

Dertwinkel-Kalt, Markus; Feldhaus, Christoph; Ockenfels, Axel; Sutter, Matthias

**Working Paper**

## The Illusion of Moral Superiority: Evidence from the Energy Crisis

CESifo Working Paper, No. 11837

**Provided in Cooperation with:**

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

*Suggested Citation:* Dertwinkel-Kalt, Markus; Feldhaus, Christoph; Ockenfels, Axel; Sutter, Matthias (2025) : The Illusion of Moral Superiority: Evidence from the Energy Crisis, CESifo Working Paper, No. 11837, CESifo GmbH, Munich

This Version is available at:

<https://hdl.handle.net/10419/319205>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

## The Illusion of Moral Superiority: Evidence from the Energy Crisis

*Markus Dertwinkel-Kalt, Christoph Feldhaus, Axel Ockenfels, Matthias Sutter*

## **Impressum:**

CESifo Working Papers

ISSN 2364-1428 (electronic version)

Publisher and distributor: Munich Society for the Promotion of Economic Research - CESifo GmbH

The international platform of Ludwigs-Maximilians University's Center for Economic Studies and the ifo Institute

Poschingerstr. 5, 81679 Munich, Germany

Telephone +49 (0)89 2180-2740, Telefax +49 (0)89 2180-17845, email [office@cesifo.de](mailto:office@cesifo.de)

Editor: Clemens Fuest

<https://www.cesifo.org/en/wp>

An electronic version of the paper may be downloaded

- from the SSRN website: [www.SSRN.com](http://www.SSRN.com)
- from the RePEc website: [www.RePEc.org](http://www.RePEc.org)
- from the CESifo website: <https://www.cesifo.org/en/wp>

# The Illusion of Moral Superiority: Evidence from the Energy Crisis\*

Markus Dertwinkel-Kalt<sup>†</sup>

Christoph Feldhaus<sup>‡</sup>

Axel Ockenfels<sup>§</sup>

Matthias Sutter<sup>¶</sup>

April 19, 2025

## Abstract

We provide evidence in line with the illusion of moral superiority, a phenomenon that individuals perceive themselves to be more morally motivated than others. We analyze survey data collected during the 2022/23 energy crisis in Germany to investigate individuals' and others' motivations to reduce gas consumption, including both financial and non-financial (or 'moral') motives. Across two studies, we find evidence for the illusion of moral superiority: participants, on average, attribute stronger moral motives to their own savings compared to those of others.

*JEL-Classification:* H41, D01, D02.

*Keywords:* Moral Behavior, Moral Superiority, Energy Crisis.

---

\*We thank the editor, the associate editors, two anonymous referees as well as Sandro Ambuehl, Vincent Eulenberg, Leon Landes, Max R. P. Grossmann, and Anna Ressi for helpful comments. We thank Maximilian Schmetzke for excellent research assistance. Funding by the German Research Foundation (DFG) under Germany's Excellence Strategy (EXC 2126/1—390838866) and project 462020252 is gratefully acknowledged.

<sup>†</sup>University of Münster & Max Planck Institute for Research on Collective Goods. Email: markus.dertwinkel-kalt@wiwi.uni-muenster.de.

<sup>‡</sup>Ruhr-University Bochum. Email: Christoph.Feldhaus@ruhr-uni-bochum.de.

<sup>§</sup>University of Cologne & Max Planck Institute for Research on Collective Goods. Email: ockenfels@uni-koeln.de.

<sup>¶</sup>Max Planck Institute for Research on Collective Goods, University of Cologne, University of Innsbruck, & University of Venice. Email: sutter@coll.mpg.de.

# 1 Introduction

Self-serving bias refers to the phenomenon that individuals tend to interpret information or outcomes in ways that favor themselves, often distorting their perceptions of reality to maintain a positive self-image (Grossman and van der Weele, 2017). This has implications for a range of topics, including fairness judgments and bargaining processes (Babcock and Loewenstein, 1997), beliefs about the sources of inequality both between and within countries (Almås et al., 2024), redistribution preferences in the political realm (Deffains et al., 2016), and the way people process information about themselves (Zimmermann, 2020).

In the present paper, we are concerned with self-serving bias when it comes to judging sustainable behavior in the field. We investigate a specific form of self-serving bias that has been denoted in the psychology literature the *illusion of moral superiority* (Tappin and McKay, 2017; Dunning, 2016)—an individual’s tendency to overestimate her moral motivation relative to others. We investigate this in a highly relevant real-world context where an economic decision could be both financially and morally motivated. Our studies are set in the context of natural gas saving behavior during the German energy crisis of 2022/23, following Russia’s invasion of Ukraine. In this setting, savings could be driven both by financial incentives resulting from increased gas prices and by moral motivations related to the broader crisis. The data from the two studies used in this paper were collected as part of a broader research project. An earlier article from this project analyzed gas-saving *behavior* and examined the role of prices and cash transfers for gas consumption (Dertwinkel-Kalt et al., 2024). In contrast, this article studies gas-saving *motivations* and focuses on the existence of the illusion of moral superiority in this context.<sup>1</sup>

We provide evidence consistent with the illusion of moral superiority across two empirical studies, both of which examine how individuals attribute their own and others’ energy-saving motives to either financial or non-financial ‘moral’ reasons during the energy crisis. The first study was conducted with a panel provided by a survey company, while the second was conducted with customers of a public utility that we cooperated with. In the second study, we incentivized the elicitation of others’ motives in the spirit of Krupka and Weber (2013). Across both studies, we find that participants attribute stronger financial and weaker moral motives to others, while perceiving their own motives for savings as relatively less financially and more morally driven. We observe that this tendency is particularly pronounced among more educated and more altruistic participants. While we cannot determine at the individual level whether someone is truly morally superior or not, the illusion of moral superiority becomes evident at the aggregate level: on average, individuals perceive themselves as more morally motivated than the average person—an impossibility, since the average cannot exceed the average.

Understanding whether individuals are subject to an illusion of moral superiority has important practical implications for policy design and behavioral interventions. If people perceive themselves as more morally motivated than others, they may become less responsive to moral

---

<sup>1</sup>The two studies in this paper were preregistered with AsPredicted (116961 and 118329), but the analyses in this paper are not preregistered.

appeals—believing they are already doing enough. This may undermine the effectiveness of campaigns that rely on moral framing, such as those promoting energy conservation, prosocial behavior, or ethical consumption, in particular in cases where the underlying motivation is ambiguous. Similarly, the illusion of moral superiority may be related to moral licensing, whereby individuals justify future self-serving behavior in unambiguous contexts based on past supposedly moral actions in ambiguous ones. Recognizing such patterns can help policymakers and practitioners design messages and interventions that sustain long-term engagement rather than lead to disengagement (see the Conclusion for a further discussion).

## 2 Related literature

We add to several strands of literature. First, the concept of the illusion of moral superiority—the belief that one is morally superior to the average person—was established in the psychology literature, which we build on here (Tappin and McKay, 2017; Dunning, 2016). We apply this concept to an urgent and highly relevant issue: how households adapted their gas usage during the energy crisis following the Russian invasion of Ukraine.

Second, we contribute to the growing body of literature examining specific patterns of moral motives in economic decision-making, such as moral self-licensing (Engel and Szech, 2020), moral ignorance (Serra-Garcia and Szech, 2022), and self-serving bias in moral and sustainable behavior (Grossman and van der Weele, 2017; Carlson et al., 2020; Mazar et al., 2008). This literature indicates that people tend to interpret information in ways that inflate their self-image and selectively recall their moral actions over their immoral ones. The illusion of moral superiority might in fact in part be driven by self-serving bias (Miller and Ross, 1975; Grossman and van der Weele, 2017). This bias allows individuals to maintain a positive self-concept without necessarily engaging in additional moral actions by interpreting underlying motivations of ambiguous actions as moral.<sup>2</sup>

Closely related to the literature on moral superiority is the literature on overconfidence. Overconfidence has been extensively studied in economics and psychology and suggests that individuals tend to overestimate for example *their own* abilities or knowledge (Camerer and Lovo, 1999; Burks et al., 2013; Benoît et al., 2015). In our setup, where the underlying motivation for behavior is likely perceived as ambiguous, they appear to be overconfident not regarding knowledge, but regarding their *moral motivation* when they view themselves as more morally motivated relative to others, whose actions they attribute to more selfish motives. This contributes to the social psychology literature on the better-than-average effect in the moral domain, as documented in various laboratory experiments (Haslam et al., 2005; Brown, 2012; Han and Kim, 2022).

One problem within the overconfidence literature is the Benoît-Dubra-critique (Benoît and Dubra, 2011), which—due to our proximity to this literature—could also be a potential con-

---

<sup>2</sup>We thank an anonymous referee for pointing out that the type of self-serving bias we observe is related to the selfish behavior observed in public good games where subjects often aim to contribute a bit less than what the average contribution of others to the public good is (see Fig. 1 in Fischbacher et al., 2001; for a broader overview of the literature, see Drouvelis, 2021).

cern in our context. Benoît and Dubra (2011) challenge the interpretation of classic better-than-average findings at the hand of the seminal study by Svenson (1981), where the vast majority of participants rated their driving skills as better than average. This result is widely cited as evidence of systematic overconfidence. However, Benoît and Dubra argue that such findings do not necessarily reflect biased beliefs. Instead, they demonstrate that these patterns can emerge when individuals engage in rational Bayesian updating based on private information.

More specifically, if individuals start with a common prior belief of having a 50% chance of being better than average and then obtain private signals—such as never having caused an accident—they will rationally update their belief upwards. When asked to provide only a binary response (*better* or *worse* than average), anyone who believes there is a probability greater than 50% of being better than average will naturally choose the “better than average” option. Consequently, a majority of “better than average” responses may simply reflect rational inferences from private information rather than biased overconfidence. This critique challenges the conclusion that such aggregate results indicate systematic overconfidence and calls for better identification strategies to distinguish true bias from rational belief updating.

The Benoît-Dubra critique could in principle apply to our setting under the assumption that individuals are uncertain about their moral type when explicitly asked whether they are more moral than the average participant. However, we followed the spirit of the primary suggestion by Benoît et al. (2015) to circumvent this problem, namely that “subjects place themselves into a narrower interval than the top 50%.” In fact, we went further by allowing participants to assign themselves precise values between 0 and 100, avoiding explicitly relative comparisons and instead inferring them from the values they assigned to themselves and others. Moreover, since our study focuses on underlying motives rather than ability, it is less plausible that participants rely on signals to learn about their own type compared to a typical overconfidence study that relates to behavior and ability. While it is reasonable to assume that individuals learn about their ability over time—for instance, through performing a task (as in the driving example)—we find this argument less applicable to the case of motives.

### 3 Two Empirical Studies

We conducted two studies to investigate energy consumption during the energy crisis in Germany in 2022/2023 in the aftermath of Russia’s attack on Ukraine and the following gas price increases. As part of these studies, we asked the participants for their underlying motives to save natural gas during the crisis. In both studies, participants were asked to allocate 100% of their motivation between financial motives (such as cost savings) and several non-financial motives that we jointly refer to as moral motives. The exact question was: “There are various reasons for which one would like to save gas in the current period. Please indicate to what percentage your gas saving is driven by the following motives. Please allocate exactly 100% to the following motives (if one motive is the only important one for you, please allocate the whole 100% to this motive). Please enter a number between 0 and 100 for each motive: (i) I save gas for cost reasons. (ii) I save gas so as not to endanger the security of gas supply in Germany and avoid a gas shortage for households and the economy. (iii) I save gas because I want to

send a signal against Putin. (iv) I save gas for climate protection reasons. (v) Other.”<sup>3</sup> To elicit beliefs about others’ savings motives, all subjects also had to answer a variant of this question where the second sentence was replaced by “What do you think are the savings motives of other households?”<sup>4</sup>

Beside these motives, further variables used in this paper and elicited in both studies are income, education, and gender. To also measure altruism, we included a (hypothetical) dictator game: “Imagine the following situation: You have unexpectedly received 1,000 euros today. How much of this amount would you donate to a good cause?” We use the amount donated as a proxy for altruism.

For our analyses of both studies, we only include participants who completed the survey and passed an attention check. The two studies differed in their subject pools as well as in their incentivization. While motive elicitation was purely hypothetical in the first study, the elicitation of others’ motives was incentivized in the second study for eligible participants (eligibility required subjects to submit gas meter pictures at the beginning and the end of the study). Therefore, for the second study, we further restrict our sample to eligible participants.

### 3.1 Study 1 (Hypothetical)

In our first study, German gas customers with own gas contracts were surveyed, using the panel of the survey company *Bilendi & respondi*, which is commonly used in economic studies and has 300,000 panelists in Germany. All adults could participate in the study, provided they passed the following screening questions: (i) Do you have a direct contract with a gas supplier for your residence? (ii) If so, is the gas contract in your name? (iii) Have you relocated in the past two years? (iv) Has your household size changed in the past two years? Respondents who answered “Yes” to questions (i) and (ii) and “No” to questions (iii) and (iv) were allowed to participate. A total of 1,329 respondents completed the survey, of which 1,238 passed the attention check. Participation incentives were as follows: participants earned the standard reward the survey company offers its participants, which depends on the length of the survey; in our case, about 0.75 EUR for the first-round survey. The elicitation of savings motives was not incentivized.

### 3.2 Study 2 (Incentivized)

This study was conducted in cooperation with “Wuppertaler Stadtwerke” (WSW), the default public utility in Wuppertal, Germany, as part of its gas savings program. The public utility opened the gas savings program for up to 2,500 customers who were also invited to participate in our accompanying scientific study. Additional customers—that exceed the 2,500 participants—were invited to participate in our accompanying study without having the chance to obtain a savings premium. Of the 2,589 registered WSW households, we received 1,166 survey responses. Our sample contains only those subjects for which the public utility could calculate gas savings because they delivered two gas meter pictures and were already customers in the

---

<sup>3</sup>Participants were given the opportunity to verbally specify the additional “other” motive and allocate a percentage to it. However, this option was of minimal relevance (see Table A.4 in the Appendix).

<sup>4</sup>The full set of instructions for both studies can be found here: [https://www.dertwinkel.com/wp-content/uploads/2023/11/Instructions\\_overall.pdf](https://www.dertwinkel.com/wp-content/uploads/2023/11/Instructions_overall.pdf).



previous year. This leaves us with  $n = 712$  subjects who qualify for our final sample and take part in the incentivization. We restrict our analysis also in Study 2 to those that passed the attention check ( $n = 649$ ).

We used two separate incentives for participation and belief elicitation. The participation incentives were as follows: Upon study completion, a random draw was conducted, selecting ten participants to be awarded 1,000 EUR each. To elicit beliefs about others' savings motives, we employed an incentivized elicitation mechanism in the spirit of Krupka and Weber (2013). Participants could earn lottery tickets by accurately guessing the saving motives of others. When a participant's guess deviated by no more than 5 percentage points from the average percentage assigned to a particular motive, they earned a lottery ticket. For instance, if a person estimated 24% for the climate motive and the average is 20%, this person earned a ticket. If another person estimated 26% for the climate motive, this person did not earn a ticket. Participants could thus earn a maximum of five lottery tickets. One of these tickets was selected to win a prize of 2,000 EUR. Belief incentives were paid out independently of participation incentives.

### **3.3 Summary statistics**

For summary statistics for both studies see Table 1. Even though the samples of the two studies differ, the control variables collected in the two studies are very similar in terms of means and standard deviations. In Study 2, the order of all motives was randomized, while in Study 1, the order was fixed, with financial costs always presented first for both the elicitation of one's own and of others' motives. This fixed order may explain the overall higher levels of financial motives reported in Study 1.

Table 1: *Summary statistics for Study 1 (upper panel) and Study 2 (lower panel).*

	Mean	Median	SD	Min	Max	N
Income	2.33	2	0.85	1	4	1238
Education	3.97	4	0.98	1	5	1238
Gender	0.62	1	0.49	0	1	1238
Financial (Own)	58.63	60	31.70	0	100	1238
Donation	135.50	100	192.55	0	1000	1238

	Mean	Median	SD	Min	Max	N
Income	2.29	2	0.85	1	4	649
Education	3.81	4	1.06	1	5	649
Gender	0.59	1	0.49	0	1	649
Financial (Own)	45.57	45	25.61	0	100	649
Donation	197.84	100	214.18	0	1000	649

“Income” categorizes participants’ average monthly household net income in EUR (1 if <2000, 2 if in (2000, 4000), 3 if in (4000, 6000), 4 if >6000). “Education” gives the highest educational attainment: 1 if None, 2 if Secondary School Certificate, 3 if German Realschulabschluss, 4 if High School Diploma, 5 if University Degree. “Gender” is 1 if male, and 0 if female or other. “Financial (Own)” gives the percentage of financial motivation (between 0% and 100%) a subject attributes to herself. “Donation” indicates the donation in a (hypothetical) dictator game: “Imagine the following situation: You have unexpectedly received 1,000 euros today. How much of this amount would you donate to a good cause?”

## 4 Results

In both studies, we find evidence for the illusion of moral superiority: On average, participants attribute a significantly higher percentage of financial motivation to others than to themselves. Participants in Study 1 attribute 58.6% of their own savings motivation to financial motives while they estimate that financial motives account for 64.9% of others’ savings motivation. In Study 2, participants indicate that 45.6% of their own motivation is financially driven and assume that this value is 53.2% for others (see Table 2 for an overview and see Figure A.1 in the Appendix for the entire CDFs).

We thus find that participants on average think their own financial motivation is 10% lower in the first and 14% lower in the second study than the average financial motivation of others. Thus, both studies provide strong and significant evidence for the illusion of moral superiority (the difference between own and others’ financial motives is highly significant in both studies,  $p < 0.001$ , Wilcoxon-ranksum tests).<sup>5</sup>

To learn more about the determinants of moral superiority—be it true moral superiority or merely an illusion thereof (recall that we cannot identify this at the individual level)—we

<sup>5</sup>See Tables A.1–A.4 in the Appendix for analogous versions of Table 2, presenting the results for each moral motive separately. When examining what drives the aggregate effect of attributing a higher moral motivation to oneself compared to others, we observe that this difference is particularly driven by the supply security and climate protection motives.

Table 2: *Comparison of financial motives own vs. others*

	Study 1	Study 2
<b>Financial (Own)</b>	58.6 (31.7)	45.6 (25.6)
<b>Financial (Others)</b>	64.9 (26.8)	53.2 (20.8)
<b># Obs.</b>	1,238	649

Percentages assigned to the statement “I save gas for cost reasons,” both for oneself (*Own*) and for other participants (*Others*), shown separately for both studies. Standard errors in brackets.

further test for individual correlates of the difference between others’ and own financial motivation (see Table 3). We observe that education and altruism (as measured by the hypothetical donation) are positively related to the extent of the difference between others’ and own financial motivation across the two studies. These results suggest that those who are more educated and those who are more altruistic expect larger differences between their own and others’ moral motivation. In addition, income is positively related to this difference in Study 2 (Model (2)).

To investigate the drivers of these relations, we further consider the estimations of own and others’ motivation separately. We observe that those who are more altruistic expect that others are less financially motivated. We further observe some evidence that those with higher income (in Model (3)) and men (in Model (4)) expect others to be less financially motivated. When it comes to determinants of own financial motivation, we observe that those with higher income, those who are more educated, and those who are more altruistic state that they are less financially motivated. Interestingly, the first two models suggest that the relation of altruism and financial motivation is more pronounced for the own motives than for others’ motives. We finally observe some evidence that men perceive themselves as less financially motivated (in Model (6)).

These observations suggest that the difference between one’s estimation of others’ and one’s own motives is largely driven by two factors: highly educated individuals tend to assign more moral motivation to themselves, and those with greater altruism perceive both others and themselves as less financially motivated but expect this relation to be stronger for themselves.

## 5 Conclusion

Our findings highlight the presence of the illusion of moral superiority in energy-saving behavior during the 2022/23 energy crisis in Germany. Individuals tend to view their own savings as more morally driven compared to others, attributing stronger financial motives to others.

We hereby speak to the literatures on moral balancing (Bénabou and Tirole, 2006) and moral consistency (Merritt et al., 2010) by highlighting behaviors where the underlying motivation—

Table 3: *Comparison of financial motives own vs. others (within subject)*

	Diff. (Others – Own) (1)	Financial (Others) (2)	Financial (Others) (3)	Financial (Others) (4)	Financial (Own) (5)	Financial (Own) (6)
Income	-0.02 (0.979)	4.19*** (0.000)	-2.19* (0.018)	-0.09 (0.927)	-2.16* (0.043)	-4.28** (0.001)
Education	2.14** (0.005)	4.30*** (0.000)	-1.11 (0.174)	1.41 (0.082)	-3.25** (0.001)	-2.89** (0.003)
Gender	-0.46 (0.745)	-0.69 (0.670)	-2.61 (0.078)	-4.73** (0.004)	-2.15 (0.218)	-4.04* (0.042)
Donation	0.01** (0.003)	0.01* (0.044)	-0.04*** (0.000)	-0.01** (0.001)	-0.05*** (0.000)	-0.02*** (0.000)
Constant	-3.52 (0.282)	-19.52*** (0.000)	80.85*** (0.000)	53.34*** (0.000)	84.37*** (0.000)	72.86*** (0.000)
Observations	1238	649	1238	649	1238	649
R-squared	0.02	0.10	0.09	0.03	0.11	0.09

“Financial (Others)” gives the percentage of financial motivation a subject attributes to others. “Financial (Own)” gives the percentage of financial motivation a subject attributes to herself. “Diff (Others - Own)” gives the difference between the two, that is, the percentage of financial motivation a subject attributes to others vs. the percentage of financial motivation she assigns to herself. Columns (1), (3), and (5) refer to Study 1 and Columns (2), (4), and (6) refer to Study 2. Significance levels are indicated as \* 0.05, \*\* 0.01, \*\*\* 0.001. Robust p-values in parentheses.

whether financial or moral—is ambiguous, such as careful driving, cycling instead of driving, or saving gas or electricity. If individuals overestimate how often they act out of moral rather than financial motivation, this could leave more room for future moral licensing effects (see, e.g., Blanken et al., 2015; Engel and Szech, 2020), whereby people justify selfish or unethical decisions after behaving seemingly “ethically” in other contexts, so that genuine moral behavior might be reduced over time. Furthermore, our results are related to research on the effects of social norms (Bicchieri, 2005) that suggests that behavior is strongly shaped by expectations about others. If people believe that climate-friendly behavior is common among others, they are more likely to act morally themselves to align with the perceived norm. However, if morally motivated individuals assume that others engage in climate-friendly behavior primarily for financial reasons, this perception may undermine their own norm-based motivation to act sustainably, as the underlying motives of others do not align with their own.

## References

- Almås, I., Cappelen, A. W., Sørensen, E. Ø., and Tungodden, B. (2024). Attitudes to inequality: preferences and beliefs. *Oxford Open Economics*, 3(Supplement\_1):i64–i79.
- Babcock, L. and Loewenstein, G. (1997). Explaining bargaining impasse: The role of self-serving biases. *Journal of Economic Perspectives*, 11(1):109–126.

- Bénabou, R. and Tirole, J. (2006). Incentives and prosocial behavior. *American Economic Review*, 96(5):1652–1678.
- Benoît, J.-P. and Dubra, J. (2011). Apparent overconfidence. *Econometrica*, 79(5):1591–1625.
- Benoît, J.-P., Dubra, J., and Moore, D. A. (2015). Does the better-than-average effect show that people are overconfident?: Two experiments. *Journal of the European Economic Association*, 13(2):293–329.
- Bicchieri, C. (2005). *The grammar of society: The nature and dynamics of social norms*. Cambridge University Press.
- Blanken, I., Van De Ven, N., and Zeelenberg, M. (2015). A meta-analytic review of moral licensing. *Personality and Social Psychology Bulletin*, 41(4):540–558.
- Brown, J. D. (2012). Understanding the better than average effect: Motives (still) matter. *Personality and Social Psychology Bulletin*, 38(2):209–219.
- Burks, S. V., Carpenter, J. P., Goette, L., and Rustichini, A. (2013). Overconfidence and social signalling. *Review of Economic Studies*, 80(3):949–983.
- Camerer, C. and Lovallo, D. (1999). Overconfidence and excess entry: An experimental approach. *American Economic Review*, 89(1):306–318.
- Carlson, R. W., Maréchal, M. A., Oud, B., Fehr, E., and Crockett, M. J. (2020). Motivated misremembering of selfish decisions. *Nature Communications*, 11(1):2100.
- Deffains, B., Espinosa, R., and Thöni, C. (2016). Political self-serving bias and redistribution. *Journal of Public Economics*, 134:67–74.
- Dertwinkel-Kalt, M., Feldhaus, C., Ockenfels, A., and Sutter, M. (2024). Household reduction of gas consumption in the energy crisis is not explained by individual economic incentives. *Proceedings of the National Academy of Sciences*, 121(48):e2411740121.
- Drouvelis, M. (2021). *Social Preferences: An Introduction to Behavioural Economics and Experimental Research*. Agenda Publishing, Newcastle upon Tyne.
- Dunning, D. (2016). False moral superiority. In Miller, A. G., editor, *The Social Psychology of Good and Evil*, pages 249–269. Guilford Press, New York.
- Engel, J. and Szech, N. (2020). A little good is good enough: Ethical consumption, cheap excuses, and moral self-licensing. *PloS one*, 15(1):e0227036.
- Fischbacher, U., Gächter, S., and Fehr, E. (2001). Are people conditionally cooperative? evidence from a public goods experiment. *Economics letters*, 71(3):397–404.
- Grossman, Z. and van der Weele, J. J. (2017). Self-image and willful ignorance in social decisions. *Journal of the European Economic Association*, 15(1):173–217.

- Han, K. and Kim, M. Y. (2022). Mechanism of the better-than-average effect in moral issues: Asymmetrical causal attribution across moral (vs. immoral) contexts. *Acta Psychologica*, 226:103575.
- Haslam, N., Bain, P., Douge, L., Lee, M., and Bastian, B. (2005). More human than you: attributing humanness to self and others. *Journal of Personality and Social Psychology*, 89(6):937.
- Krupka, E. L. and Weber, R. A. (2013). Identifying social norms using coordination games: Why does dictator game sharing vary? *Journal of the European Economic Association*, 11(3):495–524.
- Mazar, N., Amir, O., and Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6):633–644.
- Merritt, A. C., Effron, D. A., and Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and personality psychology compass*, 4(5):344–357.
- Miller, D. T. and Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological bulletin*, 82(2):213.
- Serra-Garcia, M. and Szech, N. (2022). The (in) elasticity of moral ignorance. *Management Science*, 68(7):4815–4834.
- Svenson, O. (1981). Are we all less risky and more skillful than our fellow drivers? *Acta psychologica*, 47(2):143–148.
- Tappin, B. M. and McKay, R. T. (2017). The illusion of moral superiority. *Social psychological and personality science*, 8(6):623–631.
- Zimmermann, F. (2020). The dynamics of motivated beliefs. *American Economic Review*, 110(2):337–363.

## Appendix

We here provide the additional tables and figures that we refer to in the main text.

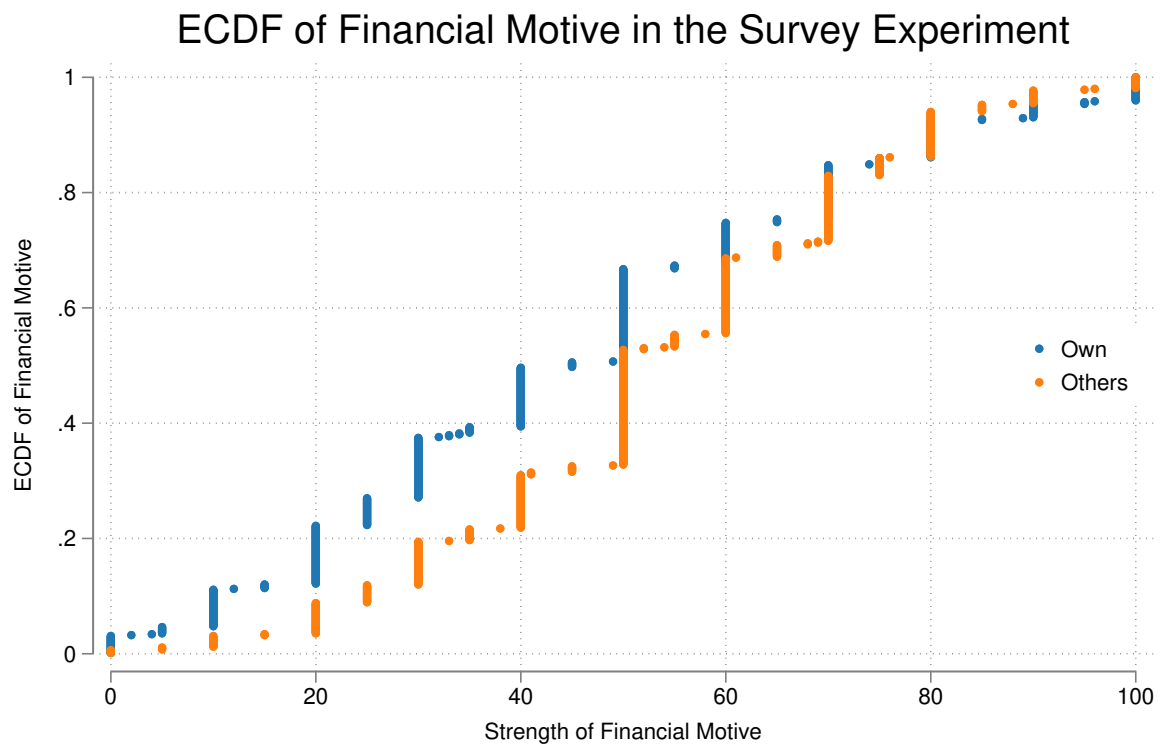
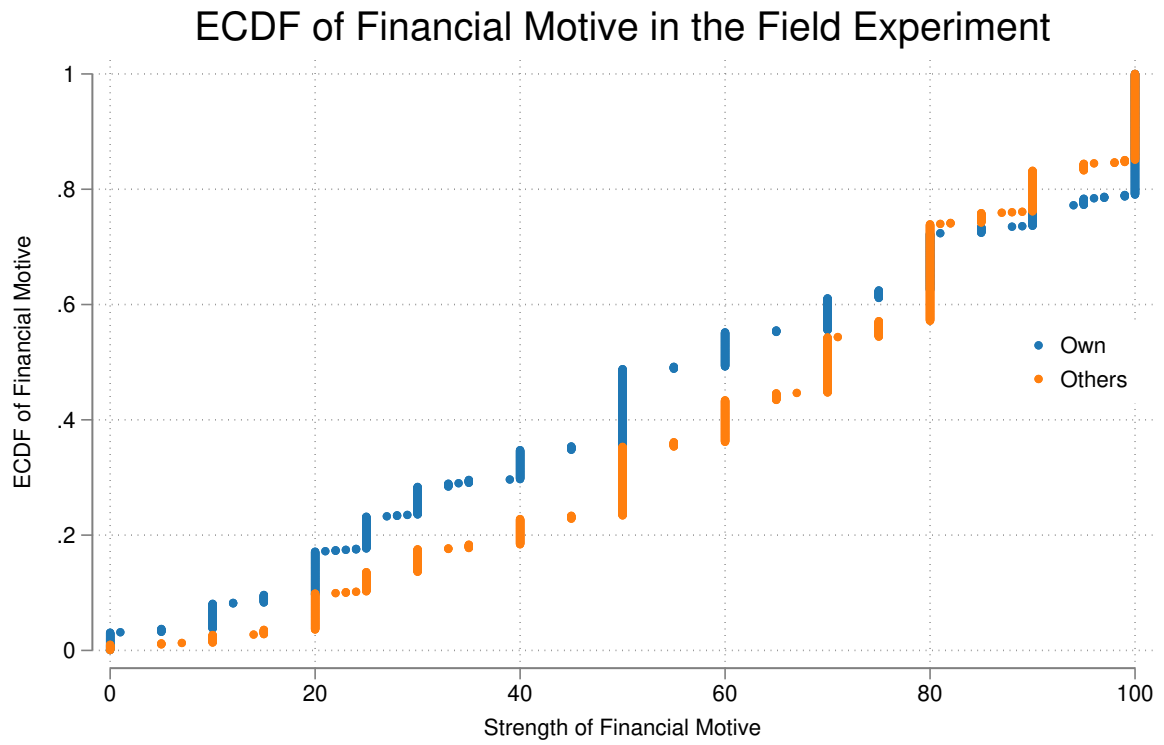


Figure A.1: *Empirical CDFs for the Financial Motive*

Table A.1: *Comparison of security motive own vs. others*

	<b>Study 1</b>	<b>Study 2</b>
<b>Security (Own)</b>	14.4 (15.2)	20.7 (14.7)
<b>Security (Others)</b>	11.8 (11.6)	16.0 (11.4)
<b># Obs.</b>	1,238	649

Percentages assigned to the statement “I save gas so as not to endanger the security of gas supply in Germany and to avoid a gas shortage for households and the economy,” both for oneself (*Own*) and for other participants (*Others*), shown separately for both studies. Standard errors in brackets.

Table A.2: *Comparison of sign-against-Putin motive own vs. others*

	<b>Study 1</b>	<b>Study 2</b>
<b>Putin (Own)</b>	8.5 (12.3)	9.8 (12.0)
<b>Putin (Others)</b>	8.3 (10.4)	9.9 (8.7)
<b># Obs.</b>	1,238	649

Percentages assigned to the statement “I save gas because I want to send a signal against Putin,” both for oneself (*Own*) and for other participants (*Others*), shown separately for both studies. Standard errors in brackets.

Table A.3: *Comparison of climate-protection motive own vs. others*

	<b>Study 1</b>	<b>Study 2</b>
<b>Climate (Own)</b>	14.8 (17.3)	21.8 (16.4)
<b>Climate (Others)</b>	11.7 (12.0)	18.0 (11.3)
<b># Obs.</b>	1,238	649

Percentages assigned to the statement “I save gas for climate protection reasons,” both for oneself (*Own*) and for other participants (*Others*), shown separately for both studies. Standard errors in brackets.



Table A.4: *Comparison of other motives  
own vs. others*

	Study 1	Study 2
<b>Other (Own)</b>	3.7 (12.2)	2.1 (6.6)
<b>Other (Others)</b>	3.3 (8.4)	2.9 (5.0)
<b># Obs.</b>	1,238	649

Percentages assigned to the motive "Other," both for oneself (*Own*) and for other participants (*Others*), shown separately for both studies. Standard errors in brackets.