

Risk Attitudes Mitigate The Effects of Political Ideology on Social Values and Support for Universal Basic Income

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Introduction

In economics, risk aversion is the idea that individuals dislike risk, and therefore prefer certain outcomes over uncertain ones, even if they come at a small cost. Instances of risk aversions abound in our daily lives—car insurance is a recognizable example. For a (relatively) small monthly cost, an individual ensures that he or she will not have to cover the full cost of damages in the case of an accident. Investing in US treasury bonds over individual stocks is another example of risk averse behavior. The expected return on a bond is lower than that on an individual stock, but the payout from a bond is nearly certain, while the return on an individual stock is not.

A perhaps less intuitive setting in which we observe risk aversion is in the political stances taken by individuals. The decision to support or oppose a given social policy is often thought to be motivated primarily by an individual's political ideology—whether they are conservative or liberal-leaning. Political ideology in turn, is influenced by many individual characteristics, such as age, sex, and household income, and these traits in turn influence the propensity to support a given policy. Risk aversion, however, is different—individuals across the ideological spectrum may be risk-averse or not¹; a liberal individual is no more or less likely to be risk-averse than a conservative one and vice versa. This brings up two interesting questions: Does risk aversion influence individuals' decisions about which political ideas to support? And given that risk aversion is independent of political ideology, how do the two factors interact in an individual's decision to support or oppose a given policy? Evidence from previous studies suggests that the social values of individuals are largely influenced by individuals' personality profiles (Carney et. al., 2008), and the result we discuss in this report corroborates and expands upon that finding. Using survey data, we find evidence that risk aversion does not only influence individuals' political preferences, but also that risk attitudes can mitigate the effects of political ideology on stated social preferences and support or opposition to social policies.

Data and Methodology

Our survey was conducted between May 5 and June 9, 2020 using the Qualtrics platform to collect approximately 2,200 responses across the United States. The sample is

¹ We tested the correlation between risk aversion and political ideology and found no significant correlation.

representative on age, sex, education, income, political affiliation, region, race and ethnicity using American Community Survey and ANES data to estimate quotas. The survey covers a range of topics, including politics, risk preferences, and respondents' Covid-19 experience. We coded the data to maintain consistency as follows: first, higher numbers generally imply greater support for or affinity towards a particular variable.

In the survey, we asked various questions about respondents' social values and their beliefs about the role the US government should play in increasing/upholding individuals' well-being. We also asked respondents to consider several arguments against and in favor of the government implementing a universal basic income policy, which was defined in the survey as a policy in which the government ensures that all Americans have at least a minimum income to help meet their basic needs. Respondents were asked to evaluate the statements presented using a five-point Likert scale, in which (1) indicated strong agreement and (5) indicated strong disagreement. Additionally, we asked participants how they would categorize their political ideology on a five-point scale, ranging from (1) very liberal to (5) very conservative. Note that in our analysis, for simplicity, we make the assumption that the relationship between different levels of political ideologies is linear.

We measured respondents' risk preferences in the survey using the scoring procedure of the Global Preferences Survey (Falk et. al, 2018). In this method, respondents are given a series of five questions in which they are presented with binary choices between a sure payment of y dollars, and a fixed lottery in which they could win x dollars or 0 . The questions were phrased as follows:

“Please imagine the following situation. You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting amount x or getting nothing. We will present to you five different situations. What would you prefer: a draw with a 50% chance of receiving amount x , and the same 50% chance of receiving nothing, or the amount of y as a sure payment?”

If the respondent chose the lottery option, they were shown a subsequent set of choices of the same kind but with a larger sure payment, y . Likewise, if the respondent chose the sure payment over the lottery, they were shown a subsequent set of choices with a smaller sure payment y . Using this method enabled us to hone in on participants' certainty equivalents, which is defined in economics as the guaranteed return a person would be willing to accept in order to avoid taking a risk on a higher, but uncertain return. The lower one's certainty equivalent, the more risk-averse they are. The purpose of this series of questions is to ascertain a general sense of respondents' risk aversion, although it

does not distinguish between the different types of risk aversion respondents may be subject to.

The methodology used in the analysis of this report borrows from microeconomics and particularly Industrial Organization (IO), a field of economics that studies how individuals make purchasing decisions. When making a decision of whether or not to purchase a certain good, individuals consider various tradeoffs according to their preferences. For example, consider an individual looking to buy a new pair of shoes. They are faced with two options: the first pair is in their favorite color and priced at \$50; the second pair is in their least preferred color, but it is on sale for \$40. Which pair of shoes will the consumer decide to buy? This depends on how much value the consumer finds in wearing their favorite color over their least favorite color, relative to the value they find in saving \$10. The tradeoff that determines which pair of shoes the consumer ends up purchasing is called the marginal rate of substitution (MRS). This idea can be applied to many areas of decision-making, not just purchasing decisions, and we apply it in our report to the decision of whether or not to support a given political statement.

It is important to note that the MRS between two characteristics is a valuable way to measure the tradeoffs individuals consider when making decisions only if the two characteristics being considered are on opposing sides of the decision being made. In our example above, price and color played opposite roles in the consumer's purchasing decision: the preferred color pushed the consumer toward buying the first pair of shoes, while the lower price pushed the consumer toward buying the second pair of shoes.

In our case, we analyze our survey respondents' decision to assign a level of agreement/disagreement to various statements about policy preferences and social values. The decision to support a given policy is influenced by several characteristics of the individual, including age, sex, and household income, but for the purpose of our analysis, we will focus on the two of the strongest² predictors for choice, risk aversion and political ideology, and on questions for which these factors have opposing influences on choice. We thus ask: when considering which political ideas to support or oppose, how does political ideology trade off against risk aversion in driving choice?

² In our regressions, risk aversion and political ideology were both statistically significant and had among the largest coefficients of the variables included in the analysis.

Social Values and the Role of Government in Society

In our survey data, we find that very liberal individuals are more likely to strongly agree with the following statements. Support for these statements is decreasing in conservativeness.

- *It is the responsibility of the federal government to see to it that people have help in paying for doctors and hospital bills.*
- *Differences in income in America are too large.*
- *It is the government's responsibility to ensure a reasonable standard of living for the unemployed.*

Conversely, very conservative individuals are more likely to support the following statements. Support for these statements is decreasing in liberalness.

- *Social benefits and services place too great a strain on the economy.*
- *Most poor people are poor because they don't work hard enough.*

For both sets of statements, individuals' risk aversion affects their decision to support or not support the statement in the opposite direction from the effect of political ideology³. In other words, the effect of political ideology on the answers given to the above statements is mitigated by the respondent's level of risk aversion. As an example, if a very liberal, risk-averse respondent was considering whether the government should ensure a reasonable standard of living for the unemployed, their political ideology would predict a response of "strongly agree" with the statement presented. However, because the individual is risk-averse, they may respond "somewhat agree" to the question.

The tradeoff that exists between political ideology and risk aversion in the two sets of statements above presents an opportunity to measure the "marginal rate of substitution" between risk aversion and political ideology when making decisions on political and social stances. The size of the effects we observe in the survey data for both risk aversion and political ideology tell us the relative weight each of these components has in individuals' decisions to assign some level of support or opposition to a given statement. This is the

³ We use an ordered logit in which the dependent variable is the level of support for the given policy (measured using a 5-point Likert scale, in which (1) indicates strong agreement and (5) indicates strong disagreement).

heart of our analysis, as the MRS is calculated by taking the ratio of the values of the two characteristics we are considering. In this case we would have:

$$MRS = \frac{\text{Weight assigned to Risk Aversion}}{\text{Weight Assigned to Political Ideology}}$$

Calculating the MRS for each of the statements above, we find the following results displayed in the graphic below.

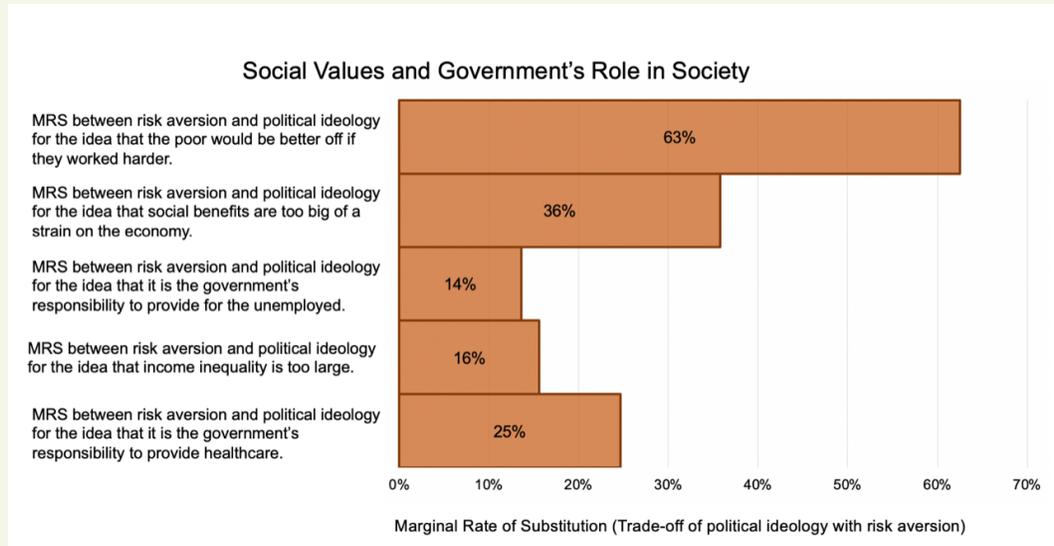


Figure 1. Marginal Rate of Substitution Between Risk Preferences and Ideology and Social Values. The height of the bars indicate the ratio between the effect of risk aversion on social preferences, and the effect of ideology on the same social preferences. Preferences are listed along the x-axis. Each bar is the result of an independent ordinal logistic regression. All regressions include standard demographic controls; age, gender, race, ethnicity, education, income, region.

The chart above offers insights into the role risk aversion plays in the social values and political views of individuals. Broadly speaking, holding political ideology constant, we find that risk-aversion acts as a buffer against extreme conservative or liberal statements. The most drastic result in our analysis is related to the statement about whether the poor could solve their economic plight by working harder. Individuals are willing to compromise 63%—*nearly two-thirds*—of their political ideological views in order to select a “less risky” level of agreement/opposition with the statement⁴. This means for example, that a very conservative, risk-averse individual would select a more neutral or even

⁴ Recall that in our analysis here, for simplicity, we make the assumption that the relationship between different levels of political ideologies is linear. However, it is important to note that the results discussed in this report if the linearity assumption is relaxed and political ideology is treated as a categorical variable.

opposing response to the question, despite the fact that their political ideology would predict agreement with the statement.

We also find that respondents are willing to compromise one quarter of their political ideologies as a result of risk aversion on the issue of government-provided healthcare, and 36% of their ideology on the issue of whether social benefits place too great a strain on the economy. Individuals are less willing to compromise the views dictated by their political ideology as a result of risk aversion on issues such as unemployment benefits (14%) and income inequality (16%).

The Benefits and Drawbacks of Cash Transfer Policies

A similar analysis to the one conducted above can be done for opinions related to a universal basic income (UBI) policy⁵. In our survey data, we find that very conservative individuals are most likely to assign higher levels of support for the statements below, while less conservative/more liberal individuals are likely to assign levels of disagreement:

- *A UBI would encourage people not to work.*
- *A UBI would go to many people who do not need it.*
- *A UBI would compensate people who take care of relatives and do other domestic work.*

Again, for each of these statements, we find that individuals' risk aversion affects their decision to support or not support the statement in the direction opposite from their political ideology, again creating an opportunity to measure the MRS between risk aversion and political ideology as it relates to UBI policy. The MRS calculation in this case is the same as in the previous section, and the results can be seen below:

⁵ We repeat the same methodology for this portion of the analysis as in the previous section -- we use an ordered logit in which the dependent variable is the level of support for the given policy (measured using a 5-point Likert scale, in which (1) indicates strong agreement and (5) indicates strong disagreement).

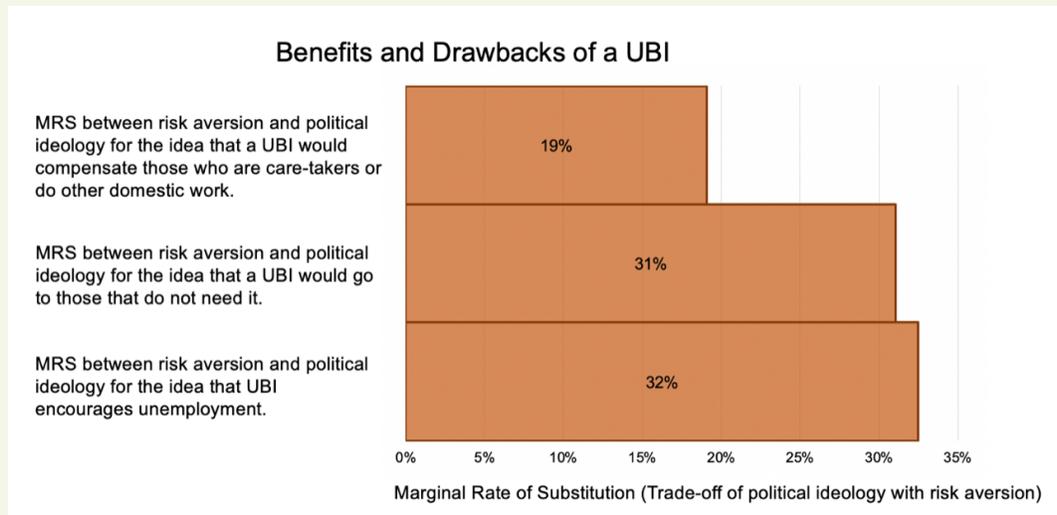


Figure 2. Marginal Rate of Substitution Between Risk Preferences and Ideology and Views on UBI. The height of the bars indicate the ratio between the effect of risk aversion on attitude towards UBI, and the effect of ideology on the same attitudes. Preferences are listed along the x-axis. Each bar is the result of an independent ordinal logistic regression. All regressions include standard demographic controls; age, gender, race, ethnicity, education, income, region.

We observe high marginal rates of substitution for the arguments of whether a UBI would discourage work and whether a UBI would give money to individuals who were not needy. Individuals are willing to trade away approximately one-third of their political ideological views in order to select “less risky” levels of agreement/opposition with these arguments. A smaller tradeoff exists between risk aversion and political ideology for the argument of whether a UBI compensates those who work in the home, taking care of children or relatives. For this argument, individuals are willing to compromise approximately one-fifth of the views dictated by their political ideology as a result of risk aversion.

Conclusion

Risk aversion plays a large role in many areas of decision-making for individuals, and choices involving social and policy stances are no exception. We find that not only does risk aversion play a role in determining social and political views, but it also often leads individuals to push back against their political ideologies when making decisions as to which ideas or values to support or oppose. In particular, risk-aversion mitigates the effect

of political ideology on the beliefs of the role of government in individuals' well-being and their stances on arguments regarding a UBI policy.

Although not captured in this data set, it is interesting to consider the source of the risk felt by the individuals responding to the statements proposed above. One possibility is social risk—even though survey responses were anonymous, individuals may feel that there is a large social risk in admitting, for example, that they believe the poor could be better off if they just worked harder. Another possibility is that there is some sort of “empathy risk” at play. Individuals have a certain political opinion but recognize that they may feel differently if their social or economic circumstances were different. Identifying the source of risk in this setting is left for future work, but it is an interesting thought experiment nonetheless.

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