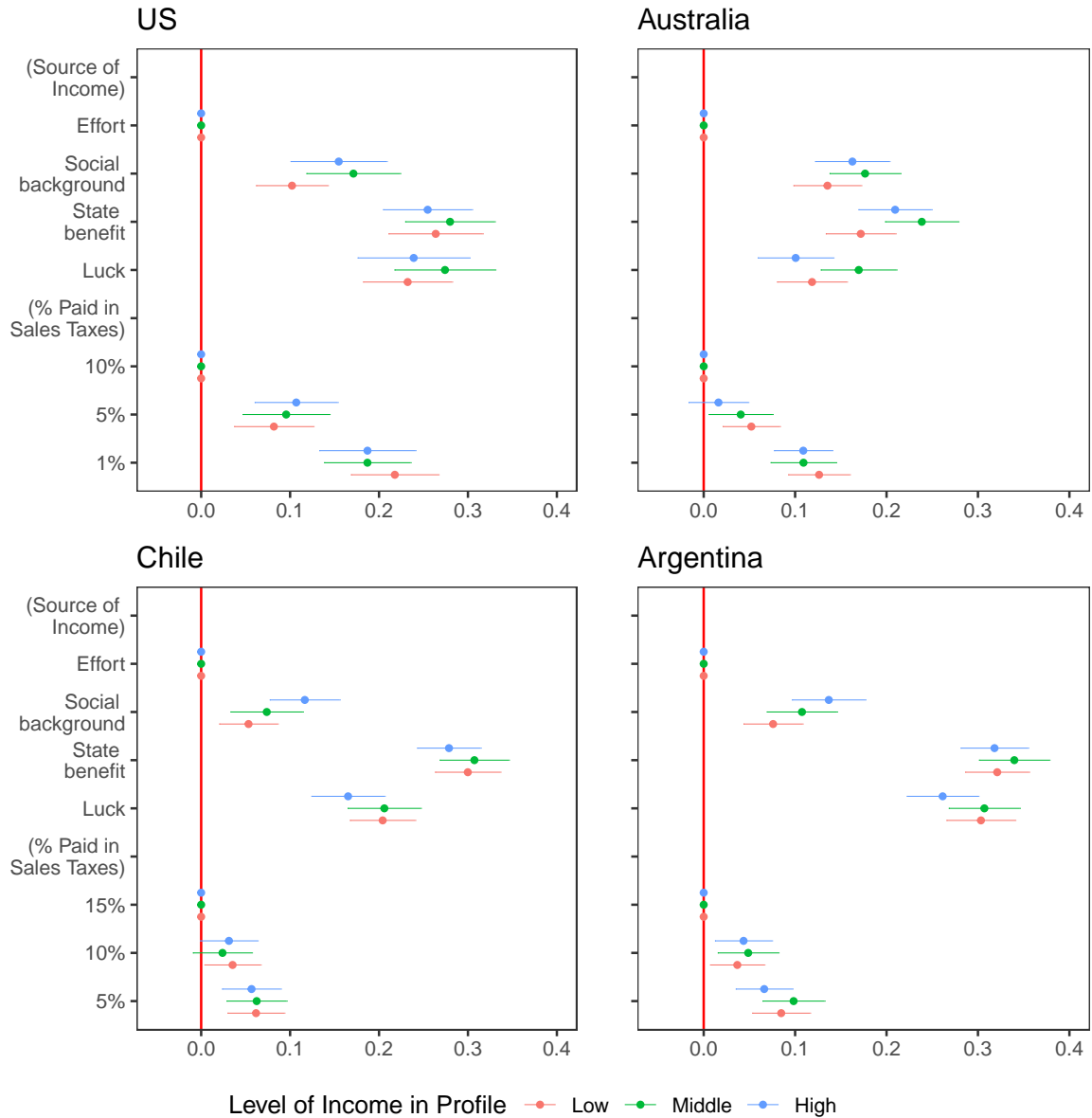
Note: This plot shows estimates of the effects of the randomly assigned individual attributes on the probability of being selected to receive the higher tax rate, by country. Estimates are based on OLS model with robust standard errors clustered by respondent, estimated separately for profiles with different levels of income. Bars represent 95% confidence intervals. US estimates use entropy balancing weights described in section A.5, all other estimates are unweighted. The points without horizontal bars denote the attribute level that is the reference category for each attribute.

Figure A.11: Conditional AMCEs by Equal Treatment Beliefs

Note: This plot shows estimates of the effects of the randomly assigned individual attributes on the probability of being selected to receive the higher tax rate, by country. Estimates are based on OLS model with robust standard errors clustered by respondent, estimated separately for two groups of respondents: those who think everyone should pay the same share of their income in taxes and those who think some people should pay more than others. Bars represent 95% confidence intervals. US estimates use entropy balancing weights described in section A.5, all other estimates are unweighted. The points without horizontal bars denote the attribute level that is the reference category for each attribute.

Figure A.12: Conditional AMCEs by Respondent Ideological Self-Placement
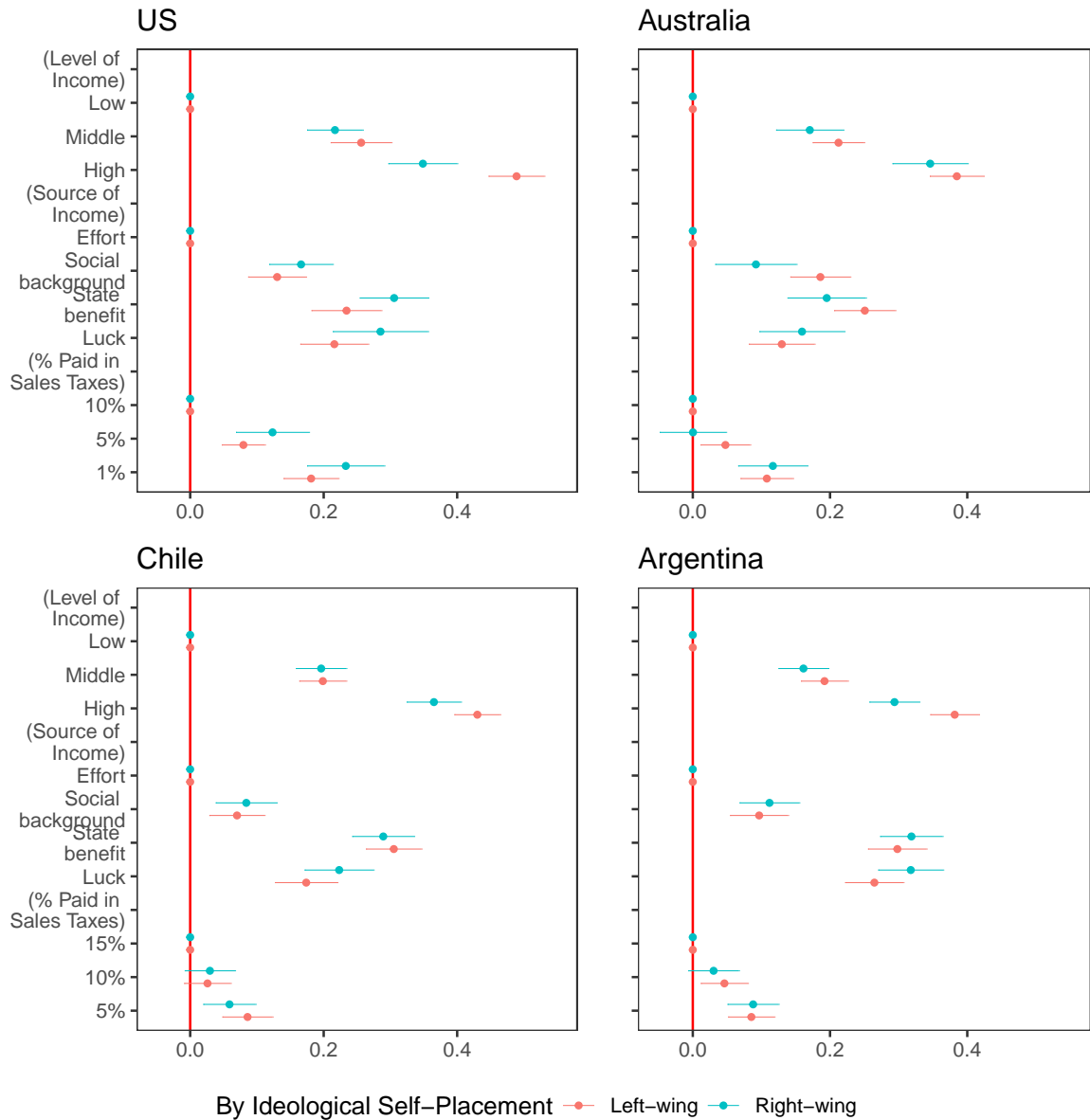
Note: This plot shows estimates of the effects of the randomly assigned individual attributes on the probability of being selected to receive the higher tax rate, by country. Estimates are based on OLS model with robust standard errors clustered by respondent, estimated separately for two different groups of respondents: those who consider themselves to be left or center-left and those who consider themselves to be right or center-right. Bars represent 95% confidence intervals. US estimates use entropy balancing weights described in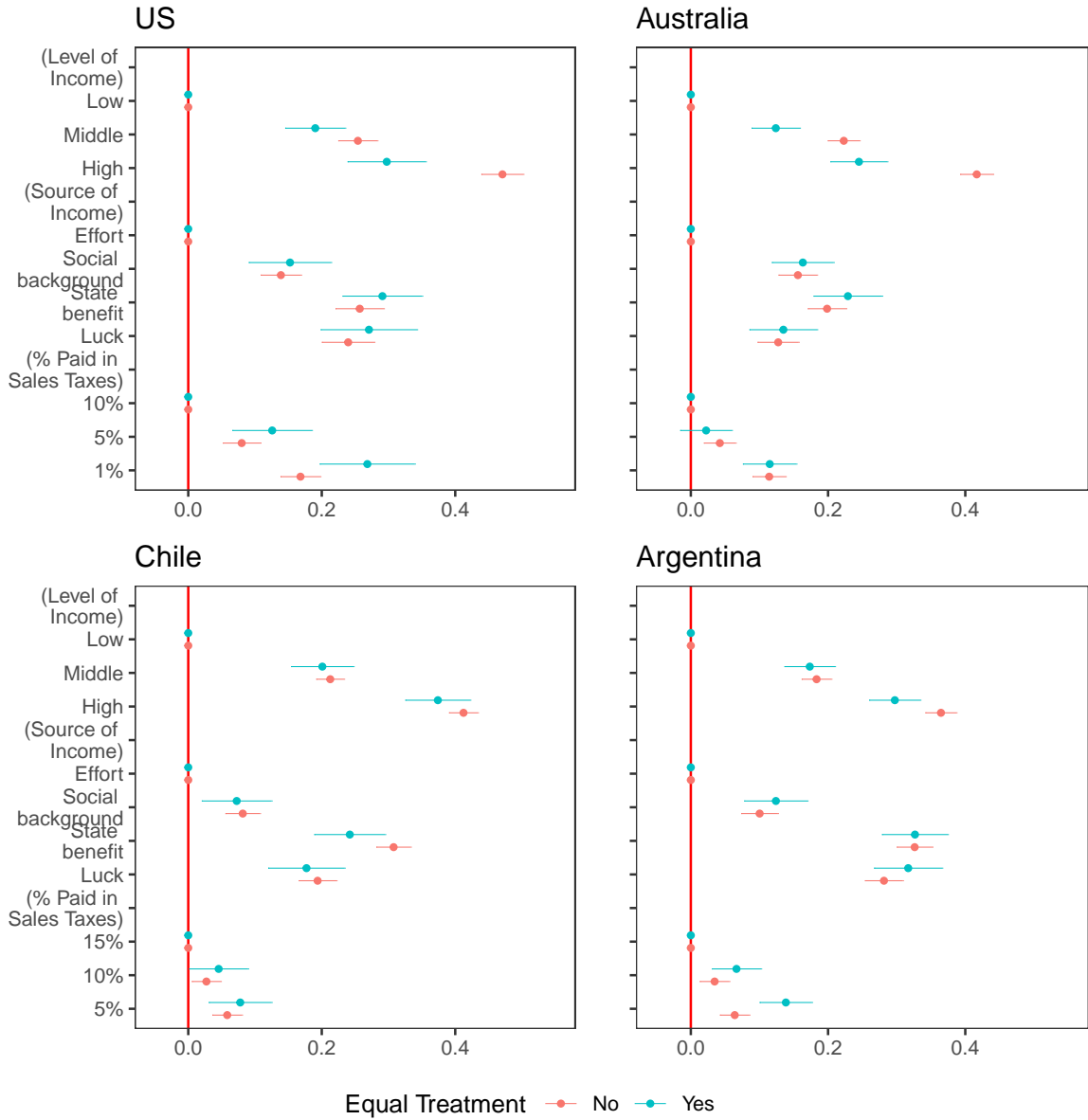 section A.5, all other estimates are unweighted. The points without horizontal bars denote the attribute level that is the reference category for each attribute.

A.9 Exploring Open Ended Justifications

After each respondent's first choice of profile, they were asked to justify their choice in an open-ended question. The goal of this question was to ensure that respondents were deciding on the basis of the fairness considerations outlined in the paper. Below, I present two types of evidence that this was indeed the case. The first type are simple wordclouds, which are graphical representations of word frequencies. The second are correlations between the coded justifications and the features of the chosen profile. Both are explained in detail below.

Despite their limitations, both of these approaches provide evidence consistent with our claim that choices were made on the basis of the fairness considerations described in the paper.

A.9.1 Wordclouds

Separate wordclouds are created on the basis of the attribute levels in the chosen profile. I therefore create a wordcloud of the most frequent words used in the justifications made by respondents who chose the profiles with (i) the higher relative level of income, (ii) the state benefit source of income and (iii) the lower relative share paid in sales taxes. It is worth noting that this does not mean that the profiles were chosen *because* of that specific level, it only increases the likelihood that they were.[3] As a result, while we expect most words in scenario (i) to be consistent with ability to pay considerations, not all of them will be. To allow for cross-country differences in the way people express themselves, I build separate wordclouds for each country.

Across countries, we can see that wordclouds justifying the choice of the profile with the higher level of income frequently include words such as "higher", "income", "afford" and "pay". This is consistent with our interpretation that people were choosing these profiles based on ability to pay considerations that people with higher incomes can more easily afford to pay the higher tax rate. When it comes to the state benefit source of income, the most frequently used words include "government", "bailout" (or in the case of Chile and Argentina, "subsidies"), "received", "money", "already", "back". Again, this is consistent with out interpretation that these profiles were chosen on the basis

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[3]As an example, someone may pick the profile with the higher level of income not because of its income but because it also happened to have luck as the source of income.

of compensatory considerations that people that had already received a state benefit (either a bailout or subsidy) should pay back that money through higher taxes. Finally, justifications of choices involving the lower share of sales taxes paid frequently include words such as "tax", "rate", "less" or "lower", "pay", as well as "income" and "higher". This is consistent with our interpretation that respondents chose these profiles on the basis of special compensatory considerations in the sense that they chose them for the higher income tax as a way to compensate for their lower sales tax burden. They are also consistent with the fact that respondents value vertical equity and were particularly likely to chose these profiles if they also had a higher income.

US

Figure A.13: Terms most used to justify choice of profile with higher income, US respondents
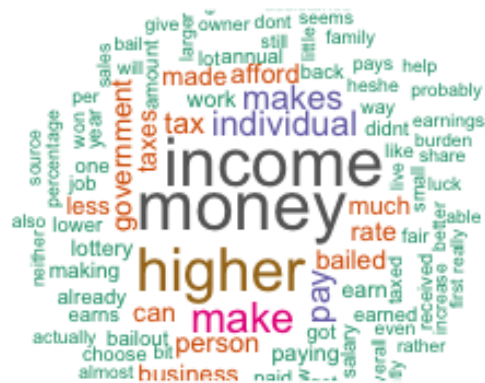
Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the higher income. Word size reflects frequency.

Australia

Figure A.14: Terms most used to justify choice of profile with higher income, Australian respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the higher income. Word size reflects frequency.

Figure A.15: Terms most used to justify choice of profile with state benefit source of income, Australian respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the state benefit source of income. Word size reflects frequency.

Figure A.16: Terms most used to justify choice of profile with lower tax, Australian respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the lower share paid in sales taxes. Word size reflects frequency.

Argentina

Figure A.17: Terms most used to justify choice of profile with higher income, Argentinean respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the higher income. Word size reflects frequency.

Figure A.18: Terms most used to justify choice of profile with state benefit source of income, Argentinean respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the state benefit source of income. Word size reflects frequency.

Figure A.19: Terms most used to justify choice of profile with lower tax, Argentinean respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the lower share paid in sales taxes. Word size reflects frequency.

Chile

Figure A.20: Terms most used to justify choice of profile with higher income, Chilean respondents
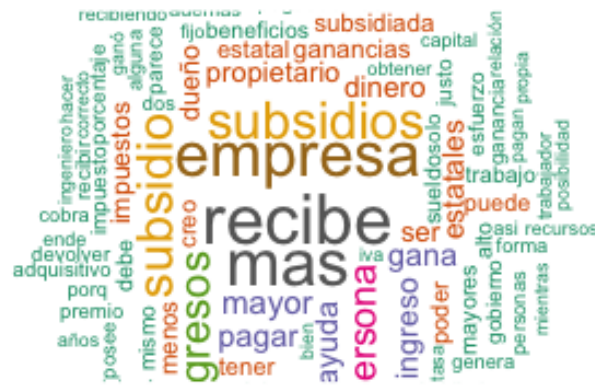

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the higher income. Word size reflects frequency.

Figure A.21: Terms most used to justify choice of profile with state benefit source of income, Chilean respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the state benefit source of income. Word size reflects frequency.

Figure A.22: Terms most used to justify choice of profile with lower tax, Chilean respondents

Note: Wordcloud showing the 100 most frequent words in open-ended justifications of respondents who chose the profile with the lower share paid in sales taxes. Word size reflects frequency.

A.9.2 Correlation between choices and justifications

Alternatively, we also coded the open ended justifications based on the coding rules presented in table A.3. All coding was done manually by a single coder. Justifications that were too short or nonsensical were excluded.[4]

We then regressed dummies identifying key attributes of the chosen profile (higher income, lower tax and social brackground, state benefit and luck sources of income) on the set of dummy variables identifying the different justifications. Results are presented in table A.4, which shows that there is a close correlation between justifications and choices. For example, a justification based on the receipt of a state benefit, is associated with a 75 percentage point increase in the probability that the profile with the state benefit source of income is chosen. As indicated by the bold coefficients in table A.4, these correlations are quite high for all of our justifications of interest. Moreover, it must be borne in mind that the fact that a profile with a given attribute level was chosen does not mean that it was chosen *because* of that specific attribute level, which limits the effect size. Additionally, for the level of income and share of income paid in sales taxes attributes, we identified chosen profiles where these attributes were higher or lower relative to its paired profile, without them necessarily having the highest level of income

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[4]In total, 90% of responses were coded.

or the lowest share of sales taxes paid.

Although these results are limited by the subjectivity inherent to having a single coder, in combination with the wordclouds they provide substantial support for our claim that decisions were made on the basis of the fairness considerations stipulated in the paper.

Table A.3: Coding rules for open-ended justifications

Code	Rule
j-level	Choice was justified on the basis of the profile's higher level of income, which made it easier to afford/pay the higher rate.
j-social	Choice was justified by the fact that the source of income was the result of an unfair advantage stemming from family connections rather than effort.
j-state	Choice was justified by the fact that the source of income resulted from a government benefit or government assistance that should be paid back.
j-luck	Choice was justified by the fact that the source of income was the result of sheer luck rather than effort, making it easier to part with some of it.
j-tax	Choice was justified on the basis of the profile's lower share of income paid in sales taxes.
j-effort	Choice was justified on the basis of the fact that the *other* profile's income was a result of hard work (and/or is a job creator) and should therefore be advantaged.
j-business	Choice was justified on the basis of the fact that the chosen profile was a business owner and as such should pay the higher rate either because he has more control over his/her income or should by principle pay more in taxes than a mere employee.
j-other	Includes justifications that i) only say it is fair, ii) are based on efficiency considerations, iii) mention a preference for an equal (proportional) rate, iv) state lottery winnings should not be taxed either because they are the result of luck or because they do not represent a permanent income stream.

Table A.4: Correlation between choices and coded justifications

| Justifications | Chosen profile had attribute level: | | | | |
	Higher income	Social background	State benefit	Luck	Lower tax
j-level	**0.626***	-0.084***	-0.072***	0.060***	0.012
	[0.026]	[0.025]	[0.024]	[0.016]	[0.027]
j-social	-0.117***	**0.730***	-0.231***	-0.076***	0.012
	[0.035]	[0.024]	[0.023]	[0.015]	[0.037]
j-state	-0.066**	-0.258***	**0.756***	-0.083***	0.003
	[0.030]	[0.024]	[0.024]	[0.015]	[0.031]
j-luck	-0.045	-0.259***	-0.231***	**0.913***	0.016
	[0.030]	[0.024]	[0.023]	[0.015]	[0.030]
j-tax	-0.114***	-0.139***	-0.111***	-0.005	**0.645***
	[0.031]	[0.028]	[0.027]	[0.019]	[0.027]
j-effort	-0.169***	0.312***	-0.098***	0.200***	-0.013
	[0.040]	[0.047]	[0.036]	[0.040]	[0.045]
j-business	-0.114***	-0.235***	0.600***	-0.060***	-0.061
	[0.037]	[0.025]	[0.033]	[0.016]	[0.038]
Observations	5,709	5,709	5,709	5,709	5,709
R-squared	0.499	0.339	0.534	0.581	0.159

NOTES. Results from OLS regressions with country dummies (not reported). Cluster robust standard errors (clustered by respondent) are reported in brackets.

*** p<0.01, ** p<0.05, * p<0.1.

A.10 Marginal Means by Alternative Measures of Respondent Ideology

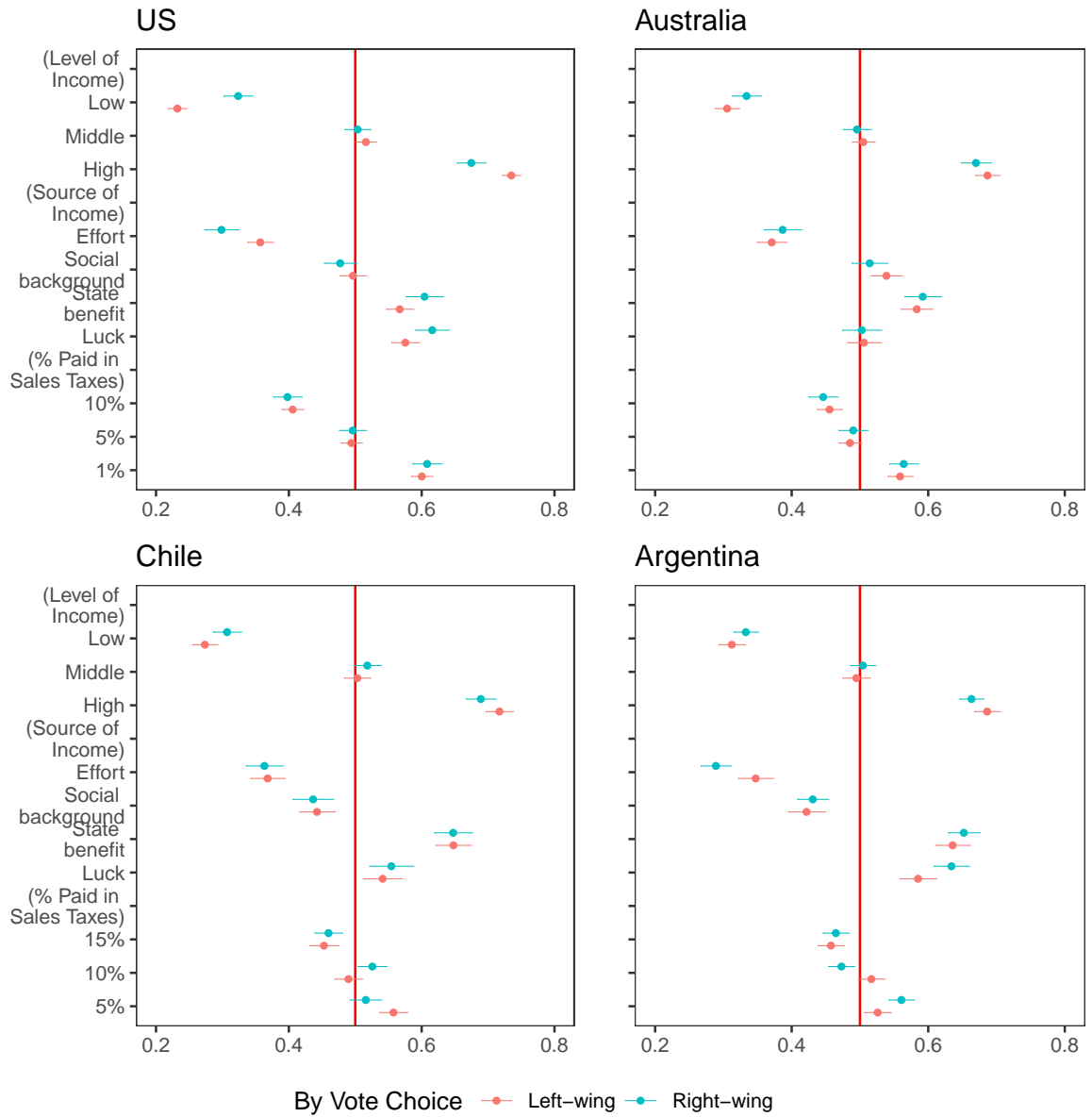Figure A.23: Marginal Mean Outcomes by Respondent Ideological Self-Placement
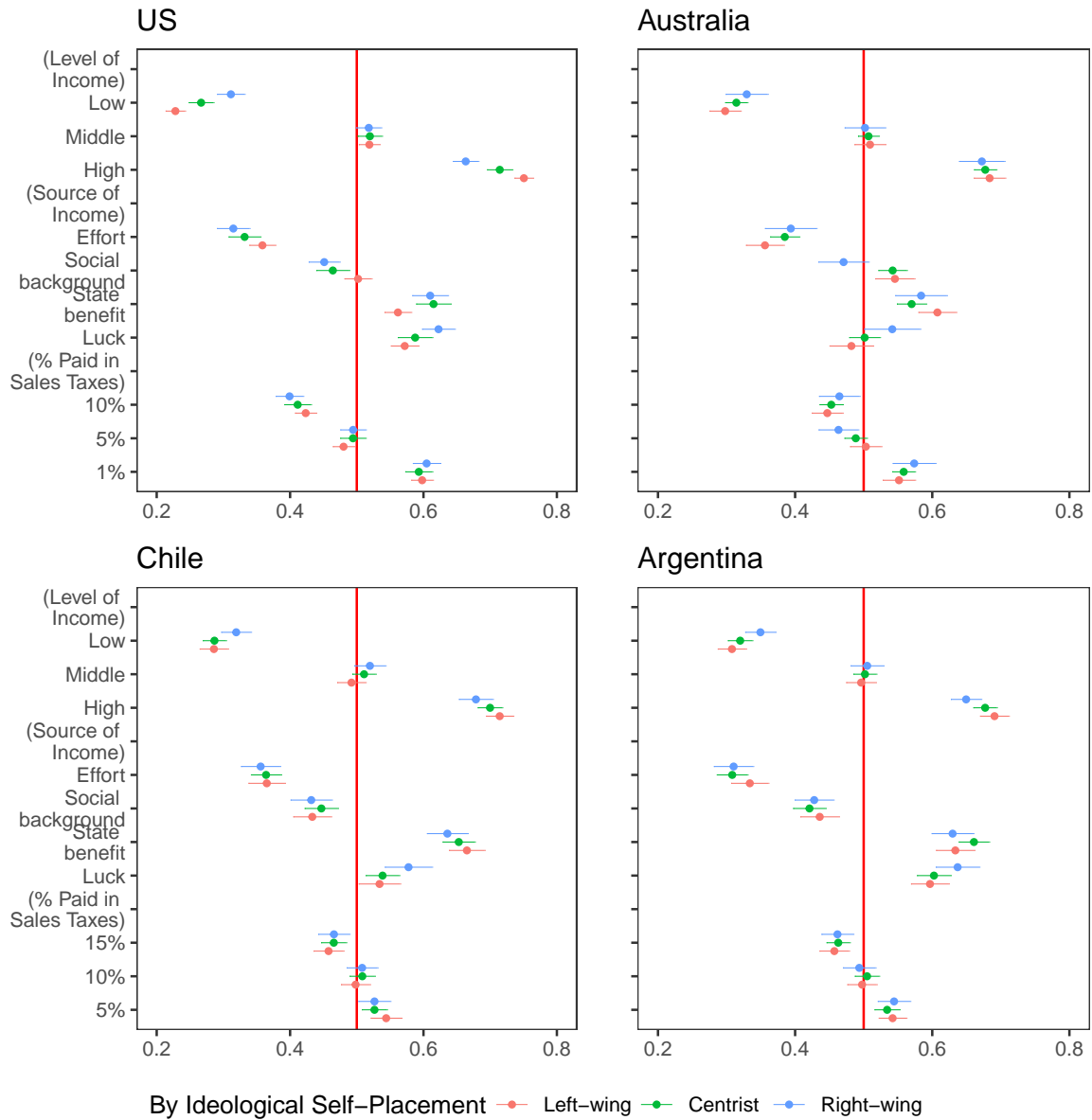
Note: Plots show marginal mean outcomes from forced-choice conjoint experiment, estimated separately for three groups of respondents: those who consider themselves to be left or center-left, center and right or center-right. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

Figure A.24: Marginal Mean Outcomes by Respondent Party Identification
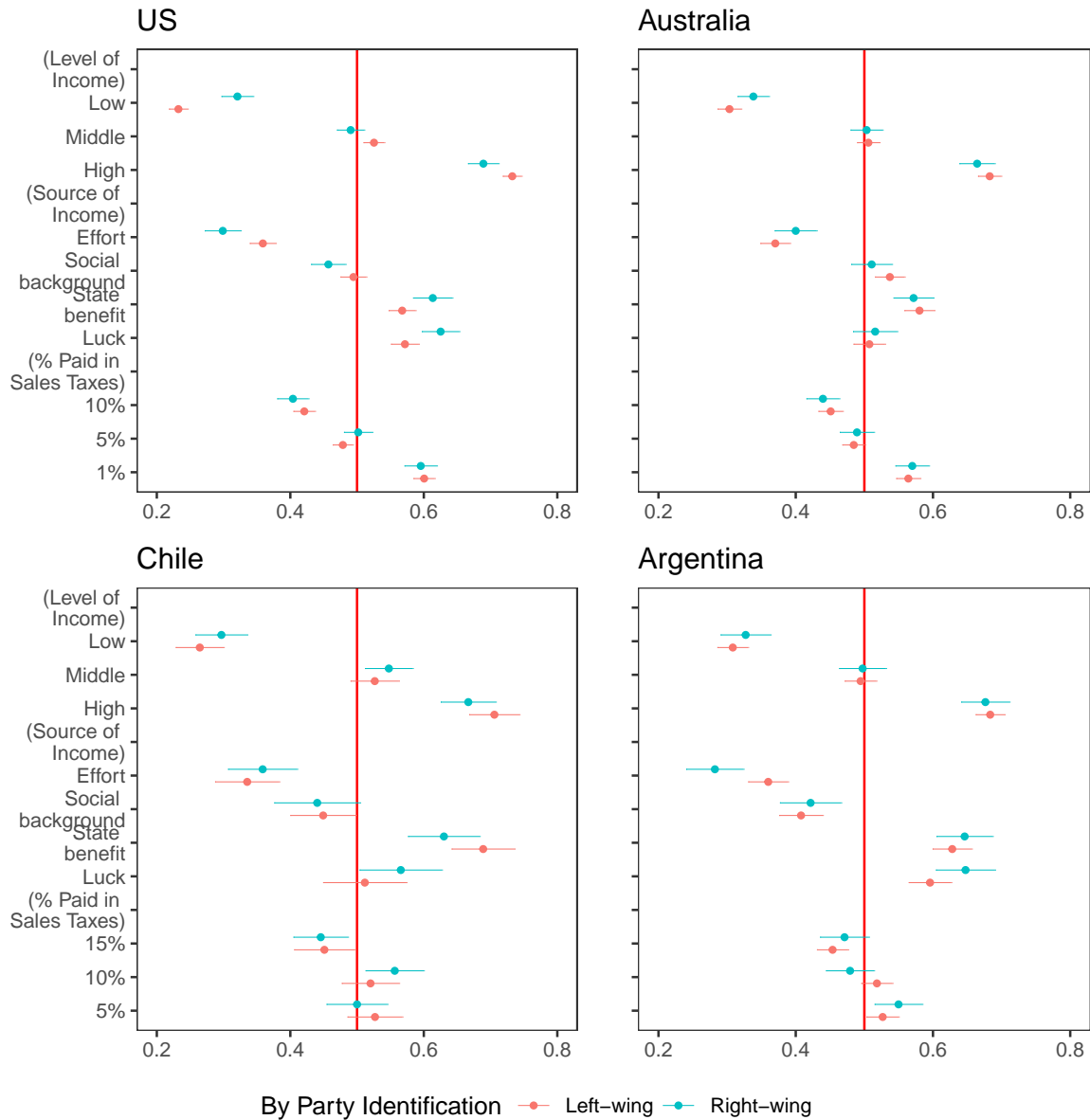
Note: Plots show marginal mean outcomes from forced-choice conjoint experiment, estimated separately for two groups of respondents: those who identify with left or center-left parties, and those who identify with right or center-right parties. Those identifying with center parties, other parties or as independents are excluded. See tables 4-7 for party codings by country. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

Figure A.25: Marginal Mean Outcomes by Respondent Vote Choice

Note: Plots show marginal mean outcomes from forced-choice conjoint experiment, estimated separately for two groups of respondents: those who in the last general election voted for left or center-left parties, and those who voted for right or center-right parties. Those who voted for center parties, other parties or did not vote are excluded. See tables 4-7 for party codings by country. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

Table A.5: Party Coding: Argentina

Ideology	Party identification	Vote choice
Left	Partido Justicialista	Alberto Fernandez (Frente de Todos)
	Kirchnerismo	Nicolas del Cano (Frente de Izquierda)
	Partido Socialista	
Right	Union Civica Radical	Mauricio Macri (Juntos por el Cambio)
	Propuesta Republicana	Juan Jose Gomez (Frente NOS)
		Jose Luis Espert (Unite por la Libertad y la Dignidad)
Excluded	Other, None	Roberto Lavagna (Consenso Federal)
		Other, Did not vote

Note: The survey question used to capture party identification was: "Generally speaking, which party or political organization do you most identify with?". The survey question used to capture vote choice was: "Who did you vote for president in the 2019 presidential elections?".

Table A.6: Party Coding: Chile

Ideology	Party identification	Vote choice
Left	Partido Socialista de Chile (PS)	Alejandro Guillier (La Fuerza de la Mayoria)
	Partido Radical Socialdemocrata (PRSD)	Beatriz Sanchez (Frente Amplio)
	Partido por la Democracia (PPD)	Marco Enriquez Ominami (PRO)
	Partido Comunista de Chile (PC)	Eduardo Artes (UPA)
	Revolucion Democratica (RD)	Alejandro Navarro (Pais)
Right	Union Democrata Independiente (UDI)	Sebastian Pinera (Chile Vamos)
	Renovacion Nacional (RN)	Jose Antonio Kast (Independiente)
	Partido Evolucion Politica (EVOPOLI)	
Excluded	Partido Democrata Cristiano (PDC)	Carolina Goic (PDC)
	Other, None	Other, Did not vote

Note: The survey question used to capture party identification was: "Generally speaking, which party or political organization do you most identify with?". The survey question used to capture vote choice was: "Who did you vote for president in the first round of the 2017 presidential elections?".

Table A.7: Party Coding: Australia

Ideology	Party identification	Vote choice
Left	Labor	Australian Labor Party
	Greens	Australian Greens
Right	Liberal	Liberal Party of Australia
	National Party	National Party of Australia
		Liberal National Party of Queensland
		United Australia Party
		One Nation
Excluded	Independent, Other	Other, Did not vote

Note: The survey question used to capture party identification was: "Generally speaking, do you usually think of yourself as...". The survey question used to capture vote choice was: "If you voted in the May 2019 Federal election, which party got your first preference in the House of Representatives?".

Table A.8: Party Coding: US

Ideology	Party identification	Vote choice
Left	Democrat	Hillary Clinton
Right	Republican	Donald Trump
Excluded	Independent, Other	Other, Did not vote

Note: The survey question used to capture party identification was: "Generally speaking, do you usually think of yourself as...". The survey question used to capture vote choice was: "If you voted in the 2016 presidential election, who did you vote for?".
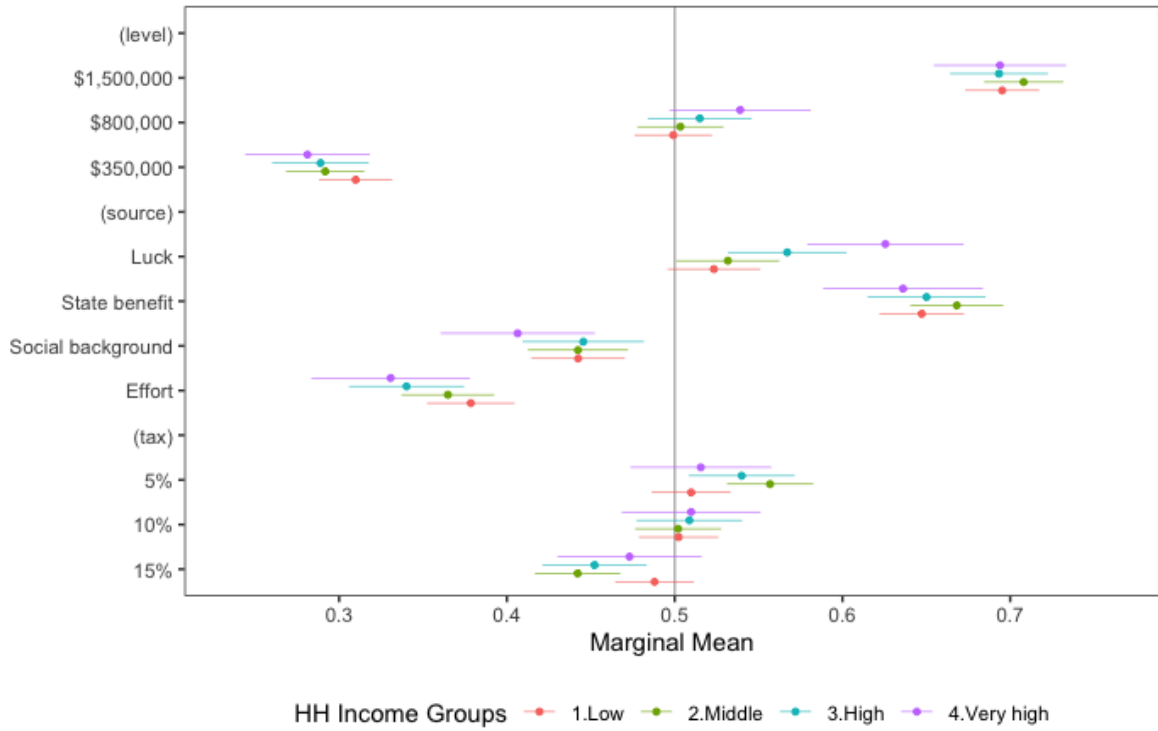
A.11 Marginal Means by Respondent Income Level

Figure A.26: MMs by Respondent Income Level: Argentina
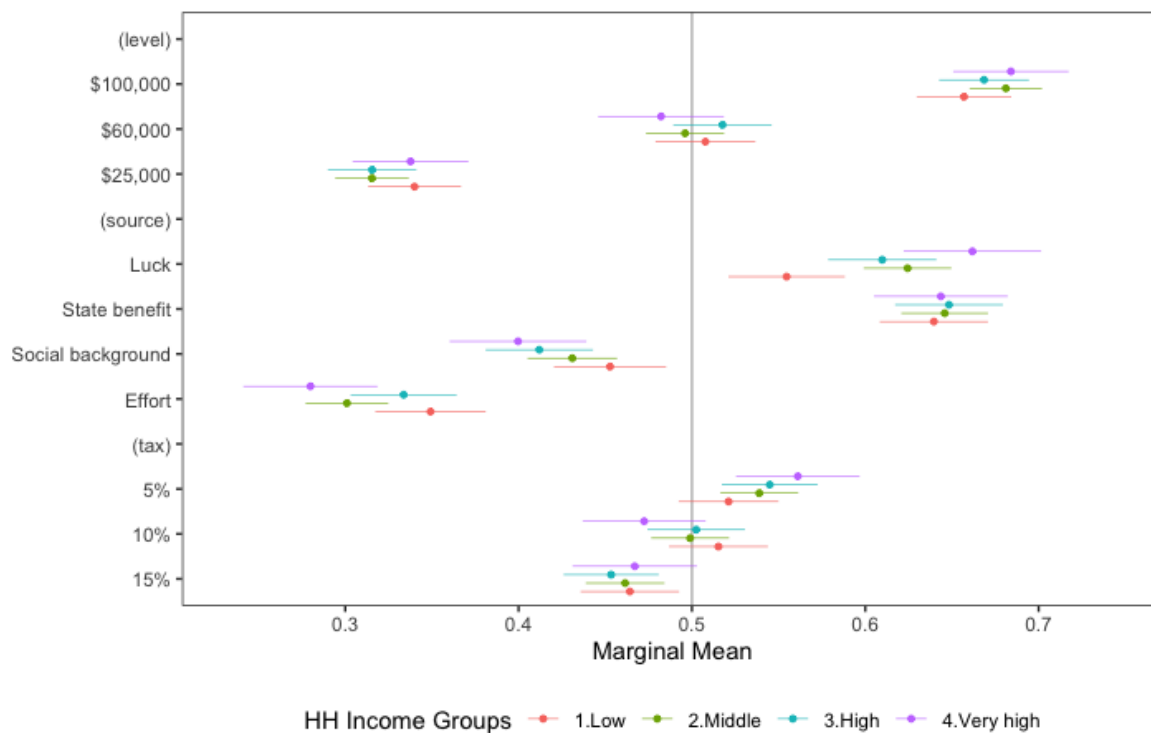
Note: This plot shows marginal mean outcomes from forced choice conjoint experiments, by respondent income level in Argentina. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.
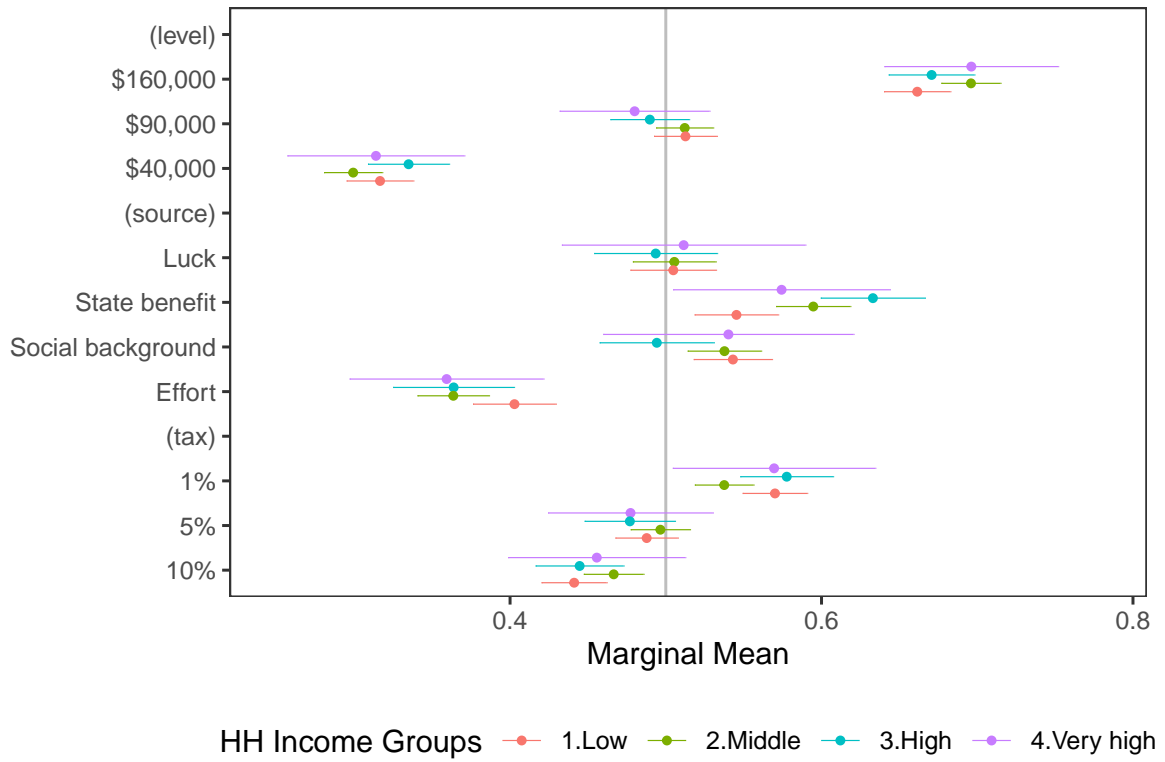
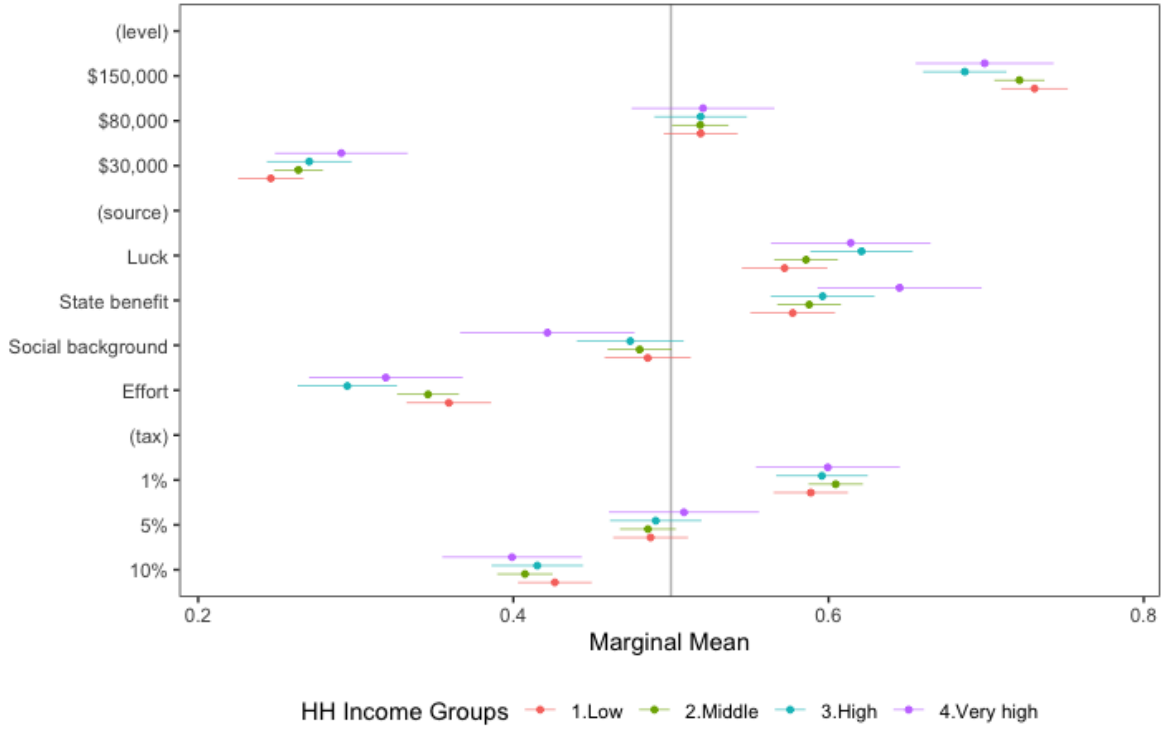Figure A.27: MMs by Respondent Income Level: Chile

Note: This plot shows marginal mean outcomes from forced choice conjoint experiments, by respondent income level in Chile. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

Figure A.28: MMs by Respondent Income Level: Australia

Note: This plot shows marginal mean outcomes from forced choice conjoint experiments, by respondent income level in Australia. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

Figure A.29: MMs by Respondent Income Level: US

Note: This plot shows marginal mean outcomes from forced choice conjoint experiments, by respondent income level in the US. Estimates are unweighted and clustered by respondent. Bars represent 95% confidence intervals.

A.12 Estimating Population Average Marginal Component Effects

Recent research has highlighted the drawbacks of using the uniform distribution to randomize conjoint profiles, noting that target distributions of interest are often far from uniform (De la Cuesta, Egami and Imai 2022). As a result, the external validity of conjoint estimates may be seriously compromised, particularly when there are interactions between attributes and the real-world distribution is far from uniform, both conditions that apply here. In order to assess the robustness of my results to using alternative profile distributions, I conducted model-based exploratory analyses using real-world marginal distributions for the level of income and share of income paid in sales tax attributes. Since there are no obvious real-world distributions to inform source of income probabilities, I maintained the uniform distribution for this attribute. Table A.9 describes the probabilities used for each attribute level and country, table A.10 the data sources used to

determine them and figures A.30 to A.33 the uniform and population AMCEs for each country. As we can see, despite the fact that target distributions differ considerably from the uniform, results are remarkably robust, bolstering confidence in their external validity.

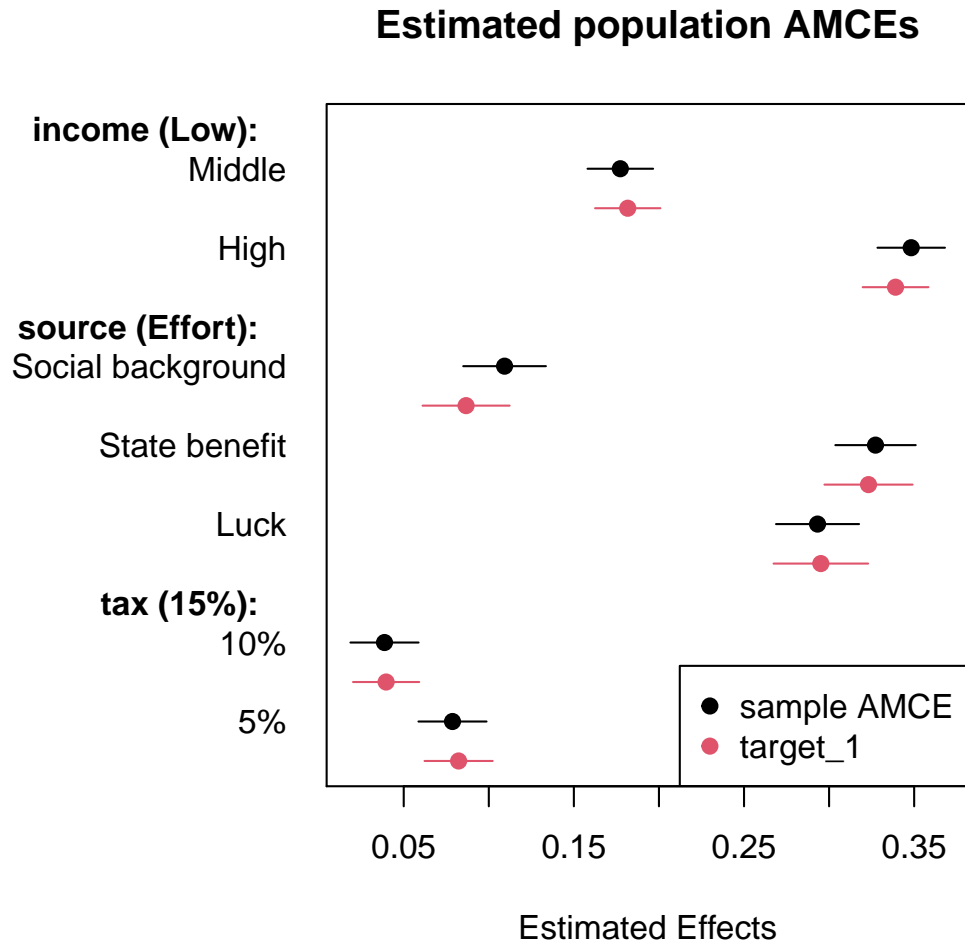Table A.9: Attribute Levels and Target Probabilities by Country

Attribute Levels	Probabilities			
	Argentina	Chile	Australia	US
Level of income				
Low	0.625	0.575	0.6	0.6
Middle	0.275	0.275	0.275	0.275
High	0.1	0.15	0.125	0.125
Source of income				
Effort	0.25	0.25	0.25	0.25
Social Background	0.25	0.25	0.25	0.25
State Benefit	0.25	0.25	0.25	0.25
Luck	0.25	0.25	0.25	0.25
% of income paid in sales taxes				
Low	0.3	0.1	0.05	0.05
Medium	0.6	0.6	0.55	0.55
High	0.1	0.3	0.4	0.4

Note: See table A.10 for data sources used to define probabilities.

Table A.10: Population Data Sources by Country

Country	Attributes	
	Share of Income paid in Sales Taxes	**Level of Income**
Argentina	Abeles, Balasini and Panigo (2012)	Encuesta Permanente de Hogares 2019
Chile	OECD and KIPF (2014)	Encuesta CASEN 2017
Australia	Phillips and Taylor (2015)	Survey of Income and Housing 2017-18
US	Wiehe et al. (2018)	Current Population Survey 2017

Figure A.30: Argentina

Estimated population AMCEs

income (Low):
Middle

High

source (Effort):
Social background

State benefit

Luck

tax (15%):
10%

5%

- sample AMCE
- target_1

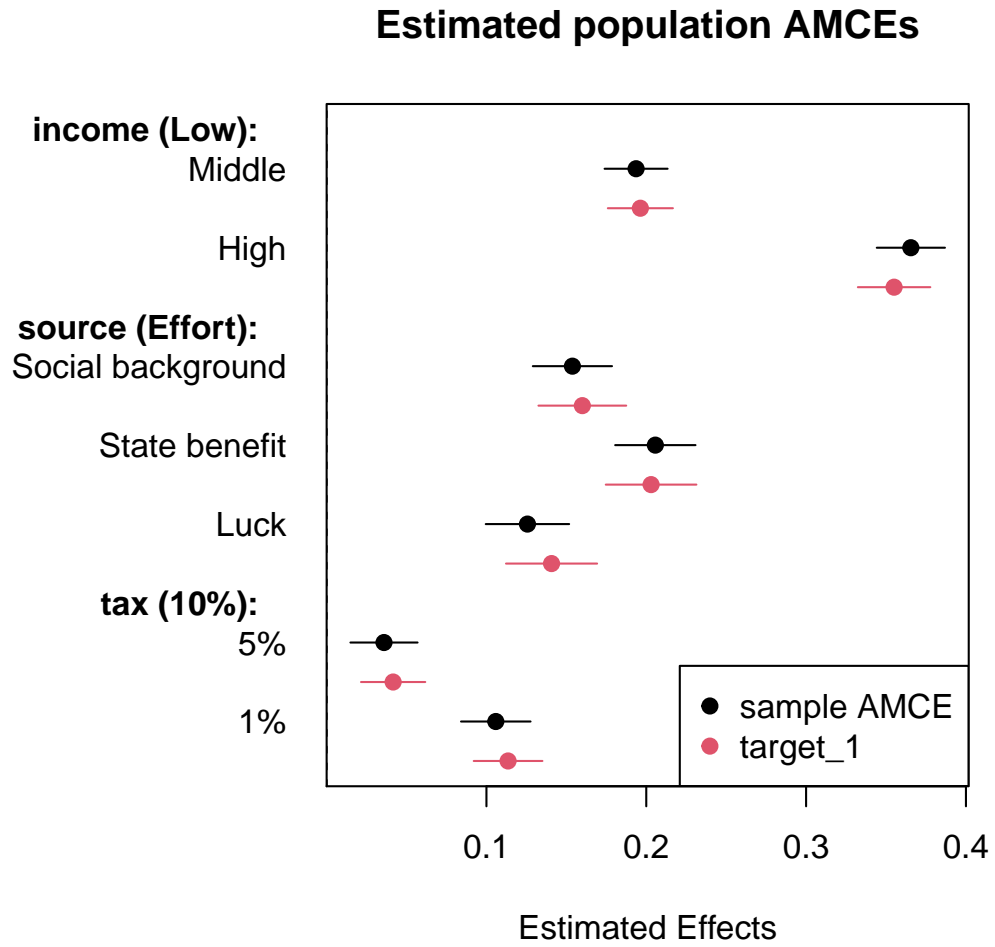0.05   0.15   0.25   0.35

Estimated Effects

Note: This plot shows estimated population (red) and uniform (black) AMCEs for Argentina. pAMCEs are estimated using a linear probability model and the probabilities described in table A.9. Estimates are clustered by respondent. Bars represent 95% confidence intervals.

Figure A.31: Chile

Estimated population AMCEs

Estimated Effects
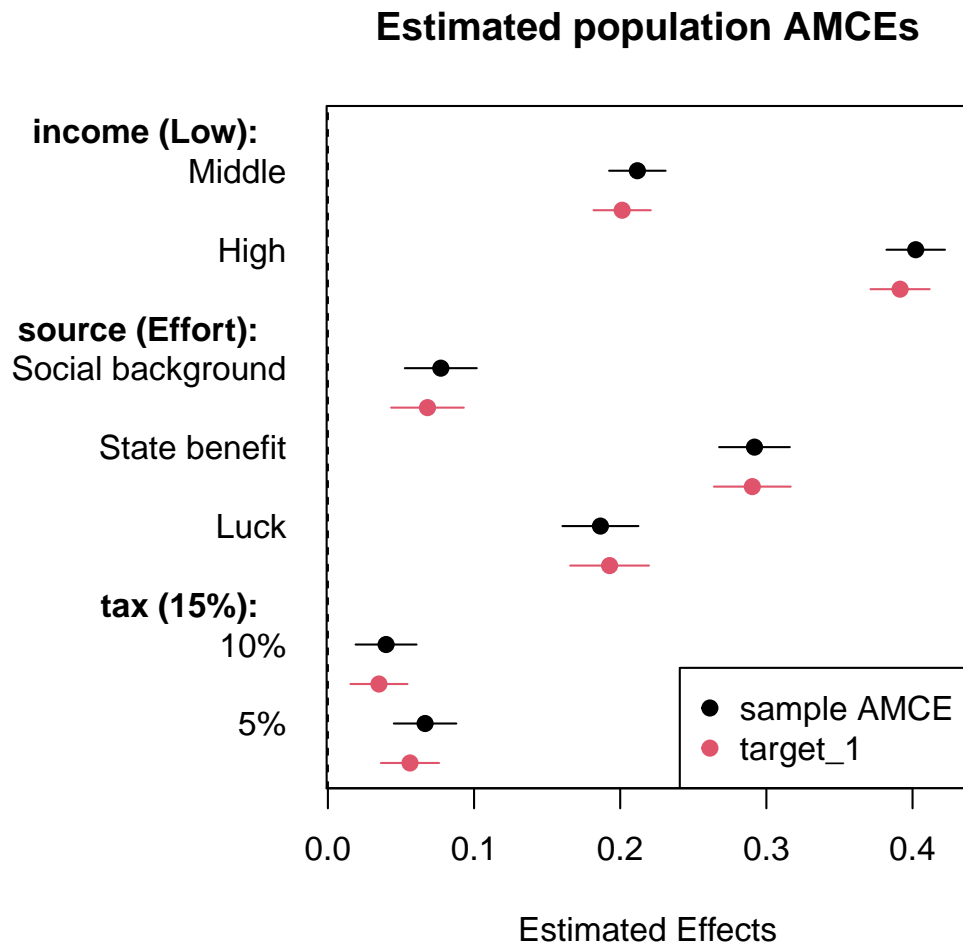
Note: This plot shows estimated population (red) and uniform (black) AMCEs for Chile. pAMCEs are estimated using a linear probability model and the probabilities described in table A.9. Estimates are clustered by respondent. Bars represent 95% confidence intervals.

Estimated population AMCEs

Note: This plot shows estimated population (red) and uniform (black) AMCEs for Australia pAMCEs are estimated using a linear probability model and the probabilities described in table A.9. Estimates are clustered by respondent. Bars represent 95% confidence intervals.
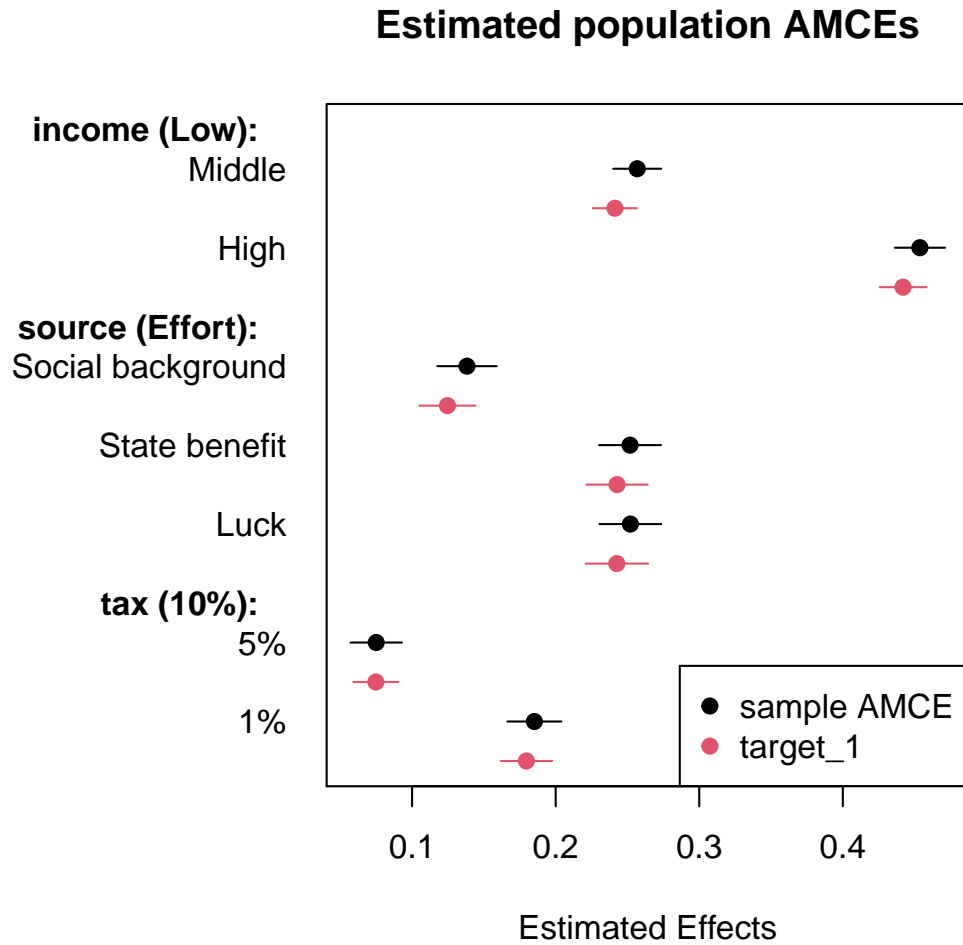
Estimated population AMCEs

Note: This plot shows estimated population (red) and uniform (black) AMCEs for the US. pAMCEs are estimated using a linear probability model and the probabilities described in table A.9. Estimates are clustered by respondent. Bars represent 95% confidence intervals.

A.13 US Idiosyncracies

US results stood out compared to the other countries in the sample because they tended to be larger. This is clearly the case for the effects of the share of income paid in sales taxes as seen in figure 1, and is even more notable in the AMCE results. Moreover, open-ended justifications of choices made on the basis of the state benefit source of income also indicate important differences. The US is the only country in which a significant share of respondents (around 20%) think individuals benefitting from the state should pay a higher tax rate not just to compensate for this benefit but as punishment for taking money from the government. Example justifications include: "Because they deserve to

be penalized for being bailed out" or "They got bailed out by tax payer money. That is wrong". These types of preferences are however consistent with recent findings showing respondents in the US use high taxes to punish corrupt businesspeople Tella, Dubra and Lagomarsino (2016). Moreover, they remind us that while fairness is often linked to altruism, it also involves an inclination to punish those who are perceived as dodging their fair share of societal burden, as shown by Fehr and Gäcther's seminal public goods experiment (2000).

Qualitative research on tax attitudes in the US reveals Americans attach great importance to paying taxes. They see its as a civic obligation, a responsibility owed to society, and proof that one is a contributing member of the community. Even in comparative terms, the belief that taxpaying is a moral responsibility and tax evasion is morally wrong seems to be particularly strong in the US (Williamson 2017). This may help explain why reactions to the perception that people are taking advantage of tax payers (by receiving a bailout) or are not paying their fair share (by paying a low share in sales taxes) are particularly strong there. Nonetheless, more comparative research is needed to better understand these particularities.

In figure 3, which presents results by respondent ideological self-placement, US results for the level of income attribute also stand out for their high level of polarization. They show a clear pattern of differences between liberals and conservatives, with liberals more likely to decide on the basis of a profile's level of income and conservatives somewhat more likely to decide on the basis of its source of income.[5] This is consistent with an ideological story whereby liberals apply ability to pay considerations and prefer redistributive, progressive taxation, while conservatives apply deservingness considerations that are orthogonal to progressivity.[6] This is especially clear in figure A.12, where we can see that

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[5]These differences are not simply an expression of self-interest, as income is not highly correlated with party identification or ideology in the sample (Spearman's ρ=0.10 and 0.11 respectively), and controlling for respondent income does not alter the results.

[6]While ability to pay principles are directly linked to tax progressivity and therefore redistribution, deservingness and compensatory principles do not have direct implications for the distribution of the tax burden across income groups. Nonetheless, deservingness arguments are often used to oppose progressivity by conflating effort and wealth (arguing the rich deserve their wealth because they have exerted more effort). On the other hand, compensatory arguments have also often been used to promote progressivity by demanding the rich pay higher rates of income taxation in accordance with the special compensatory theory described above.

the high level of income attribute level has a much larger causal effect on the probability of selection for liberal respondents than for conservatives. These results are in line with research arguing conservatives in the US prioritize procedural justice rules while liberals give more weight to fair outcomes by applying distributive justice rules (Miles 2014); they are thus broadly consistent with prior research showing partisan gaps when it comes to tax policy views in general and fairness concerns in particular (Stantcheva 2020). Large ideological differences and the ensuing difficulties in building cross-party consensus may be part of the reason why redistribution in the US is much lower than in other advanced democracies (Elkjaer and Iversen 2021). Notably however, even in the US, preferences coincide when it comes to both tax benefits and the state benefit source of income.

A.14   On Wars, Pandemics and External Validity

As all experiments, this one's limitations are most evident when it comes to external validity. Findings presented here show that when we isolate tax fairness preferences, respondents across a broad variety of settings favor using taxes to compensate for unequally distributed state benefits. However, the extent to which these preferences inform policy decisions in the real world depends on a number of factors on which the experiment provides little insight.

At the individual level, tax preferences can not only guided by fairness ideals, but also self-interest and efficiency considerations. The fact that the experiment was relatively successful in isolating fairness concerns[7] means it is uninformative about their relative weight when compared to more self-serving considerations. Nonetheless, US research has found that "fairness views appear to be the most important factor in shaping support for tax policy" (Stantcheva 2020, p. 4). Thus, while the preferences captured here may not be exactly those informing tax policy, they are arguably a major component.

Perhaps a more important obstacle to external validity is the fact that in the real world state benefits are not as clear as in the experiment, mainly because people have more than three attributes and it is often hard to figure out which ones are relevant. Nonetheless, we know from previous research that this has not prevented compensatory

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[7]Breaking down results by respondent income level (section A.11) shows income only slightly moderates ability to pay preferences, suggesting the experiment did a good job of minimizing self-interest bias and capturing fairness preferences instead.

demands from being associated with important increases in tax progressivity in the past (Limberg 2019; Scheve and Stasavage 2016). This is probably where the crisis situations that have been studied in the literature become key. While they may not be necessary for compensatory demands to exist, wars, financial crises and —possibly— pandemics, likely play a crucial role in making them salient. The political power of compensatory demands will thus highly depend on context, which determines both whether elites raise these kinds of arguments and whether they resonate with publics.

This ties up with the broader research on fairness, which notes that while fairness rules are broadly agreed upon, disagreement arises when it comes to applying abstract rules to concrete situations (Trump 2020). Context becomes key in facilitating agreement over the relevance of specific fairness arguments. In this case, massive asymmetric shocks provide a solution to the problem of impracticability highlighted by Seligman in the 19th century: we do not need to measure all of the ways in which the state has contributed to inequalities, only the most obvious, scandalous ones. A point also made elsewhere: "if arguments about compensation are to carry much weight politically, the initial unfairness corrected must be obvious and its magnitude must be large" (Scheve and Stasavage 2016, p.22). People may care about compensation generally, but for it to matter politically, crisis situations may be a necessary condition for elites to adopt and mobilize voters on the issue.

Finally, even if compensatory demands are an important driver of tax preferences in general (and not just tax fairness preferences), the extent to which these inform actual tax policies depends on the process through which policies are created. This criticism, which extends to all studies of individual preferences, highlights the importance of, and complementarity with institutional approaches. Perhaps the only point worth adding here is that even if democratic institutions are flawed, certain crisis situations that increase demands on the public may also force politicians to be especially attentive to their preferences.

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