

Pay your debts: Moral dilemmas of international debt repayment

Alessandro Del Ponte and Peter DeScioli
Center for Behavioral Political Economy
Department of Political Science
Stony Brook University

Abstract

Should a country repay its international debt even if this comes at an extreme cost to its citizens? This moral dilemma is a common source of tension among nations. Here we apply theories and methods from moral psychology to investigate when people think a government is morally obligated to pay its debts. Participants read a scenario about a country that has to decide whether to default on its debt payments or cut vital government programs. Across experimental conditions, we vary the number of jobs at stake and whether a full or partial default is required to save them. Overall, most participants judged that a country should pay its debt, even when the costs to the debtor are substantially greater than the benefits to the lender. As the costs to the debtor became extreme, participants increasingly said that the country should default, but they still judged that defaulting is morally wrong.

Introduction

Should a government pay its international debt even if this comes at a high cost to its citizens? This dilemma has repeatedly shaken the international community in recent times. In Europe, for instance, Greece's government in the midst of financial crisis has faced difficult choices between repaying lenders and meeting the dire needs of its citizens (Reinhart and Rogoff 2011). These decisions have much at stake for many citizens whose jobs, prosperity, and welfare depend on them (Karanikolos et al. 2013), and they have been divisive and polarizing in European politics (Pew Research Center 2012). Here we investigate the moral dilemmas surrounding international debt by using methods from moral psychology (e.g., Greene 2014; Haidt 2012; Tetlock 2003).

The issue of debt repayment is not only a matter of economics but also morality. In addition to costs and benefits, there is also the question of how firm is the moral obligation to repay a debt. At one extreme, there is the view that a debtor should always pay their debt, no matter what the consequences, taking a deontological stance (Kant 1785/1993). On the other side, there is the view that the debtor should maximize overall welfare by defaulting when the aggregate benefits outweigh the costs, taking a consequentialist stance such as utilitarianism (Bentham 1789/1948). The field of moral psychology finds that for many moral rules, such as prohibitions against killing or stealing, people have conflicting deontological and consequentialist tendencies (reviewed in Haidt 2012). Here we examine for the specific case of debt repayment to what extent people's moral judgments are driven by deontological prohibitions versus welfare consequences.

Psychologists have found that moral judgments have a distinct deontological character, alongside and often in conflict with consequentialist motives for the greater good (DeScioli & Kurzban 2009, 2013; Greene 2014; Haidt 2012; Mikhail 2007; Tetlock 2003). Following moral philosophy, a deontological judgment focuses on the category and nature of the action rather than its consequences (Kant 1785/1993); hence, deontological judgments require strict observance of moral taboos and prohibitions, and they resist the kinds of cost-benefit considerations that factor into other kinds of (non-moral) decisions such as matters of economics or personal safety. In a large

literature with hundreds of experiments, researchers find that participants often judge that breaking moral rules is wrong and punishable even when the violation does more good than harm. For example, in the well-studied trolley problem, most participants (~75%) judge that it is morally wrong to push one person in front of a trolley to save five people on the tracks (Mikhail 2007), condemning the action of killing even though it would achieve a better outcome of one death instead of five deaths. Moreover, by experimentally varying the dilemma, psychologists found that seemingly minor details can shift a majority of participants' judgments (e.g., Mikhail, 2007). For instance, when the protagonist could flip a switch that would redirect the trolley toward one person, now most participants (~75%) said to flip the switch and kill one person to save five, a consequentialist judgment. In short, people's moral judgments include both deontological and consequentialist tendencies, and details about causality, intentions, and relationships can tip the balance between them (De Freitas et al. 2017; Greene 2014; Kurzban, DeScioli, & Fein 2012).

Previous research has also examined deontological moral judgment in the political realm (Ginges et al. 2007; Dehghani et al. 2010; Ryan 2014, 2017, 2018; Skitka & Bauman 2008). For instance, one study found that participants who moralized a political issue were more resistant to potential compromises on the issue, and they even wanted to punish politicians who were willing to compromise (Ryan 2017). In a further study, participants with strong moral convictions about a political issue were more likely to ignore new information about it and to dismiss arguments based on costs and benefits (Ryan 2018). Another line of research has examined deontological judgment in the context of conflict resolution. One study asked Palestinian and Israeli participants which deals they would accept to resolve issues surrounding the Israeli-Palestinian conflict (Ginges et al. 2007). Participants who viewed an issue as a matter of moral absolutes reacted to a potential compromise with outrage, and even more so when additional perks were added to try to persuade them. Similarly, Iranian participants who viewed their nuclear program as an absolute moral right responded to offers of additional financial incentives with greater anger (Dehghani et al. 2010).

Here we examine people's moral judgments about international debt repayment. A debt crisis poses a difficult moral dilemma in which decision-makers need to balance moral obligations along with the consequences for the debtor and the lender. Citizens' moral judgments about debt are likely to contribute to the political pressures that influence how governments manage debt crises, which in turn has massive effects on citizens' economic wellbeing.

Specifically, we investigate to what extent people make deontological versus consequentialist judgments about debt. On the one hand, the repayment of debts seems to be a firm moral obligation related to reciprocity and promises. In fact, in some languages such as ancient Hebrew and modern German, the word for debt also means sin or guilt. On the other hand, debt is an economic concept and so might be more consequentialist, showing greater sensitivity to costs and benefits than other moral rules. Hence, we examine two opposing hypotheses that people are deontological or consequentialist about debt, along with the possibility that they hold a conflicting mixture of both kinds of judgment.

To do so, we apply standard methods from moral psychology. Participants read a hypothetical debt dilemma in which a government must choose whether to cut vital services in order to repay its debt. Hypothetical dilemmas are commonly used in moral psychology because they allow researchers to control and vary participants' information about the situation while minimizing outside influences from previous beliefs about current events (e.g., a specific debtor was reckless or the lender was predatory). Particularly, by using hypothetical countries we aim to minimize the powerful effects of motivated reasoning (Lodge & Taber 2013) and post hoc rationalization (Haidt 2012) on people's moral and political judgments, such as someone skewing

their judgments to favor their own nation. We use this approach to temporarily isolate the effects of the structure of debt dilemmas from these other powerful influences. It also approximates the judgments of less partial bystanders such as neighboring nations who often play a key role in the international politics of debt crises.

Across experimental conditions, we manipulate the amount of the potential damage to the debtor in lost jobs to examine the sensitivity of participants' judgments to the welfare stakes. Specifically, we vary the number of jobs at risk in the debtor country in different ratios (1.2x, 2x, 5x, and 20x) to the number of jobs at risk in the lender country if the debt is unpaid (held constant at 5,000 jobs), which we call the damage ratio for the debtor relative to the lender. This allows us to quantify the relative influences of deontological and consequentialist factors in participants' judgments about what the government should do. We also manipulate a second factor: whether the government needs to default in full or partially in order to avoid damaging cuts to programs. In many real-world cases, a government in a debt crisis does not entirely default but instead negotiates a reduction in payments. People might judge a partial default more leniently (even holding consequences constant) because the partial repayments show an intention to repay, and intentions are critical for how people represent others' actions and make moral judgments (e.g., De Freitas et al. 2017).

Methods

We recruited 648 participants from the United States (46.1% female; age: $M = 35.4$, $SD = 10.7$) online using Mturk (Berinsky, Huber, & Lenz 2012) in the Fall of 2017. (See Online Appendix for more about the sample and methods.) Participants read a hypothetical scenario about a government in a debt crisis and then answered questions about it. In the baseline scenario, a country can no longer repay its debt unless it cuts major government programs, which will lead to a loss of 6,000 jobs. However, if the country does not repay, then the lender country will have to make cuts to its own government programs and will lose 5,000 jobs. Thus, the debtor country must choose between a prohibited action - defaulting on the debt - and a worse consequence - more jobs lost in total (6,000 vs. 5,000 jobs). Specifically, participants read:

Avalon and Fredonia are two countries in the same region. A few years ago, Avalon suffered hard times and Fredonia loaned \$100 billion to Avalon. Avalon promised to repay the loan regularly over the course of 15 years.

Now, a few years later, Avalon is experiencing more economic hardship and cannot afford to make its loan payments. The only way Avalon can make the payments is by drastically cutting its government programs. With these cuts, 6,000 citizens would lose their jobs.

At the same time, Fredonia has stressed that Avalon must continue to repay the loan. If Avalon stops repaying the loan, then Fredonia will have to make big cuts to its government programs and 5,000 citizens would lose their jobs.

In this difficult situation, the government of Avalon continues to debate whether they should stop repaying the loan or cut government programs for their citizens.

In a between-subject design, we manipulated the potential damage in lost jobs to the debtor country. We varied the debtor's job losses as a relative ratio compared to the lender's potential damage (always constant at 5,000 jobs) in four levels of escalating damage: 1.2x (6,000 jobs), 2x (10,000 jobs), 5x (25,000 jobs), and 20x (100,000 jobs).

We also manipulated whether the debtor country had to default in full or partially in order to prevent job losses. Partial default might be judged more leniently because it shows the debtor's

intention to preserve a positive relationship with the lender. In the partial default conditions, the relevant portion of the scenario instead said that Avalon “can afford to pay only half of the amount due each period”, and that Avalon had to choose whether to repay the total amount due or “underpay with half of the amount due each period”.

After reading the scenario, participants answered what they thought Avalon’s government should do, default on the loan or cut government programs. Next, participants made moral judgments about each option, first for defaulting on the debt, which was our main focus, and then for cutting government programs. They answered whether each option was morally wrong (forced-choice yes/no), how morally wrong it was (0-10 scale from *not at all morally wrong* to *extremely morally wrong*), and whether this action should be punished “such as by protests, lawsuits, removal from office, and/or international sanctions” (0-10 scale from *not at all punished* to *severely punished*). Finally, participants answered questions about their political views, demographic items, and general comments.

Results

What should the government do?

Figure 1 shows the percentage of participants who said the government should default on the debt rather than repay the debt by cutting programs. When the debtor’s potential job loss was only a little greater than the damage to the lender (1.2x), most participants were deontological about debt: They said that the government should not default on the debt, even if it would save more jobs in total. As the damage to the lender further increased, participants became relatively more lenient, but a substantial percentage continued to oppose default when the damage to the debtor was 5x or 20x greater than the lender. Finally, participants were generally more accepting of the partial default than full default.

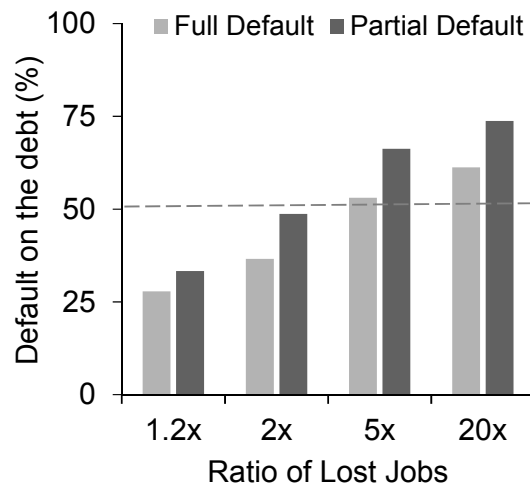


Figure 1. Percentage of participants who supported defaulting instead of repaying the debt by cutting programs. Judgments are shown by the ratio of potential damage to the debtor relative to the lender and by whether the required default was full or partial. The line at 50% indicates whether the majority tendency was to oppose or support default. The percentages statistically differed from 50% (binomial tests) except for full/2x and partial/5x (see Online Appendix for details).

Next, we analyze participants judgments with logistic regression (Table 1). The damage ratio x partial default interaction was not significant so we report the model without it. Compared to the reference category of 1.2x damage, participants showed greater support for default when the

damage was increased to 2x, 5x, and 20x. Also, participants showed greater support for partial default than full default (holding constant the consequences).

Overall, these results show that although participants tended to be deontological about debt, they became more supportive of default as the potential damage to the debtor increased from only a little more than the lender to higher levels (2x, 5x, or 20x). Moreover, varying the damage from small (1.2x) to great (20x) was sufficient to sway the majority, swinging from about 30% to 70% who said the country should default. At the same time, it is notable that even at 20x damage, roughly 30% of participants continued to judge that the government should pay its debts.

Table 1. Logistic regression of participants' support for defaulting on the debt.

	Coefficient (<i>SE</i>)
Constant	-1.06 (0.18) ***
2x ratio	0.52 (0.23) *
5x ratio	1.22 (0.23) ***
20x ratio	1.56 (0.24) ***
Partial Default	0.47 (0.17) **

Note. The reference category is 1.2x damage ratio and full default. $N = 648$.

* $p < .05$, ** $p < .01$, *** $p < .001$

Is it morally wrong to default on the debt?

Figure 2 shows participants' moral judgments for defaulting on the debt. Overall, a substantial percentage of participants in every case judged that it would be morally wrong to default. Participants' judged defaulting to be moderately wrong and punishable across the range of damage ratios, while they judged partial default somewhat less harshly than full default. We further confirmed these patterns in regression models (see Online Appendix), which also revealed that the increasing damage had little effect on moral judgments except at the most extreme ratio (20x).

These results indicate that participants' moral judgments of default were relatively insensitive to the amount of damage to the debtor across a wide range from 1.2 to 5 times more jobs lost than the lender. This shows a characteristic pattern of deontological judgment, which is more sensitive to the nature of the action (defaulting) than the consequences at stake (total jobs lost). Moreover, the fact that moral judgments *were* sensitive to whether the default was partial indicates that they were attuned to the nature of the action (partial or full default), at least as much as the consequences (which were constant across partial and full conditions).

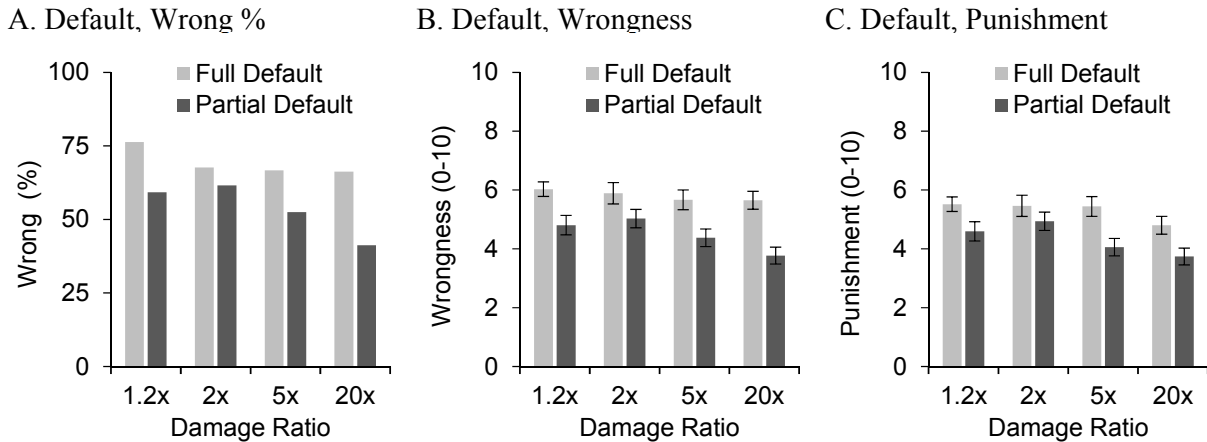


Figure 2. Participants' moral judgments about defaulting on the debt. The panels show judgments about whether defaulting is wrong (panel A), ratings of moral wrongness (panel B), and ratings of how much punishment the government would deserve (panel C).

Is it morally wrong to cut government programs?

Figure 3 shows participants' moral judgments for cutting government programs. Overall, most participants said it is not morally wrong to cut government programs in order to repay the debt, and judgments of wrongness and punishment tended toward the lower end of the scale. We further analyzed these patterns with regression models (Online Appendix), finding that participants' judgments were insensitive to the amount of damage except when it reached the extreme of 20x where cutting programs was judged as more wrong than with less damage.

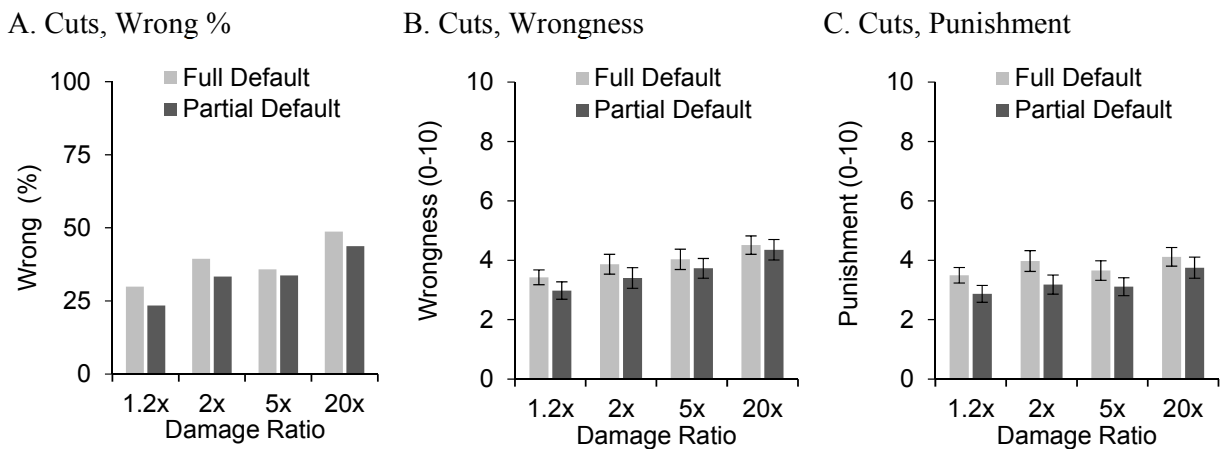


Figure 3. Participants' moral judgments about cutting government programs. The panels show whether the cuts are morally wrong (panel A), ratings of moral wrongness (panel B), and ratings of how much punishment the government would deserve (panel C).

Discussion

Overall, we found that most participants judged that a country should pay its debt even when the costs to the debtor are substantially greater than the benefits to the lender. As the costs to the debtor increased to higher levels, participants became divided or supportive about defaulting, but they still judged that defaulting is morally wrong. And, even at the most extreme damage to the

debtor (20x), a substantial percentage of participants (~30%) judged that the government should repay the debt. These broad patterns show a clear deontological tendency in participants' moral judgments about debt.

At the same time, most participants' judgments about what the government should do were not actually absolute, and in fact were substantially swayed by the debtor's damage. Across the scenarios, participants' support for default swung from ~30% to ~70%. These findings are consistent with current theories in moral psychology about how multiple psychological processes create conflicts between deontological intuitions and consequentialist intuitions (e.g., De Freitas et al. 2017; Greene 2014). Moreover, participants shifted their ultimate support for default even while their moral judgments remained consistent in deeming default to be morally wrong.

We also found that a debtor's partial default, paying half of what they owe, was judged to be somewhat less morally wrong than full default, holding constant the damage to the debtor and lender. This resonates with the idea that partial repayment shows the debtor's intention to repay. With a good faith effort to repay, the debtor's underpayment becomes a less flagrant violation of the moral rule. This interpretation fits with previous research about how moral judgments are shaped by perceptions of intentions (e.g., De Freitas et al. 2017; Haidt 2012).

The observation that people's support for default can be swayed has potential implications for public opinion and political rhetoric. The present experiment points to relative damage and partial repayment as key factors. When perceptions of these factors change due to prominent events, persuasion from elites, or selective news exposure, public opinion may follow suit (Arcenaux, Johnson, & Cryderman 2013). Of course, we suspect that many additional factors shape these judgments, such as the debtor's history of defaults, their spending decisions, the lender's predatory motives, the implications for the global economy, and so on. These additional factors can also be studied using scenario methods in future research.

The present findings also illustrate a major theme from moral psychology that is very relevant for understanding political debates: People's moral judgments reflect not only static values but also dynamic strategies. Research on morality in politics has emphasized stable individual differences in moral values, such as Schwartz's basic values (Schwartz, Caprara, & Vecchione 2010) or moral foundations (Haidt 2012). However, an individual's moral judgments are not necessarily stable; they can change over time (Smith et al. 2017) and even within a few minutes when the individual's incentives shift (DeScioli et al. 2014). Indeed, the broader literature in moral psychology examines how individuals change their moral judgments and tailor them to the situation. This research examines how moral judgments are attuned to details about actions and intentions, such as precisely how one person is killed to save five in the trolley problem (see Introduction). Moreover, these effects often occur among a wide diversity of people and cultures including individuals who hold different abstract moral principles (Mikhail 2007). Rather than static values, people use their moral judgments as dynamic strategies to negotiate the politics of everyday life, such as to bargain for better deals, protect against aggression, resolve others' conflicts, and advocate policies that serve their interests (DeScioli and Kurzban 2013). Moreover, people's strategic use of moral judgments points to the potency of political rhetoric for shaping moral debates (e.g., Arcenaux 2012; Clifford et al. 2015). If people's moral judgments closely track the details of a dilemma, then this creates room for political rhetoric to shape citizens' perceptions and policy stances on moral issues.

People's deontological judgments could have important implications for the politics of international debt. Recall that deontological judgment is insensitive to the welfare consequences for the people involved, since it emphasizes moral obligations apart from their consequences. This

means that deontological judgment can pose a threat to public welfare whenever moral prohibitions are at odds with the common good. To return the case of European politics, some international demands for austerity and repayment could reflect deontological judgments that are insensitive to the harmful consequences for debtors. Indeed, political rhetoric in Europe shows deontological themes that depict debtors as sinners (Dyson 2014). More generally, a debt crisis poses a government with a real-world moral dilemma with staggering consequences at stake, both for their own citizens and for cooperation in the wider international community. Future research can continue to use methods from moral psychology to better understand people's judgments about when a government must pay its debts.

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Online Appendix
Pay your debts: Moral dilemmas of international debt repayment

Supplemental Methods

Sample

We use a convenience sample in these experiments following the standard methods of moral psychology and more broadly experimental psychology and many other experimental sciences (e.g., mice in medicine, fruit flies in genetics, *C. elegans* in neuroscience, etc.). Convenience samples are a vital tool for experimental science because low-cost samples allow researchers to repeat an experiment many times with a large number of controlled variations in order to increasingly dissect the underlying causal processes. Of course, convenience samples also come with a standard limitation which is that caution is required when generalizing the results to other samples or contexts. Importantly, however, the primary goal of many experiments is not to generalize the results but rather to test hypotheses within the microcosm of the study (Popper, 1959). This is important to point out because many prominent research areas in political science aim to generalize from a sample to a specific population, such as polling American voters or estimating how an intervention affects turnout in a specific population. However, in many experiments, including most psychology experiments, the main goal is to test hypotheses within the study rather than to generalize to a specific population. In the current experiments, we test alternative hypotheses about how participants make moral judgments about international debt. We leverage the key advantages of a convenience sample while acknowledging its standard limitations.

In particular, we recruited participants using Mturk due to the advantages emphasized in previous research, including that participants from Mturk tend to be more diverse than undergraduates, they pay closer attention to instructions, and Mturk samples are widely available to other researchers which facilitates replication efforts and comparisons across studies (Berinsky et al., 2012; Buhrmester, Kwang, & Gosling, 2011; Clifford, Jewell, & Waggoner, 2015; Hauser & Schwarz, 2016; Huff & Tingley, 2015). For these reasons, Mturk has become a standard source of convenience samples that is widely used across the social sciences including political science, psychology, and economics.

Supplemental Results

What should the government do?

Table A1 reports whether significantly more than half of participants supported or opposed defaulting on the loan. In the full default condition, participants opposed defaulting when the damage was 1.2x and 2x, and there was no significant difference from 50% when the damage was 5x and 20x (but 20x had a marginal trend toward support for default). In the partial default condition, most participants opposed defaulting for 1.2x damage, they were evenly divided for 2x, and most participants supported defaulting for 5x and 20x damage. Hence, participants showed a little more acceptance of a partial default when the potential damage to the debtor was much greater than the lender.

Table A1. Participants' support for defaulting on the debt.

Damage ratio	Full Default			Partial Default		
	<i>n</i>	% Default	<i>p</i>	<i>n</i>	% Default	<i>p</i>
1.2x	97	27.8	< .001	81	33.3	< .01
2x	71	36.6	< .05	78	48.7	.91
5x	81	53.1	.66	80	66.3	< .01
20x	80	61.3	.057	80	73.8	< .001

Note. P values are for binomial tests of whether the percentage of participants who said to default is significantly greater or less than 50%.

Is it morally wrong to default on the debt?

We used regression analyses to look more closely at the treatment effects (Table A2). The reference category is 1.2x potential damage to the debtor and full default. For all analyses, we found that the effect tests for the damage ratio x partial default interactions were not significant, so we removed them from the models. For whether defaulting was wrong, the results show no effects of additional damage to the debtor country except at the greatest level of damage (20x) where they were less likely to judge defaulting as wrong. We also found that participants were less likely to judge partial default as wrong compared to full default. We found the same pattern of results for wrongness and punishment ratings.

Table A2. Regressions for moral judgments of defaulting on the debt

	Wrong %	How Wrong	Punishment
Constant	1.11 (0.18) ***	6.07 (0.23) ***	5.54 (0.23) ***
2x ratio	-0.14 (0.24)	0.06 (0.31)	0.16 (0.30)
5x ratio	-0.37 (0.23)	-0.39 (0.30)	-0.30 (0.30)
20x ratio	-0.62 (0.23) **	-0.70 (0.30) *	-0.78 (0.30) **
Partial Default	-0.68 (0.17) ***	-1.32 (0.22) ***	-0.98 (0.21) ***

Note. Column 1 shows a logistic regression of the percentage wrong. Columns 2 and 3 show OLS regressions for wrongness and punishment ratings. The reference category is a 1.2x damage ratio and full default. Standard errors are in parentheses. $N = 648$.

* $p < .05$, ** $p < .01$, *** $p < .001$

Is it morally wrong to cut government programs?

We again used regression to analyze the treatment effects for each judgment (Table A3). The damage ratio x partial default interactions were not significant, so we removed them from the models. For whether defaulting was wrong, the results show that participants judgments were insensitive to the amount of the damage, except when it reached the extreme of 20x where participants judged cutting programs as more wrong. There was no difference between full and partial defaults for judgments about cutting programs. Participants' ratings of wrongness and punishment followed a similar pattern, except that wrongness was higher at the 5x damage level and punishment of cuts was reduced when the country was considering partial rather than full default.

Table A3. Regressions for moral judgments of cutting government programs

	Wrong %	How Wrong	Punishment
Constant	-0.90 (0.18) ***	3.38 (0.24) ***	3.47 (0.23) ***
2x ratio	0.45 (0.24)	0.43 (0.32)	0.39 (0.31)
5x ratio	0.38 (0.24)	0.67 (0.31) *	0.20 (0.31)
20x ratio	0.86 (0.23) ***	1.22 (0.31) ***	0.75 (0.31) *
Partial Default	-0.22 (0.17)	-0.34 (0.22)	-0.58 (0.22) **

Note. Column 1 shows a logistic regression of the percentage wrong. Columns 2 and 3 show OLS regressions for wrongness and punishment ratings. The reference category is a 1.2x damage ratio and full default. Standard errors are in parentheses. $N = 648$.

* $p < .05$, ** $p < .01$, *** $p < .001$

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