IS THE PRICE RIGHT? THE ROLE OF ECONOMIC TRADEOFFS IN EXPLAINING REACTIONS TO PRICE SURGES

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ABSTRACT

Public authorities often introduce price controls to address opposition to price surges, but this may cause inefficiencies and shortages. In a survey experiment with 7,612 Canadian and US respondents, we found that people generally disapprove of, and have strong moral reactions to unregulated price increases. However, acceptance is higher when potential economic tradeoffs between controlled and unregulated prices are salient, and if the incentives resulting from price surges enhance access to goods. Highlighting tradeoffs also reduces the polarization of moral reactions between supporters and opponents of unregulated pricing. Text analysis and a donation experiment further support our findings.

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"If the one man derives a great advantage by becoming possessed of the other man's property, and the seller be not at a loss through being without that thing, the latter ought not to raise the price, because the advantage accruing to the buyer, is not due to the seller, but to a circumstance affecting the buyer." (Thomas Aquinas, Summa Theologica, *1485).*

"Besides, as there can be no other measure set to a merchant's gain but the market price where he comes, so if there were any other measure, as 5 or 10 per cent as the utmost justifiable profit, there would be no commerce in the world, and mankind would be deprived of the supply of (...) mutual conveniences of life." (John Locke, Venditio, *1695).*

"(...) if you look closely at the price-gouging debate, you'll notice that the arguments for and against price-gouging laws revolve around three ideas: maximizing welfare, respecting freedom, and promoting virtue. Each of these ideas points to a different way of thinking about justice." (Michael Sandel, Justice, *2009).*

1. Introduction

Characterizing prices as signals of relative scarcity and the price mechanism as the primary instrument to achieve allocative and production efficiency is a tenet of modern economics. According to Adam Smith (1776), impediments to price adjustments exacerbate rather than solve problems such as famines. George Stigler (1987) famously stated that attributing scarcity to price movements is like blaming a thermometer for high temperature. Yet, studies in sociology and psychology contend that people view prices also as the outcomes of social relationships that, by reflecting moral norms and cultural values, reveal the meaning that people on both sides of the market assign to certain transactions (Beckert 2020, Beckert and Aspers 2011, Ody-Brasier and Fernandez-Mateo 2017, Ranganathan 2018, Sorenson and Waguespack 2006, and Zelizer 1989). Recent and historical events show that popular views of prices, particularly price surges, go beyond the ones that standard economics models assume. Examples include the social disapproval and moral outrage following the application of "surge pricing" by car-riding companies in response to adverse events such as hurricanes, snowstorms, or terrorist attacks.[1] During the COVID pandemic, the sudden increase in the price of several products (e.g., surgical masks and hand sanitizer) led to a diffused belief that companies were behaving unfairly and that this required public

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[1] On December 15, 2014, for example, a gunman entered a coffee shop in Sydney, Australia, and held hostage its customers for hours. During the siege, city officers ordered a lockdown of the surrounding area. As news of the attack broke, prices for Uber rides increased fourfold. Many people condemned this behavior, and after failed attempts to justify their choices, Uber apologized and offered refunds and free rides to those affected by the attack. See Apostolidis (2014), Piotrowski (2014), Stone (2014), and Suranovic (2015).

intervention.[2,3] **Historically**, price increases of staple goods following wars, droughts, or famines often caused protests.[4] Kahneman et al. (1986) document that price increases following shifts in demand often collide with social standards of fairness. More recently, Holz et al. (2021) show that people are willing to incur a cost to report "price gougers" to the authorities because they disapprove of companies who profit from crises – they consider it "repugnant" (Roth 2007).[5] These findings help to explain the popular demand for (and enforcement of) regulations that restrict firms' ability to raise prices in some circumstances.[6]

Previous studies usually considered one-shot contexts where the supply of a good is fixed and the price determines who gets it and the distribution of the surplus between buyers and sellers. However, the debate about the social acceptability and regulation of price surges raises the possibility of unintended consequences of government interventions. For example, higher prices may encourage additional supply, the introduction of new products, or the reallocation of supply from low to high-demand markets. Price controls may prevent these adjustments, creating or exacerbating shortages.[7] These tensions are well-known, as the quotes that opened this paper witness. Yet, existing research does not make them explicit or address how these considerations might affect people's attitudes about price surges and their regulation.

To address this question, we study the effect of highlighting the possible economic consequences of free price movements versus controls and the associated tradeoffs on preferences

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[2] See, for example, "Price gouging complaints surge amid coronavirus pandemic" (*NYT* 2020: shorturl.at/guvVYl) and "'Stop price gouging,' 33 attorneys general tell Amazon, Walmart, others" (*NPR* 2020: shorturl.at/befS2).

[3] In late 2021, several countries including Canada and the US began to experience high overall inflation rates. In our study, we focus on reactions to price surges of specific products, not to generalized increases in overall price levels (see for example Shiller 1997).

[4] "[…] that miserable harvest [had a] painful, salutary, inevitable consequence, a rise in prices. But when prices rise more than a certain amount, [… R]eal or imaginary hoarders of grain -- everyone, in fact who possessed or was thought to possess grain was blamed for the shortage and for the high prices, and made the target of universal complaint and of the hatred of rich and poor alike." In Chapter 12 of *The Bethroted,* Italian writer Alessandro Manzoni provides this description of the "bread riots" that occurred in Milan in the 1620s.

[5] Anderson and Simester (2010) provide evidence of customer antagonism to price changes. Rotenberg (2011) and Li and Jain (2016) elaborate models to explain these responses. Dworkzac et al. (2021) and Weitzman (1977) derive conditions under which price controls and rationing may be socially desirable, especially when inequality is high and the regulator places a high value on equity.

[6] The majority of US states have laws against "price gouging". Typically, there are specific rules for essential goods or services, and states specify the maximum percent increase allowed after emergencies have been declared (see https://www.findlaw.com/consumer/consumer-transactions/price-gouging-laws-by-state.html).

[7] Cabral and Xu (2021) present evidence suggesting that sellers concerned about their reputation choose *not* to raise prices following demand increases, and that these decisions can result in supply shortages. Thus, inefficiencies can occur even in the absence of regulation. Eyster et al. (2021) show that customers' dislike of "unfair prices" (i.e., those marked up steeply over cost) can cause price rigidities in the economy, with implications for monetary policy.

for one or the other regime. We investigate the nature of the moral reactions to unrestricted price changes by gauging perceptions of fairness to buyers and sellers separately, to understand the tension between the right of consumers not to be exploited and the right of companies to freely determine what price to charge. Further, we study how tradeoff considerations affect the polarization of opinions and whether attitudes towards the role of markets in society affect reactions to price increases.

We rely on a vignette-based survey experiment, a real-stakes choice task, and open-ended questions in a study that we conducted with 3,782 U.S. and 3,830 Canadian residents in May 2021 and December 2021. In the vignette experiment, we randomly assigned each respondent two versions of a market scenario where demand for a product suddenly increases. In the first version, a company raises the product's price; in the second, a public authority prevents these increases by imposing a price cap. We varied (and cross-randomized) several features of the scenarios. Our primary manipulation, and innovation over existing work, consisted in altering the salience of possible economic effects associated with unregulated pricing and price controls. In particular, we highlighted that higher prices might incentivize additional supply by new entrants (thus leading to lower prices in the future) or cause a reallocation of products across markets (thus attenuating the shortage), whereas price controls would preclude these adjustments. By exposing respondents to these tradeoffs, we can assess whether economic reasoning alters people's perceptions of and attitudes toward price surges (Sunstein 2018). Some individuals may not be immediately aware of the possible incentive effects of higher prices. Alternatively, they might acknowledge these consequences but still give more weight to other considerations, such as fairness or equity. In addition, we varied the salience of production costs contributing to the higher prices, manipulated whether the scenario occurred during a pandemic, and considered four different products: a pharmaceutical drug, treadmills for home use, hand sanitizer, and hand moisturizer. Price surges may be more acceptable when they result from higher production costs (Rotenberg, 2011), because this reduces the prevailing perception that companies are taking advantage of consumers (Eyster et al. 2021). Raising prices may lead to stronger disapproval during exceptional circumstances such as a pandemic. Additionally, price increases for necessary items, for example those related to health, may cause greater opposition than for discretionary or low-cost items.

We find that the majority of participants oppose unimpeded price increases for the four products, especially the health-related ones. However, the acceptance rate of price surges more

than doubles, from 20.7% to 43.5%, when participants face scenarios that present economic tradeoffs. This indicates that people are more willing to tolerate price surges when the resulting incentives lead the market to alleviate an existing shortage, or to eventually deliver more supply at a lower price. The acceptance of unregulated price surges was 4.7 percentage points higher in scenarios where cost increases contributed to higher prices. The presence of a pandemic did not have any impact on preferences for pricing regimes, and there were no meaningful differences in responses from US and Canadian residents.

Furthermore, preferences for unregulated prices vs. price controls strongly correlate with respondents' moral reactions. On average, participants find unregulated pricing scenarios more unfair to the customer but fairer to the company than price control scenarios. When respondents express general morality judgments, they mostly take the customers' perspective. Moreover, moral reactions to a given scenario are very different when tradeoffs are salient than when they are not. The moral acceptability of unregulated pricing increases and that of price controls decreases in scenarios with economic tradeoffs. Furthermore, moral judgments are highly polarized in scenarios without tradeoffs; highlighting tradeoffs softens the differences in moral views and reduces the distance between supporters and opponents of unregulated price surges in how morally acceptable they consider those increases.

We also examined the role of pro-market ideology, finding that respondents who hold a positive view of markets in society are more likely to be supportive of unregulated pricing. In contrast, those with a more favorable view of government regulation are more likely to favor price controls. However, we find that the ideological differences about the role of markets and governments in society between supporters of price controls and those who favor unregulated prices are less stark in conditions where tradeoffs are salient (i.e., the two groups of respondents become more similar to each other).

Our survey also included an open-ended question that asked respondents to report the motivations for their answers. We performed text analysis to better explain the underlying reasons of participants' responses to our manipulation. The comments of those who support price controls systematically focus on moral arguments. In particular, participants argue that companies who raise prices take advantage of customers and that any additional profit is exploitative and, as such, unfair. The motivations do not include any considerations for potential economic inefficiencies that high prices may entail. Respondents who prefer unregulated price surges, instead, consistently

bring motivations associated with the ability of markets to self-regulate and with the principle of free enterprise. Highlighting tradeoffs between policy regimes reduces the differences in the nature and focus of the arguments expressed in the comments, consistent with the previously described findings that tradeoffs reduced the polarization of moral judgments. The text analysis also indicates that respondents in scenarios mentioning the economic consequences of unregulated and capped prices explicitly discuss the tradeoffs between higher prices and greater product availability (across markets or over time). They emphasize these tensions in general terms and did not focus on the specific quantitative details that the scenarios displayed. Finally, the respondents' vocabulary is much broader than just repeating words and concepts from the scenarios and questions; this allays concerns about demand effects driving the content of the answers.

In December 2021, we conducted a follow-up survey with the same pool of respondents (with a return rate of 38%). We found that the effect of tradeoff salience, which we measured between-subjects in the first wave, also holds in a within-subjects design (we assigned respondents who received scenarios without tradeoffs in May the same scenario, but with salient tradeoffs in December), and with a considerable time lapse between the two waves. Moreover, in the second wave we also included a real-stakes choice experiment where, similar to Bursztyn et al. (2020) and Elias et al. (2019), respondents had the opportunity to gain one extra dollar if they allowed the researchers to donate $1 to an organization that advocates for free markets and against price controls. We find congruence between the preferences for hypothetical scenarios and a real-stakes decision on a similar topic and policy issue; those who stated a preference for price controls were 25% more likely to forgo the opportunity to earn a monetary bonus to avoid supporting the anti-price control foundation.

Overall, we show that moral concerns and beliefs about the role of markets in a society strongly correlate with how people reason about sudden price surges following demand increases. However, highlighting possible tradeoffs between policy regimes does shape peoples' reactions. Our findings indicate that when considering price surges, people's response emphasizes concerns about the exploitation of customers by firms. Tolerance for unrestricted price surges, however, increases when the higher prices lead companies to increase supply, thereby improving access to the good. Highlighting tradeoffs also reduces the polarization of moral and ideological views between supporters of different types of market regulation. These results suggest that people do not immediately include efficiency considerations when reacting to and expressing a judgment

about price surges. When morality is the primary driver of attitudes, views are highly polarized. When economic tradeoffs are explicit, people's views tend to converge, and individuals become more likely to tolerate undesirable aspects of the market mechanisms (i.e., price surges), in return for increased product availability that alleviates an existing shortage, or for more supply at lower prices in the future.

The paper proceeds as follows. Section 2 describes our research design and the data, and Section 3 reports and discusses our main findings. In Section 4, we describe how text analysis of the open-ended comments provides insights into the interpretation of our findings. Section 5 reports results from various robustness analyses, Section 6 discusses the evidence from the donation experiment, and Section 7 concludes.

2. Survey experiment and data

2.1 Recruitment

We relied on the market research company Respondi to recruit participants and requested 4,000 U.S. and 4,000 Canadian residents.[8] Canada and the United States have historical, social, and economic similarities, and their citizens share similar social values. However, there are some differences in the role of the market and the state in each country's economy. In particular, in Canada, the public sector is more present in the provision of social services and in regulating certain industries than in the United States, where there is more room for private enterprise to drive the economy. The company stratified the pool of respondents for each country based on gender, education, ethnicity, and income distribution of the adult population. Respondents in Canada could fill out the survey in either English or French.

2.2 Design

2.2.1 Survey flow

After obtaining participants' consent to complete the survey, we collected information on their socio-demographic characteristics. To increase the perceived consequentiality of the study, we informed them that we planned to send a letter to U.S. members of Congress (or Canadian members

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[8] Several survey-based academic studies relied on this company. See, for example, Alesina et al. (2018), Roth and Wang (2020), and Stantcheva (2021).

of Parliament) summarizing the survey results (Elias et al. 2019). Next, we showed respondents their randomly assigned vignettes, which we describe in detail below. We then asked their views about the role of markets and government intervention in society, in general and for specific industries. A final set of questions gauged the participants' broad moral stances (utilitarian versus deontological), time preferences, altruism, and trust in others.

2.2.2 The vignettes

We presented each respondent with a hypothetical scenario in which a company experienced a sudden increase in the demand for a product. Participants saw two versions of each scenario. In the first version, the company raised the price of the product; in the second version, it planned to increase the product's price (by the same amount as in the first version), but the government intervened by capping the price at the level that prevailed before the demand shock. We then cross-randomized the following features:

(1) **Product.** Each scenario concerned one of four products: a pharmaceutical drug, a treadmill for home use, a hand sanitizer, and a hand moisturizer. Two are of these products are health-related (pharmaceutical drug and hand sanitizer), and the other are not; two are relatively expensive (drug and treadmill), whereas the other are low-priced; one (the drug) is potentially life-saving.

(2) **Context.** In half of the scenarios, we did not specify the reason for the demand surge. In the other half, we indicated that the demand increase resulted from a pandemic outbreak. Although we did not mention COVID-19 explicitly, we wanted to test whether reactions to price increases (especially for the health-related products) were specific to the current (and vivid) events or were more general.

(3) **Salience of cost factors.** We varied the salience of cost factors by including, in half of the scenarios, a sentence indicating that the company incurred higher costs to produce and distribute additional units of its product.

(4) **Salience of economic tradeoffs.** We manipulated the salience of the potential economic consequences of letting the price adjust freely versus imposing a cap. These consequences highlighted tradeoffs that one may expect to occur in either case. For the scenarios concerning the drug and the treadmill, we focused on intertemporal tradeoffs. Specifically, we described a two-period situation in which a high price in the first period implies that only a small proportion of the population can obtain the good. However, the high price induces entry and

thus additional production, a lower market price, and a larger share of consumers being able to obtain the good in the second period. Conversely, price controls in the first period precluded these adjustments and dynamics: in each of the two periods, the price would be the same, there would be no entry, and the share of the population able to obtain the good would be in between the ones for the first and second period in the unregulated price version of the scenario. For the vignettes with the hand sanitizer and moisturizer, we instead emphasized possible consequences of the reallocation of products across markets. We described a situation where the demand for the product increased in a certain region. In the unregulated-price version of the scenario, the company chooses to move its inventory to the high-demand area but does not do so in the version where the government imposes price controls. Thus, our manipulation highlighted a tradeoff between higher prices and (current or future) greater product availability, and lower price and a (current and future) shortage of the good. We chose these tradeoffs not because the situations that we described were the only possible outcomes, but because we were interested in testing whether stressing potential tradeoffs would affect participants' preference for, and moral judgment of the free market versus price control options. In our vignettes, we indicate the precise share of consumers "in need of" the product who will obtain it in the various pricing regimes. To enhance the salience of the economic consequences of each policy, we indicating specific figures for the change in the share of consumers served in each pricing regime. Although these numbers were hypothetical, respondents may interpret them as actual additional information, and reactions to these conditions may derive from a response to the specific details rather than to the "nudge" toward tradeoff thinking. The analysis of the text from the open comments allows us to identify which mechanisms is more likely to explain these findings; from that investigation, we conclude that the tradeoff-thinking channel is more relevant than the information one (see Section 4 below).

The cases that we illustrated are realistic and akin to situations that occurred during the first wave of the COVID-19 pandemic.[9] The size of the price increases was similar to those observed in reality for similar products. In particular, in our vignettes, the price of hand sanitizer increased

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[9] In March 2020, the *New York Times* reported that two brothers had stockpiled hand sanitizer in Tennessee and were selling it on Amazon at a large premium ("He has 17,700 bottles of hand sanitizer and nowhere to sell them": https://www.nytimes.com/2020/03/14/technology/coronavirus-purell-wipes-amazon-sellers.html). In May 2020, news that pharmaceutical drug Remdesivir might be effective against COVID-19 led to a controversy about its pricing during a pandemic ("Putting a price on COVID-19 treatment Remdesivir", NPR: https://tinyurl.com/3sut75yt).

from \$4 to \$20 per bottle – a five-fold increase that is close to the one that Holz et al. (2021) reported for that product. In the case of the pharmaceutical drug, the increase from \$200 to \$1,000 per treatment course brings the price to a level consistent with what the Institute for Clinical and Economic Review (ICER) estimated for *Remdesivir* in 2020.[10]

(5) Additional "no-reason" scenarios. Economic theory interprets relative prices and their changes as signals that guide consumption, production, and investment decisions, without any need or concern for what caused the price movements. However, reactions to price changes may be affected by context-specific information. In our survey, we included four scenarios where the product price increased without specifying anything about the context or reason for the increase. These scenarios offer a baseline that allows us to compare respondents' choices (unregulated pricing versus price controls) and moral judgments for situations where the price of a given product changes by a certain amount (the same across scenarios) with and without a specified context.

Cross-randomizing features (1)–(4) and the additional four no-reason scenarios resulted in 36 scenarios. Figure 1 reports a version the scenarios (with salient tradeoffs) for each product.

Figure 1: Survey vignettes in the scenarios with salient tradeoffs

A. Pharmaceutical drug

Scenario 1	Scenario 2
A pharmaceutical company developed a drug to treat a certain condition and was selling the drug for \$200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. **The company raises the price of the drug to \$1,000 per treatment course.** About 30% of patients in need manage to obtain the drug in the next 12 months. **One year later, pharmaceutical companies introduce new drugs for the treatment of the disease**. The increased supply and competition drive the price down to \$300 per treatment course, and about 80% of patients in need obtain one of the available treatment drugs.	A pharmaceutical company developed a drug to treat a certain condition and was selling the drug for \$200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. **The company plans to raise the price of the drug to \$1,000 per treatment course. However, the government decides to prevent that and imposes a price cap at \$200 per treatment course.** About 50% of patients in need manage to obtain the drug in the next 12 months. **One year later, this drug is still the only available drug to treat the new disease**, and again about 50% of patients in need will obtain the treatment drug.

B. Treadmill

Scenario 1	Scenario 2
A company that produces treadmills specific for home use has been selling them at $200 each. More people start exercising at home. As a consequence, the demand for treadmills for home use increases. **The company raises the price of its treadmills to $1,000 each.** About 30% of customers looking for such a treadmill manage to obtain one in the next 12 months. **One year later, more physical exercise equipment producers decide to produce treadmills specific for home use**. The increased supply and competition drive the price of treadmills down to $300, and about 80% of customers looking for such a treadmill are able to buy one.	A company that produces treadmills for home use has been selling them at $200 each. More people start exercising at home. As a consequence, the demand for treadmills for home use increases. **The company plans to raise the price of its treadmills $1,000 each. However, the government decides to prevent that and imposes a price cap at $200 per treadmill.** About 50% of customers looking for a treadmill manage to buy one in the next 12 months. **One year later, no other companies have entered the market**, and again 50% of customers looking for such a treadmill are able to buy one.

C. Hand sanitizer

Scenario 1	Scenario 2
The typical price of hand sanitizer in a certain region is **$4 per bottle**. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. **A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle**. About 80% of customers who wish to purchase hand sanitizer are able to do so, whereas 20% are not.	The typical price of hand sanitizer in a certain region is **$4 per bottle.** The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. **A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle.** The company decides to no longer move its inventory to the region with the shortage. About 50% of customers who wish to purchase hand sanitizer are able to do so, whereas 50% are not.

D. Hand moisturizer

Scenario 1	Scenario 2
The typical price of hand moisturizer in a certain region is **$4 per tube**. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. **A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and sells it at $20 per tube.** About 80% of customers who wish to purchase hand moisturizer are able to do so, whereas 20% are not.	The typical price of hand moisturizer in a certain region is **$4 per tube**. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. **A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and plans to sell it at $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube. The company decides to no longer move its inventory to the region with the shortage.** About 50% of customers who wish to purchase hand moisturizer are able to do so, whereas 50% are not.

Notes: The four panels report two versions of a scenario for each of the four products. Scenario 1 corresponds to the unregulated price version, whereas scenario 2 outlines the version with price controls. These scenarios correspond to the experimental conditions where we do not refer to a specific pandemic context, costs increases are not salient, and tradeoffs are salient.

2.2.3 Morality assessments and market arrangement choice

After reading each version of their assigned scenario (i.e., unregulated pricing and price control), participants expressed their judgment, on a scale from –10 to +10, about the scenario's fairness to the customers (or patients), to the company, and overall moral acceptability. We then showed the two versions of the scenario again, side by side, and asked the respondents to select the one that they would prefer to see in place in their own country and to report, in open-ended text form, the reason(s) for the answers they just gave.

The questions about fairness and moral acceptability are similar to those in Kahneman et al. (1986). However, whereas Kahneman et al. (1986) measured an overall assessment of fairness, we specified the subject to which the fairness assessment referred (the customers or the company) to gauge a more nuanced understanding of the respondents' moral reaction to each situation. For example, if a person perceives price controls as fair to customers but unfair to the company, a single assessment of fairness would not show these differences. Moreover, we proposed to participants two versions of each scenario describing alternative policy regimes (unfettered price surges and price caps) and eliciting their moral assessment of each. Finally, we tested whether moral judgments of price surges are absolute or are affected by the possible economic consequences and tradeoffs between different policy regimes. Our open-text question allows us to collect additional information to further investigate the nuanced motivations for specific answers (Alesina et al. 2018, Ferrario and Stantcheva 2022).

The order of the questions – first the elicitation of moral judgments, then the choice of the preferred policy regime, and finally the open-ended question on motivations – ensures that all respondents considered the fairness of each scenario and policy regime for all parties involved (customers, firm, and overall) before making their choice and providing their motivations. A possible concern is that prompting participants to consider morality issues might "lead" them to use only these arguments in the following, open-ended question. However, Elias et al. (2019) showed that prompting respondents to express morality judgments in an already morally charged setting does not alter people's subsequent choice of policy regime. In Section 4 below, moreover, we report the analyses that we conducted to further alleviate this concern.

2.2.4 Follow-up survey

In December 2021, seven months after the first intervention (wave 1), we invited the original respondents to complete a follow-up survey (wave 2). We gave each participant the same scenario (combination of product, context, and saliency of unit cost increases) as in May; however, we showed all respondents the version with salient tradeoffs regardless of whether they received a scenario with or without salient tradeoffs in the previous survey. Our main objective was to test whether the effects of tradeoff salience we measured in wave 1 in a between-subject design would also hold within-subjects and when a considerable amount of time elapsed between presenting respondents with the versions without and with tradeoffs.

Moreover, wave 2 included a donation opportunity.[11] Following Bursztyn et al. (2020) and Elias et al. (2019), we gave respondents the opportunity to earn $1 (in addition to the payment for completing the survey) if they allowed the researchers to make a $1 gift to an organization that promotes unfettered markets and believes that the market price is always the "just" price, the Future of Freedom Foundation (FFF).[12] This module lets us assess whether the participants' responses to the hypothetical scenarios were consistent with a real-stakes choice, by verifying. whether respondents are willing to incur a cost (i.e., give up $1) to express opposition to an organization that promotes free markets, plausibly because they do not share the views that the organization promotes. Note that this is not a test of the effects of our manipulations, and in particular of the salience of tradeoffs, because in the second wave of the survey all returning respondents received a scenario with tradeoffs. We are more generally interested in whether the pricing regime selection in a hypothetical context has some deeper foundations than just being a "stated" preference.

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[11] In wave 2 we included only a subset of the questions on attitudes toward markets and government intervention and did not include the questions on time preferences, trust, and altruism.

[12] This organization is a "tax-exempt, non-profit educational foundation whose mission is to present an uncompromising moral, philosophical, and economic case for the free society." In the donation module, we reported the FFF's position on the freedom that firms should enjoy when setting prices. The following sentences are from an article that appeared on the FFF's webpage and that we reported in our survey: "a just price is the market price," "a just price is any price based on supply and demand," "a just price includes any price that is raised in times of shortages and natural disasters," and "a just price is any price not constrained by some government regulation."

2.3 Data

We collected the data between April 29 and May 1, 2021 (wave 1), and then between December 10 and December 31, 2021 (wave 2). In wave 1 we recruited 7,612 participants: 3,830 in Canada and 3,782 in the United States (Table 1). In December, we gathered answers from 1,335 of the original respondents in Canada and 1,203 in the United States, corresponding to 34.9% and 31.8% the participants in May, respectively.[13]

Columns (1) and (3) of Table 2 report the socio-demographic characteristics of the wave 1 survey participants in Canada and the U.S., respectively, and columns (2) and (4) display official statistics for the adult population in the two countries. The survey firm provided samples that matched the adult population by gender, age, ethnicity and education. Other features of the respondents (including marital status, employment, and income) are also similar to those of the Canadian and the U.S. populations. The sample is also well-balanced across our experimental conditions in terms of socioeconomic characteristics (gender, race, education, income, marital status, number of children), attitudes (political views, altruism, trust, intertemporal preferences), and whether a participant responded to both surveys in May and December.[14]

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[13] In December, we only contacted participants who in May received a scenario with a specified reason for the price increase. This implies that response rates in wave 2 were 39.1% in Canada (1,335/3,415) and 36% in the United States (1,203/3,345).

[14] Appendix Figure B1 reports estimates of regressions of binary indicators for individual socioeconomic characteristics (gender, race, education, income, marital status, number of children), attitudes (political views, altruism, trust, intertemporal preferences), and whether a participant responded to both surveys in May and December, on binary indicators of the 32 experimental conditions. Of the 496 estimated coefficients, 14, or 2.8%, are statistically significant at the 5% level. All but one of the 16 p-values of the F-tests are greater than 0.05.

Table 1: Number of participants, overall and by round and country, and main experimental condition

	Wave 1		Wave 2	
	Canada	**United States**	**Canada**	**United States**
Overall N.	3,830	3,782	1,335	1,203
Product				
Drug	941	920	332	290
Treadmill	983	958	330	300
Sanitizer	934	944	329	282
Moisturizer	972	960	344	331
Reason for price increase				
Not specified	415	437		
Specified	3,415	3,345	1,335	1,203
Context				
Not specified	1,717	1,685	683	595
Pandemic	1,698	1,660	652	608
Salience of cost factors				
Cost factors not salient	1,750	1,630	695	598
Cost factors salient	1,665	1,715	640	605
Salience of tradeoffs				
Tradeoffs not salient	1,675	1,694		
Tradeoffs salient	1,740	1,651	1,335	1,203

Table 2: Respondent characteristics and comparison with population survey data

	Canada		United States	
	Respondi sample (Age 18+ N = 3,830)	Population (SC 2020)	Respondi sample (Age 18+ N = 3,782)	Population (ACS 2019)
Percent of:				
Women	49.9	50.4	50.0	50.8
Age 18-29	20.8	22.6	23.1	21.1
Age 30-39	17.8	16.6	17.1	17.3
Age 40-49	16.6	15.2	18.3	15.9
Age 50-59	17.6	16.2	17.5	16.4
Age 60+	27.2	29.4	24.1	29.4
Asian	13.4	14.7	6.3	6.8
Black	3.1	3.1	12.7	12.8
Hispanic	1.0	1.3	15.1	18.4
White (non-Hispanic)	78.9	78.7	62.5	60.0
Other race/ethnicity	3.5	2.1	3.5	5.5
French speaking (Canada)	6.8	22.8	NA	NA
HS diploma or less	9.2	8.0	35.3	38.3
Some college	35.3	32.0	29.2	28.6
College degree or higher	55.5	60.0	35.5	33.1
Married/Cohabiting	51.8	47.7	48.9	54.1
Employed (full or part time)	63.6	59.5	56.4	58.0
Out of labor force	28.1	35.4	30.5	38.4
Income 0-$19,999	8.1	9.8	14.8	18.1
Income $20,000-$39,999	16.5	21.2	20.9	8.4
Income $40,000-$59,999	16.2	24.2	20.2	11.9
Income $60,000-$79,999	16.7	17.6	14.2	17.4
Income $80,000-$99,999	15.5	11.5	10.3	12.8
Income $100,000+	27.1	15.7	19.6	31.4

Notes: The table shows summary statistics from the Canada and U.S. samples (columns (1) and (3), respectively) and corresponding statistics on the population of Canada and the U.S. (columns (2) and (4)). Data for Canada are from Statistics Canada. Income distribution statistics are for 2019. Race and ethnicity statistics are from 2017 and for population 15 years old and over. Employment and labor force participation refer to May 2021, and population is for population 16 and above. All other statistics refer to 2020. Education statistics are for the population 25 years old and over. For the United States, employment and labor force participation rates are from the Bureau of Labor Statistics for May 2021 and refer to individuals 16 years old and over. The other statistics are from the 2019 American Community Survey (ACS). Educational attainment is for the population 25 years old and above; the remaining ACS statistics are for the population 18 years and above.

3. Main Findings

3.1 Support for unregulated price surges

Figure 2 displays the share of respondents who choose the unregulated pricing option. Overall, this fraction is 32.2%.[15] Panel A shows that support for unregulated pricing is lowest for the pharmaceutical drug, highest for the treadmill, and intermediate for the hand sanitizer and moisturizer (22.5%, 41.1%, 30.3%, and 34.2%, respectively; chi-square test of differences in proportions: 140.2, $p<0.001$).

Panel B indicates that tradeoff salience has a large, positive effect on support for unregulated pricing. The fractions of respondents supporting unregulated pricing increases from 11.4% when tradeoffs are not salient to 33.4% when they are salient in the pharmaceutical drug scenario, from 34.1% to 48.3% for the treadmill, from 14.1% to 45.9% for the hand sanitizer, and from 22.4% to 46.1% for the hand moisturizer. All differences in these proportions are statistically significant ($p<0.001$). Support for unregulated pricing is also higher when cost factors are salient, although the changes are smaller than those induced by the salience of tradeoffs (Panel C). In Panels D and E, we observe no substantial differences between pandemic and generic scenarios and between Canadian and U.S. residents.

Table 3 reports the parameter estimates from linear regressions where the outcome variable is a binary indicator for whether the respondent preferred the unregulated pricing option. In column (1), the estimates show that, on average, support increases by 22.8 percentage points when tradeoffs are salient ($p<0.001$) and by 4.7 percentage points when cost factors are salient ($p<0.001$). These changes correspond to 73% and 15% of the overall average. Columns (2)–(5) show the estimates from product-specific regressions. Tradeoff salience increases respondents' acceptance of unregulated prices for all products. The impact of cost factor saliency holds for the hand sanitizer and the moisturizer but not for the drug and the treadmill. Finally, the estimates in column (6) are from a model that includes interaction terms between the pandemic indicator and either the tradeoff salience or the cost salience indicator; the corresponding coefficient estimates are small and not statistically significant.

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[15] Because most of our analyses concern the scenarios that expressed some reasons for the prices increases, the statistics reported in this section, except for Section 3.8, refer to the 6,760 participants, out of 7,612, who received scenarios with reasons included. Moreover, we consider only data from participants who fully completed the survey.

Figure 2: Support for unregulated pricing scenarios
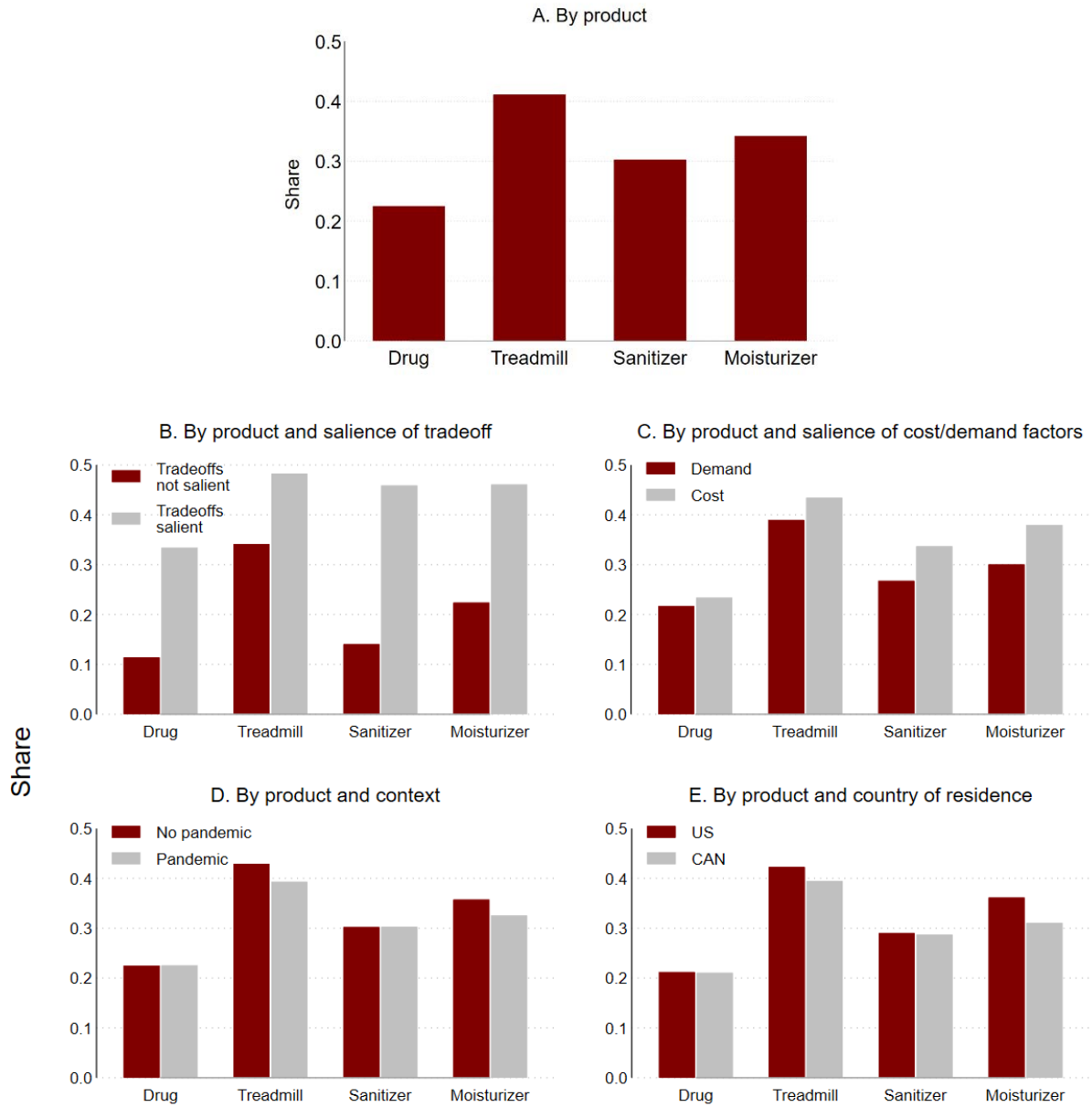
Notes: The figure reports the share of respondents who select the unregulated price scenario. In panel A, the support rates are by product. In the remaining panels, the support rates are by product and salience of tradeoffs (B), salience of cost factors (C), context (D), and respondents' country of residence.

Table 3: Scenario features and choice: Regression estimates

	Outcome variable:	= 100 if chose Unregulated price, 0 if chose Price control					
	Sample:	Full Sample	Drug	Treadmill	Hand sanitizer	Hand moisturizer	Full Sample
		(1)	(2)	(3)	(4)	(5)	(6)
Drug		-18.80***					-18.82***
		(1.54)					(1.54)
Sanitizer		-11.27***					-11.29***
		(1.58)					(1.58)
Moisturizer		-7.17***					-7.20***
		(1.61)					(1.62)
Salient tradeoff		22.77***	22.02***	13.96***	31.71***	23.74***	21.88***
		(1.09)	(1.98)	(2.35)	(2.10)	(2.21)	(1.54)
Salient cost side		4.74***	1.69	3.41	6.35***	7.67***	3.98**
		(1.09)	(1.99)	(2.36)	(2.11)	(2.21)	(1.55)
Pandemic		-1.59	-0.32	-3.42	0.34	-2.77	-3.24*
		(1.09)	(1.99)	(2.35)	(2.11)	(2.21)	(1.69)
Salient tradeoff x Pandemic							1.78
							(2.18)
Salient cost side x Pandemic							1.52
							(2.18)
Canadian resident		-2.58**	-0.04	-2.57	-0.96	-6.54***	-1.63*
		(1.09)	(1.99)	(2.34)	(2.11)	(2.21)	(0.97)
Constant		29.63***	10.75***	35.54***	11.22***	23.02***	30.47***
		(1.59)	(2.09)	(2.60)	(2.15)	(2.42)	(1.73)
Observations		6,760	1,648	1,731	1,666	1,715	6,760
R-squared		0.084	0.070	0.024	0.125	0.075	0.084
Average of the outcome variable		32.15	22.51	41.13	30.25	34.17	32.15

Notes: The parameter estimates are from OLS regressions. Each observation corresponds to a different respondent. The right-hand-side variables listed in the first column are binary indicators for the product in the scenario (treadmill omitted), salience of tradeoffs and cost factors, context, and residence of the participant. In all columns, we multiply the outcome variable indicator by 100; therefore, the reported numbers correspond to estimated percentage point changes. Robust standard errors are in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

3.2 Moral reactions to pricing scenarios

In Table 4, we report the average ratings of fairness to the customer (or patient), fairness to the company, and overall moral acceptability that respondents attributed to each version of their assigned scenario. Recall that each score ranged from –10 (most unfair/morally unacceptable) to +10 (most fair/morally acceptable). On average, across all vignettes, respondents find unregulated pricing scenarios more unfair to the customer (average score = –4.39) than price control scenarios (3.22); conversely, they consider unregulated pricing fairer to the company (1.76) than price controls (0.51). These differences replicate in the overall moral acceptability scores: –4.28 for

unregulated pricing and 2.20 for price controls. In addition to having similar average values the scores of fairness to consumers and overall moral acceptability are highly correlated with each other (Appendix Figure B2). In the case of the treadmill, respondents considered unregulated pricing less unfair to the customers, and price controls more unfair to the firm, compared to the other three products. We also constructed measures of *relative* fairness and moral acceptability of the unregulated price version of the scenarios as the difference between the fairness/moral acceptability scores of the unregulated price scenario and the corresponding scores for the price control case. By computing the relative score, we account for different baselines or reference points that respondents might hold. Because the two scores range from –10 to +10, the relative index can take values between –20 and 20. We report average relative judgments in the bottom panel of Table 4.

Table 5 shows estimates from regressions where the outcome variables are the respondents' moral reactions to the scenarios, expressed in standard deviation units.[16] Some of our experimental manipulations strongly affect moral reactions. Tradeoff salience, in particular, increases the perceived fairness to customers of unregulated pricing (column 1) and, especially, lowers the perceived fairness to customers of price controls (column 4). It also increases the perceived fairness to the company of unregulated pricing (column 2). The effect of tradeoff salience on the respondents' perceived moral acceptability of unregulated pricing (column 3) and price controls (column 4) is similar in sign and magnitude to its effect on fairness to customers. The effect of tradeoff salience on the moral acceptability rating is more similar to the rating of fairness to consumers than to the company. The impact of the salience of cost factors is in the same direction as that of tradeoff salience but is smaller. Finally, unregulated pricing is considered more unfair and less morally acceptable for the drug, hand sanitizer, and hand moisturizer than for the treadmill. Moreover, in the case of the treadmill, the assessments of fairness to the company show a much higher correlation with the overall moral acceptability assessments (Appendix Figure B3). The estimates in columns (7)–(9) are from regression where the outcome variables are the relative morality measures as the dependent variable (again in standard deviation units for ease of comparison). The results suggest that the measures of relative fairness and moral acceptability are

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[16] Tables B1 and B2 in Appendix B report the estimates in in Tables 3 and 5 with p-values corrected for multiple hypothesis testing. All estimates of interest are statistically significant also with those corrections.

a good summary of the respondents' moral judgment of the vignettes. In relative terms, participants' overall moral concerns especially align with the consumer side.

Table 4: Moral judgments, by scenario and product

| | Unregulated pricing | | |
	Fairness to customer	Fairness to Company	Moral acceptability
Overall	-4.39	1.76	-4.28
Drug	-4.78	1.91	-4.76
Treadmill	-2.45	2.44	-2.32
Sanitizer	-5.63	0.98	-5.49
Moisturizer	-4.75	1.68	-4.61
	Price controls		
	Fairness to customer	Fairness to Company	Moral acceptability
Overall	3.22	0.51	2.20
Drug	3.71	1.54	3.27
Treadmill	4.59	-0.96	1.85
Sanitizer	2.26	1.02	1.97
Moisturizer	2.32	0.52	1.76
	Relative judgments (unregulated - price controls)		
	Fairness to customer	Fairness to Company	Moral acceptability
Overall	-7.61	1.24	-6.48
Drug	-8.49	0.37	-8.04
Treadmill	-7.04	3.41	-4.17
Sanitizer	-7.89	-0.05	-7.46
Moisturizer	-7.06	1.15	-6.38

Notes: The table reports the average ratings of fairness to the customer (or patient), fairness to the company, and overall moral acceptability that respondents attributed to each version of their assigned scenario. The first panel reports averages for the unregulated pricing scenarios (range -10 to +10), the second panel those for the scenarios with price caps (range -10 to +10), and the third panel reports the relative morality judgments, computed as the difference between unregulated pricing – price controls (range -20 to +20).

Table 5: Scenario features and moral judgments: Regression estimates

Outcome variable (standardized):	Unregulated pricing version			Price controls version			Relative morality judgments (unregulated pricing - price controls)		
	Fairness to customer	Fairness to Company	Moral acceptability	Fairness to customer	Fairness to Company	Moral acceptability	Relative fairness to customers	Relative fairness to company	Relative moral acceptability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Drug	-0.41***	-0.10***	-0.42***	-0.13***	0.43***	0.23***	-0.17***	-0.37***	-0.43***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Sanitizer	-0.56***	-0.28***	-0.55***	-0.36***	0.34***	0.03	-0.11***	-0.42***	-0.38***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Moisturizer	-0.41***	-0.14***	-0.40***	-0.36***	0.26***	-0.01	-0.01	-0.28***	-0.25***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Salient tradeoffs	0.39***	0.20***	0.31***	-0.81***	0.02	-0.56***	0.83***	0.12***	0.58***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Salient cost factors	0.12***	0.01	0.15***	-0.03	-0.19***	-0.13***	0.10***	0.14***	0.19***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Pandemic	-0.08***	-0.08***	-0.11***	-0.02	0.07***	-0.02	-0.04*	-0.10***	-0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Canadian resident	-0.03	0.05*	-0.02	0.06***	-0.04*	0.05*	-0.06***	0.06**	-0.04*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Constant	0.19***	0.07**	0.21***	0.57***	-0.17***	0.24***	-0.28***	0.17***	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Observations	6,760	6,760	6,760	6,760	6,760	6,760	6,760	6,760	6,760
R-squared	0.085	0.023	0.075	0.187	0.036	0.092	0.185	0.040	0.125

Notes: The parameter estimates are from OLS regressions. Each observation corresponds to a different respondent. The outcome variables are in standard deviation units. The right-hand-side variables listed in the first column are binary indicators for the product in the scenario (treadmill omitted), salience of tradeoffs and cost factors, context, and residence of the participant. Robust standard errors are in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

Figure 3 shows the effect of our experimental manipulations on the whole distribution of the relative moral acceptability score. In panel B, in particular, the distribution of morality judgments differs substantially between respondents assigned to scenarios with and without salient tradeoffs. We will return to these differences in Section 3.5 below.

Figure 3: Distribution of opinions on the relative moral acceptability of the unregulated price scenario
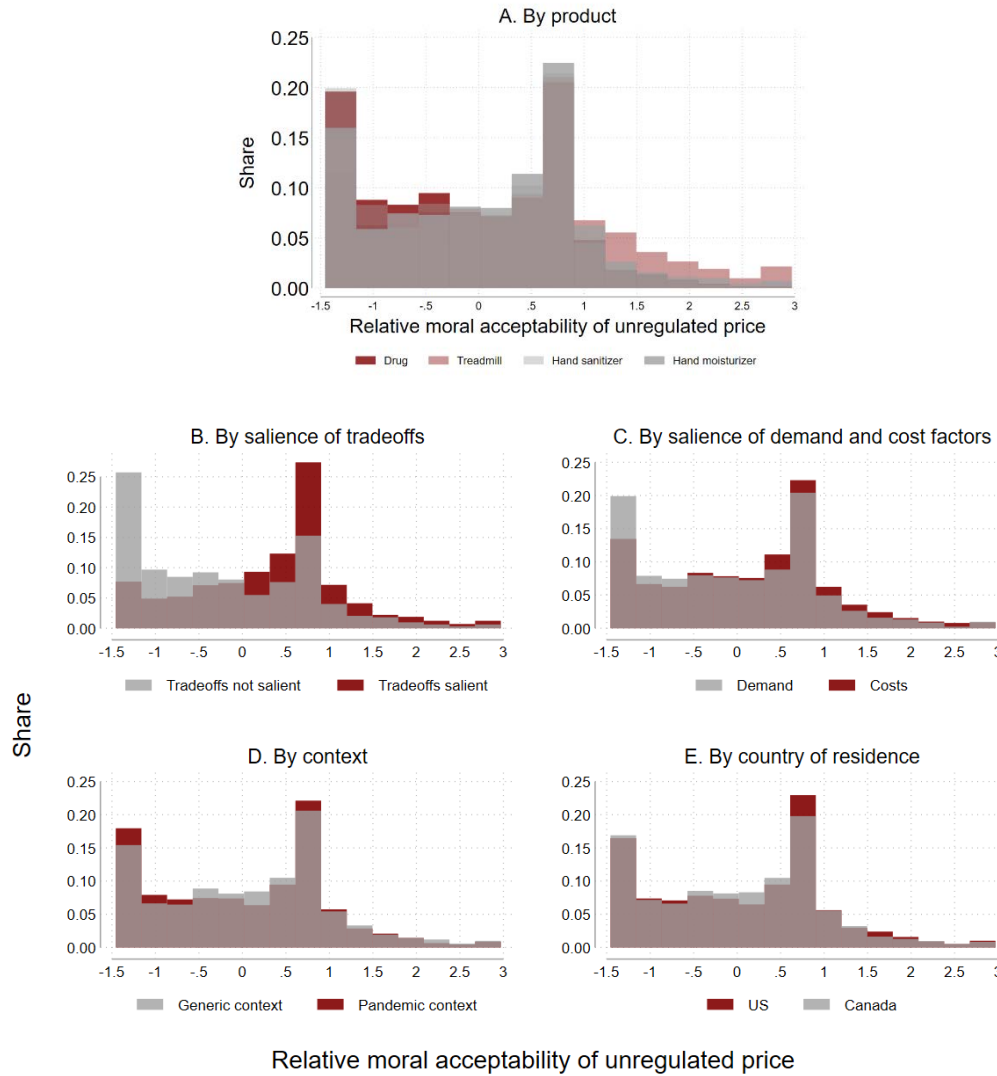
Notes: The figure reports the estimated density of the standardized score representing the relative acceptability of the unregulated price scenario by product, salience of tradeoffs, salience of demand or cost factors, context, and participants' country of residence. The relative moral acceptability of unregulated price scenario is the difference between the score on the moral acceptability of the unregulated price scenario and the score on the moral acceptability of the price control scenario. Each of the two scores can take values between –10 and +10, in 0.1 increments. The overall average value of the relative score is –6.48. The values on the x-axis indicate standard deviation units.

3.3 Moral judgments and scenario choice

The binned scatterplot in Figure 4 show a strong positive correlation between opinions about the moral acceptability of the unregulated price scenario and the selection of that scenario's configuration. The best linear fit implies that an increase of one standard deviation in the relative moral acceptability score (8.96) corresponds to a change in support rates for unregulated pricing of about 24 percentage points, a size comparable to the tradeoff salience effect.

Figure 4: Support rates for unregulated price scenario and moral reactions to scenarios
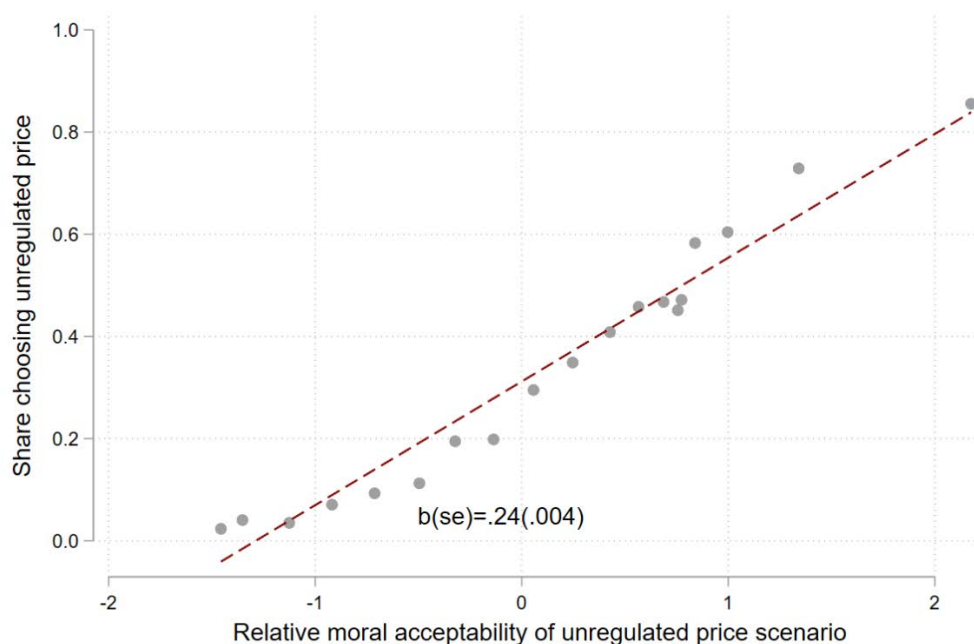
Notes: The figure reports a binned scatterplot of the relationship between the share of respondents who select the unregulated price scenario and their opinions on the relative moral acceptability of the unregulated price scenario versus the price control option (Panel 2). The relative moral acceptability of the unregulated price scenario is the difference between the score on the moral acceptability of the unregulated price scenario and the score on the moral acceptability of the price control scenario. Each of the two scores can take values between –10 and +10, in 0.1 increments. The values on the x-axis indicate standard deviation units; b(se) is the OLS estimate of the slope parameter (the standard error) from a regression of the 0-1 indicator for whether a respondent chose the unregulated price option, and their relative moral acceptability score.

Of course, we cannot interpret this relationship as causal because both the moral judgments about each scenario and the choice of pricing regime depend on the scenarios' characteristics. However, this strong correlation suggests that the preference for a particular scenario has strong moral connotations. Column (2) of Table 6 provides further corroboration to this claim. The estimates are from a model analogous to the one in column (1) of Table 3 (replicated in column (1) of Table 6 to facilitate comparison), with the addition of the score of relative moral

acceptability (in standard deviation units) among the regressors. The coefficient estimate on the relative moral acceptability is similar to the estimated slope of the line in Figure 4. Including this variable on the right-hand side substantially alters the estimates on the indicators for the various scenario features. In particular, the estimated differences between products are much smaller, the estimated effect of tradeoff salience drops from 22 to 9 percentage points, and the estimated effect of cost factors saliency is close to, and not statistically different from zero.

Table 6: Scenario features, moral judgments, pro-market attitudes, and choice: Regression estimates

Outcome variable:	= 100 if the respondent chose unregulated price, 0 if price controls			
	(1)	(2)	(3)	(4)
Drug	-18.80***	-9.16***	-17.27***	-9.12***
	(1.54)	(1.35)	(1.47)	(1.33)
Sanitizer	-11.27***	-2.91**	-10.14***	-2.99**
	(1.58)	(1.40)	(1.52)	(1.38)
Moisturizer	-7.17***	-1.56	-6.34***	-1.57
	(1.61)	(1.40)	(1.54)	(1.38)
Salient tradeoffs	22.77***	9.75***	22.34***	10.64***
	(1.09)	(1.04)	(1.05)	(1.03)
Salient cost factors	4.74***	0.58	4.74***	0.94
	(1.09)	(0.97)	(1.05)	(0.96)
Pandemic	-1.59	-0.26	-1.27	-0.20
	(1.09)	(0.97)	(1.05)	(0.95)
Canadian resident	-2.58**	-1.63*	-1.22	-0.93
	(1.09)	(0.97)	(1.05)	(0.95)
Relative moral acceptability of unregulated pricing		22.26***		20.32***
		(0.47)		(0.49)
Pro-market attitudes			11.82***	6.84***
			(0.52)	(0.50)
Constant	29.63***	30.38***	28.13***	29.45***
	(1.59)	(1.35)	(1.50)	(1.33)
Observations	6,760	6,760	6,760	6,760
R-squared	0.084	0.280	0.148	0.300

Notes: The parameter estimates are from OLS regressions. Each observation corresponds to a different respondent. The right-hand-side variables reported in the first column are binary indicators for the product in the scenario (treadmill omitted), salience of tradeoffs, salience of cost factors, context, residence of the participant, the standardized score for relative moral acceptability of the unregulated price scenario with respect to the price control scenario, and the standardized index for pro-market attitudes. We multiply the outcome variable indicator by 100; therefore, the reported figures correspond to estimated percentage point changes. Robust standard errors are in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

3.4 Support for unregulated prices and attitudes toward the role of markets in society

Does the support for unregulated prices indicate an overall more positive view of the role that markets, in general, play in society? To answer this question, we compute a summary measure of attitudes toward markets as the average of the scores from three questions: (a) fairness or unfairness of the market system, (b) the extent to which the market system promotes or harms innovation and growth, and (c) the extent to which the government intervenes too much or too little in the economy (see part 5 of Appendix A). Each score can take values between –10 and +10, with higher values indicating a more positive view of the role of markets. The average of this measure does not vary significantly across experimental conditions (see Appendix Figure B1), indicating that general attitudes toward markets are pre-determined characteristics of the respondents and have no relationship with the treatments.

Column (3) of Table 6 above reports estimates from our basic regression model with support for unregulated prices as the outcome variable, including the standardized "pro-market" score among the covariates. The coefficient estimate on this variable is large and statistically significant.[19] The estimates in column (4) are from a model that includes the score of pro-market views and the score of relative moral acceptability of unregulated prices on the right-hand side of the regression equation. The estimated coefficient on the relative moral acceptability index is similar to the one in column (2), where pro-market attitudes are not included; this strengthens our claim that the respondents' general views about the role of markets in society are predetermined with respect to their opinions about the specific scenarios that we asked them to evaluate. The coefficient estimate on pro-market attitudes in the full specification of column (4) that includes also the relative moral acceptability score is still statistically significant but smaller than in column (3), suggesting some correlation between underlying views about markets and moral reactions to the vignette scenarios.

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[19] A linear fit is a proper approximation of the relationship between pro-market attitudes and support for unregulated prices. The fact that adding this regressor does not meaningfully alter the estimates on the indicators for our treatments is consistent with the respondents' views of the role of markets in society not being affected by these treatments. When we add the score for pro-market attitudes to the regression, the coefficient estimate on the indicator of the respondents' country of residence is close to zero and not statistically significant. Overall, the pro-market score for Canadian residents is lower than for those residents in the United States; the differences in support for the unregulated price options between Canadian and US resident can therefore largely be explained by these underlying differences in views about the role of markets in society.

## 3.5 Tradeoff salience, moral and ideological polarization, and sorting

The main findings from our analyses so far are that, on the one hand, people see prices and price surges as more than just signals of relative scarcity. Respondents have strong and heterogeneous moral reactions to different pricing regimes, and their preferences are strongly affected by their underlying "ideology" about the role of markets in society overall. However, when the potential economic consequences of unregulated or controlled prices are more explicit, people's opposition to market-driven price adjustments significantly decreases. Therefore, economic tradeoff considerations play a considerable role in influencing the choice between unregulated prices and price controls. We also show that the impact of tradeoff salience likely occurs through changes in moral judgments about a particular scenario.

Panel B of Figure 3 above illustrated a further effect of tradeoff salience on moral judgments. Whereas the other experimental manipulations affected the mean relative moral acceptability score but did not alter the shape of the overall distribution, tradeoff salience drastically changed the degree of the polarization of moral views. In particular, when tradeoffs are not salient, the distribution of the relative moral acceptability scores has a larger mass toward the left, indicating that, overall, participants who received scenarios without salient tradeoffs expressed a much more negative moral judgment of the unregulated price scenario than the price control scenario. Further, a second peak of the distribution is around zero, pointing to the presence of a large group of respondents who instead had similar moral reactions to the regulated and unregulated pricing configurations. In contrast, with salient tradeoffs, the distribution of relative moral acceptability of the unregulated price version is much more symmetric around the (single) peak around the value of zero. Thus, whereas in the absence of considerations about economic tradeoffs moral judgments are very polarized, making these tradeoffs explicit reduces polarization and leads to a broader consensus about the moral acceptability of different market configurations.

We explore these insights further by examining the distribution of relative moral acceptability scores by tradeoff salience as well as by pricing regime choice. The histograms in Figure 5 show that when tradeoffs are not salient, the moral judgments of those who select the unregulated price option and those who chose the price control option are much more different from one another

than when tradeoffs are salient.[20] Among those who select the unregulated price option, the relative moral judgment of that option has a very similar distribution with and without salient tradeoffs. Moreover, the two relevant distributions are single peaked and concentrated around zero; thus, most supporters of unregulated prices consider the unregulated price and price control scenarios as similar in terms of moral acceptability. Conversely, the moral valuation of unregulated prices is significantly more negative for those who select price control when evaluating scenarios without salient tradeoffs than for participants who prefer price controls in scenarios with salient tradeoffs. Therefore, the salience of tradeoffs softens the differences in moral reactions between supporters and opponents of unregulated pricing.

Figure 5: Distribution of relative moral acceptability of unregulated prices by scenario choice and salience of tradeoffs
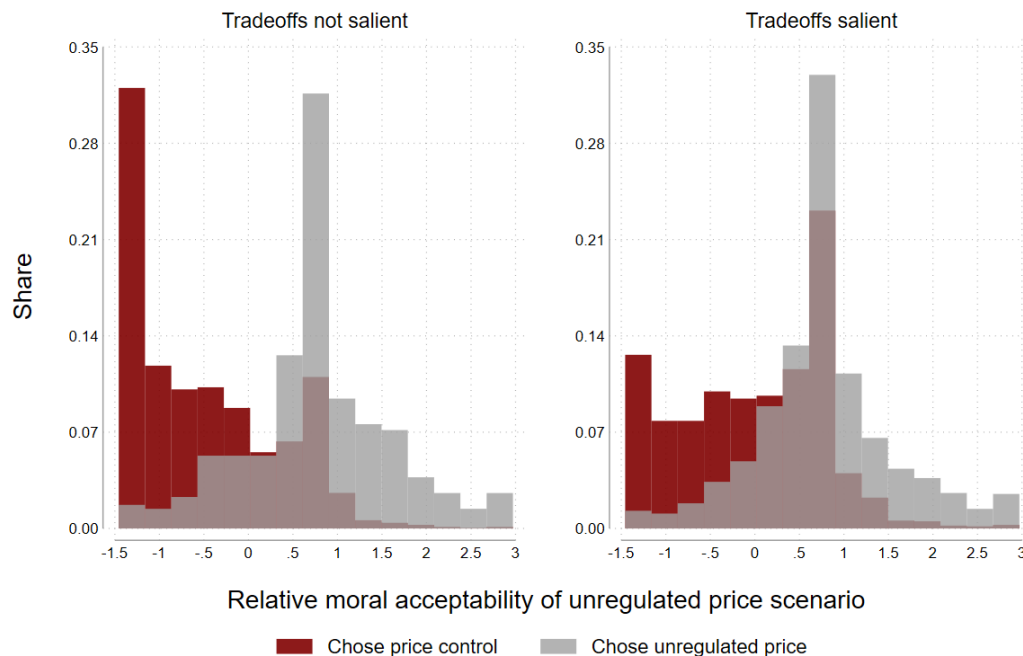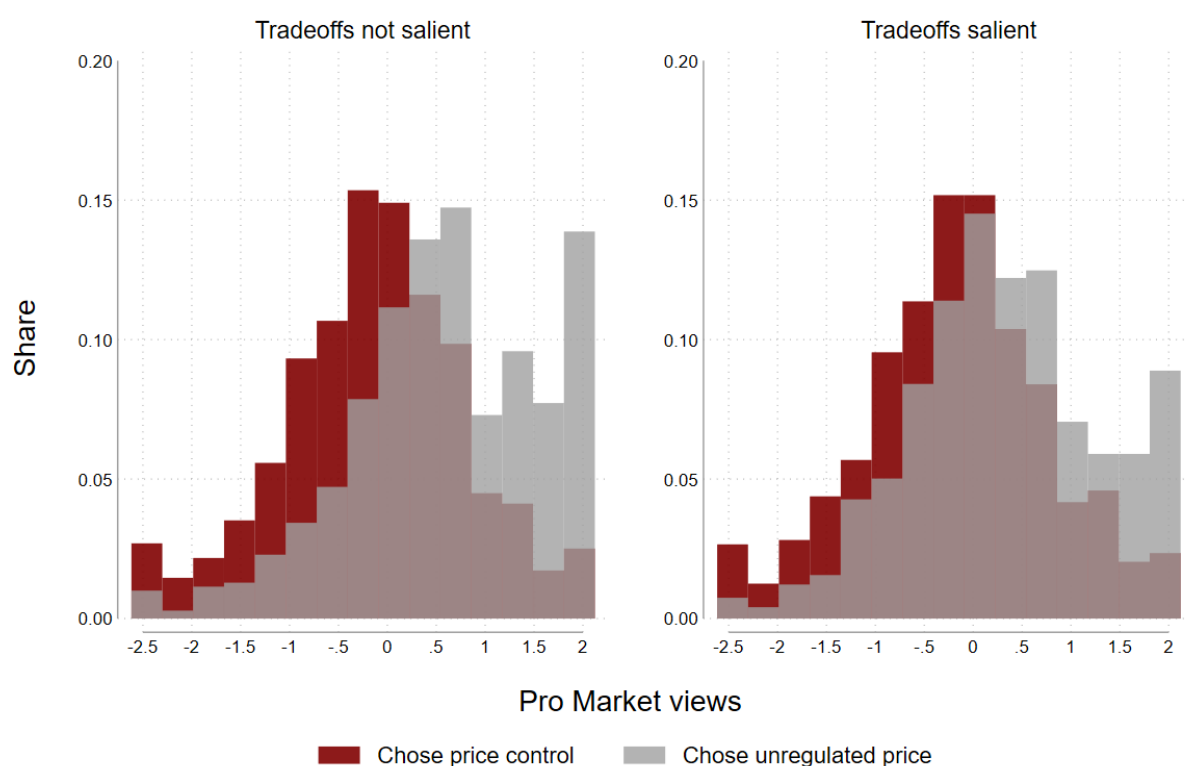

Notes: The figure displays the kernel density estimations of the relative moral acceptability of the unregulated price option by the respondents' choice (unregulated price or price control) and whether the scenario has salient tradeoffs or not. The relative moral acceptability of the unregulated price scenario is the difference between the score on the moral acceptability of the unregulated price option and the score on the moral acceptability of the price control option. Each of the two scores can take values between –10 and +10, in 0.1 increments. The overall average value of the relative score is –6.48. The values on the x-axis indicate standard deviation units.

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[20] Appendix Figures B4–B6 report distributions analogous to those in Figure 5 but for the absolute (standardized) values of the scores of fairness to customers (Figure B4), fairness to the company (Figure B5), and overall moral acceptability (Figure B6) of each of the two scenario versions, by the version actually selected and the salience of tradeoffs. The histograms show, again, much stronger polarization of moral reactions to the two versions of a scenario when tradeoffs are not salient. Judgement about fairness to the company is less responsive to tradeoff salience and vary less between those who select the unregulated price regime and those who prefer price controls.

Figure 6 shows a similar effect of tradeoff salience on the distribution of respondents' overall view about the role of markets in society according to their choice about price controls. On average, those who supported the unregulated price scenario expressed a significantly more positive attitude toward markets in general than those who preferred price controls. Moreover, among participants who supported unregulated prices, those who did so when evaluating scenarios without salient tradeoffs were overall stronger supporters of a market economy in general. [21]

Figure 6: Distribution of attitudes toward markets by scenario choice and salience of tradeoffs

Notes: The figure displays the kernel density estimations of the pro-market attitude score of respondents, by their scenario choice (unregulated price or price control), and whether the scenarios that they read have salient tradeoffs or not. The pro-market attitudes score is the average of three scores: agreement with the claim that markets are fair for society, agreement with the statement that markets promote innovation and growth, and agreement with the statement that the government is too active in the economy. Each of the three scores can take values from –10 to +10 in 0.1 increments. The values on the x-axis indicate standard deviation units.

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[21] Appendix Figure B7 shows similar evidence when we consider the distribution of political views on economic issues. For scenarios without tradeoff salience, the political preferences on economic issues between supporters and opponents of unregulated prices are more different than for scenarios with salient tradeoffs. The differences in political views on social issues are much smaller.

4. Exploring underlying motivations with text analysis

We analyze the open-text answers with which participants motivated their scenario choices and moral reactions by studying the frequency of keywords and phrases, computing the semantic similarity between comments of respondents in different conditions, and estimating the prevalence of certain topics. The objective of these analyses is threefold. First, we provide additional evidence to reinforce the interpretation of the findings from the scenario choices and moral reactions. Second, we determine the channels through which the tradeoff effect most likely operated. Third, the analysis of the open text provides information as to whether participants did pay attention to and reflect on the key aspects of the scenarios and the nature of the questions that we asked them; this allows us to address some potential concerns about our research design.

4.1 Motivations for scenario choices

The analyses above suggest that moral considerations likely drive the effects of the various scenario features in the scenario choice, and the respondents' choice depends on their broader attitudes toward and views about the role of markets in society. In particular, we observe that the strong effect of tradeoff salience on support for unregulated prices is accompanied by a reduction in extreme moral reactions against unregulated prices and a less extreme sorting of individuals supporting either policy regime.

We perform three sets of text analyses to explore further this interpretation: keyword and phrase frequency, semantic similarity, and topic modeling. Figure 7 shows the frequency of eighteen often-used, non-obvious words in the open answers in two groups. We "stemmed" group of words with the same root into single terms to represent an overall meaning. For example, Fair* includes, among others, "fair", "fairness", "fairer"; Afford* groups together "afford", "affordable", "affording"; Gvt* includes "govern", "government" and the abbreviation "gvt" too. In some cases, we also grouped obvious synonyms together; for examples, we compute the frequency of words such as "consumer", "client" and "customer" under the same term Consum*. The sequence in the figure starts with terms that pertain to potential moral concerns, such as fairness, access, and exploitation, and potentially negative connotations of the company's intents: Fair*, Unfair*, Accept*, Unaccept*, Moral*, Access*, Afford*, Greed*. For scenarios where tradeoffs are not salient, we observe striking differences in the use of these words according to the scenario preference. Opponents of unregulated prices frequently rely on terms such as (Un)fair*,

Moral* and Afford* to explain their motivations. Supporters of unregulated prices rely on these terms much less often. When tradeoffs are salient, those who selected the unregulated price option mention the word "access" significantly more often than when tradeoffs are not explicit. This suggests that mentioning the greater availability of a product (at least in a later period) is a key factor in the decision to support unregulated prices.

We then consider terms that refer more directly to economic considerations: Goug*, Profit*, Econom*, Market*, Suppli*, Demand*, Free*, Govt*. Supporters for unregulated prices use terms such as Market*, Free*, Suppl*, and demand much more frequently than opponents. Arguments in favor of allowing prices to increase focus on the role and functioning of a market economy.

Conversely, supporters of price controls employ terms related to the functioning of the market that usually have a more negative connotation, such as Goug* and Profit*. The relatively frequent mention of Profit* by those who oppose unregulated prices might indicate an aversion to companies' exerting market power. The motivation for this aversion, in turn, may be in terms of market inefficiencies or on moral grounds. In Figure B8 of the Appendix, we show that respondents use terms that might imply the consideration of market structure, such as Monopoli* very rarely (less than 1% of the comments, with no discernible difference across conditions and pricing regime choice); the considerably more frequent use of terms referring to fairness and exploitation suggests that the reference to profits might indicate an opposition to an uneven or unfair distribution of gains, with consumers or patients being unjustly penalized.

For scenarios where tradeoffs are salient, we observe smaller differences between supporters and opponents of unregulated prices in the frequency of use of all these words. Consistently with the evidence from the analysis of the respondents' moral reactions and their views about the role of markets in society, supporters and opponents of unregulated prices display stronger and more extreme moral reactions and hold more different views about markets in general when tradeoffs are not salient. The salience of tradeoffs reduces this polarization also in the motivations expressed in the open-text answers.

Figure 7: Frequency of keywords in open comments, by salience of tradeoffs and scenario choice
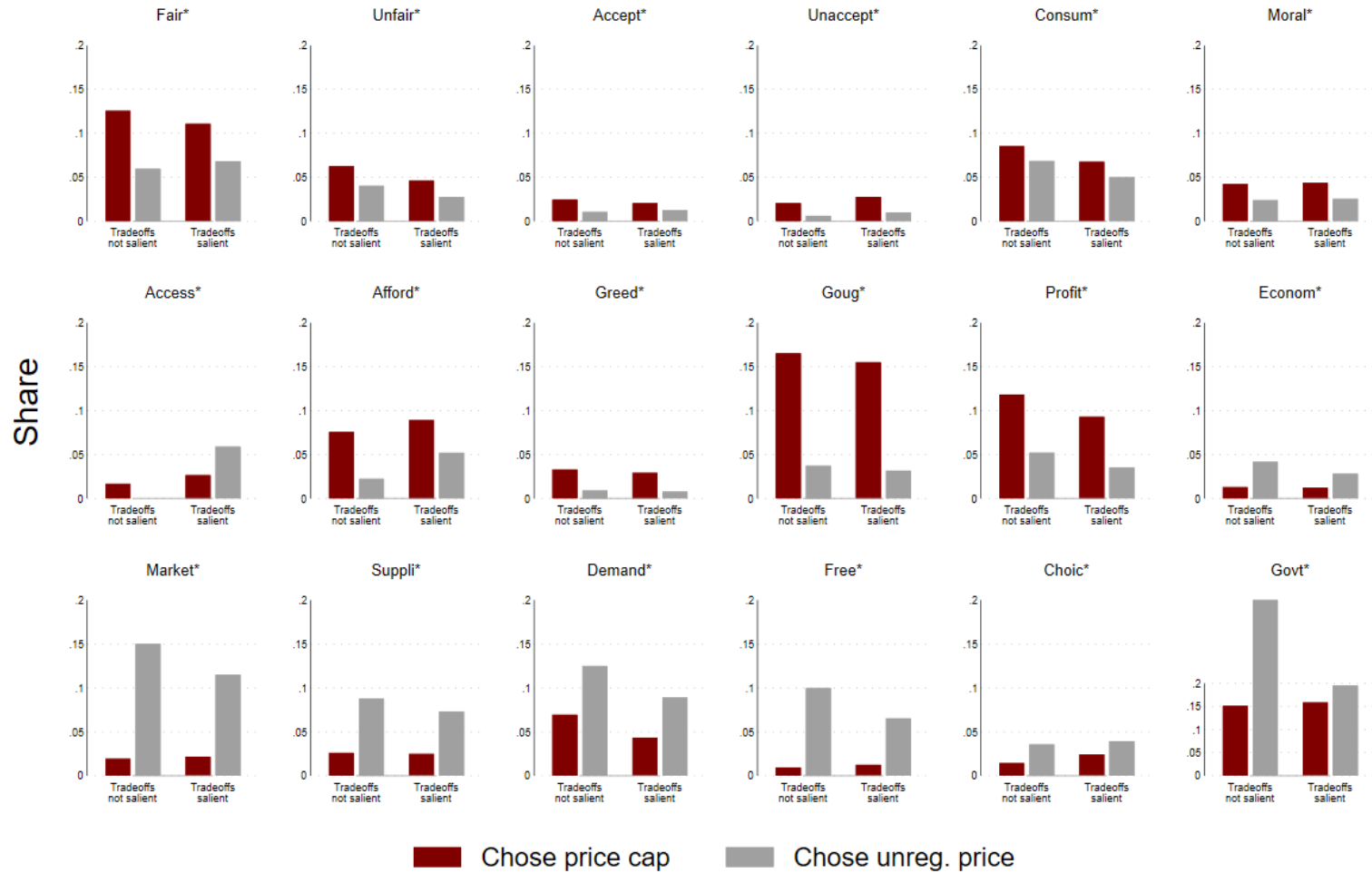
Notes: The figure reports the share of open comments by respondents that contained the term above each graph. The comments are grouped by the respondents' scenario choice and by whether they evaluated scenarios with or without tradeoff salience. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. The ngram package includes a stemming procedure on which we relied, and a list of stopwords that we excluded. We also limited the search to words of at least four letters. The title above each graph reports the stemmed version of each group of words. For example, "Accept*" includes such words as accept, accepted, acceptable.

Figure 8 displays the frequency of use of some of the most frequent 2-word expressions (excluding stop words), or bi-grams. Groups of more than one term (N-grams) allow us to consider terms in their (relative) position in a text, rather than relying on a "bag-of-words" approach whereby position does not matter. We can clarify, in particular, how participants use those words and therefore their prevailing meaning. For example, the graphs show that those who support price controls use the expression "take advantage" often. Thus, the word "advantage" has a specific meaning in these comments, one that implies the relevance of concerns for the exploitation of customers as a primary reason to be against unregulated prices.

The terms Suppli* and Demand* occur frequently together in comments by supporters of unregulated prices, again indicating the specific way in which these two words are employed, i.e., to indicate the standard operating of "supply and demand" as the way in which prices should be determined. The relatively general term "free" often appears in combination with "markets" in the comments of unregulated price supporters, strengthening our previous findings that a pre-existing pro-market ideology strongly relates to the support of unregulated prices. Again, the frequency of use of these expressions is more extreme when tradeoffs are not salient. Table B3 in the Appendix shows the relative frequency of use of the most frequent 2-, 3- and 4-grams, conditional on the presence of a word composing that N-gram in a comment; for example, if a comment includes the word "afford", the figures indicate the frequency with which that word occurs with "able" preceding it, as in the expression "able to afford". In this particular case, of all the cases where participants use Afford*, they use the expression "able to afford" 12% of the times; when they use Advantag*, in about 77% of the cases they are employing the expression "take advantage", and when they use Free*, the word occurs in the expression "free market" 66% of the times.

Figure 8: Share of two-words expressions in comments, by tradeoff salience and scenario choice
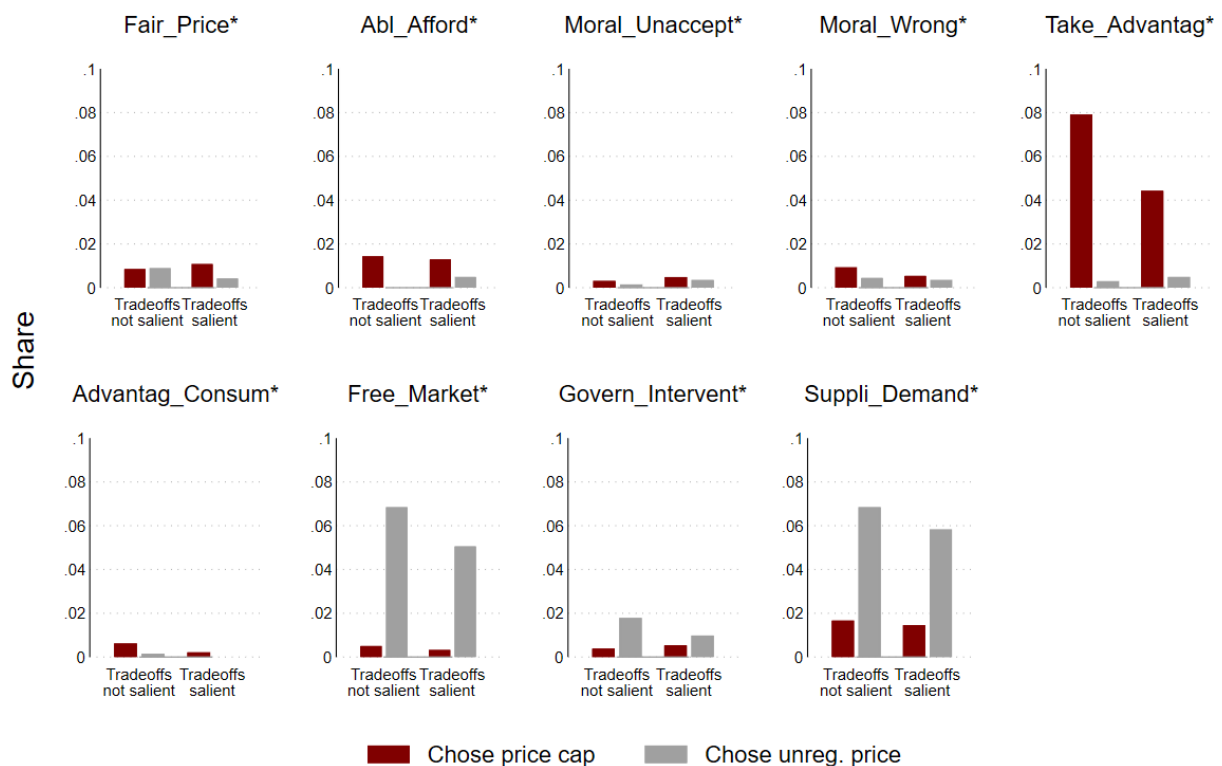
Notes: The figure reports the share of open comments that contained the two-word expression (bigram) above each graph. The comments are grouped by the respondents' scenario choice and by whether they evaluated scenarios with or without tradeoff salience. Words in each pair appear next to each other in a comment, once we exclude stopwords. from the text corpus. We used the Stata command ngram to extract all bigrams and determine whether each of them was present in a given comment. The ngram package includes a stemming procedure on which we relied, and a list of stopwords that we excluded. We also limited the search to words of at least four letters. The title above each graph reports the stemmed version of each bigram. For example, "Suppli_Demand*" includes expressions such as "supply and demand"; "supplies and demands"; Advantag_Consum* includes "advantage for consumers" "advantage to the consumer", and so on.

The text-based evidence that we described so far indicates that supporters of different pricing regimes stress specific arguments to motivate their choices, that these arguments differ between the two groups, and that the differences in arguments are more extreme when economic tradeoffs are not salient. We now extend this analysis to assess whether, more generally, participants who support the same regime make considerations that are more generally similar.
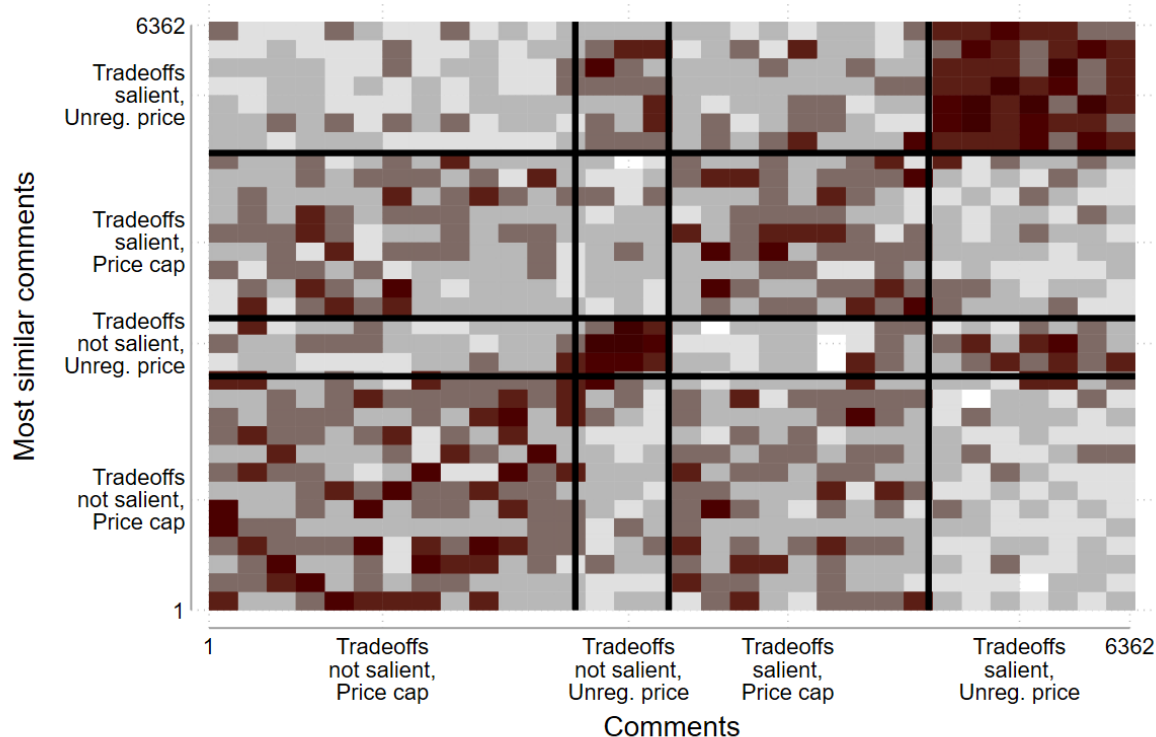
We perform a Latent Semantic Analysis and transform each comment in a vector with a dimension equal to the number of unique words in all comments, with each entry indicating the presence of a particular word in a comment, adjusted with a term-frequency-inverse-document-

frequency procedure (Deerwester et al. 1990) and reducing the dimension of the vector to 50.[22] The cosine between any two vectors, each representing a comment, is the measure of similarity that we use: the closer the cosine is to one, the more similar the two comments are. Figure 9 reports our analysis. We ordered all comments by whether they corresponded to a condition without or with salient tradeoffs and, within a tradeoff salience group, by whether the respondents expressed support for the price control or unregulated price regime. We paired each comment with the comment that the procedure estimated to be the most similar (highest cosine). We assess whether comments within a given tradeoff salience condition and within a regime preference are more similar to each other than to comments in other groups. The graph presents a heat map where we pool comments in groups of two hundred and calculate the share in that subset that has their most similar comments in any of the other subsets. Darker red shades indicate higher shares. The grid within the graph separates comments by tradeoff salience condition and scenario choice. The surface inside each cell of the grid on that diagonal is visibly darker than the other areas of the colored surface. The two darkest areas correspond to the respondents who preferred the unregulated price regime, with and without salient tradeoffs. Overall, respondents bring similar and consistent motivations for their choices, and these arguments are considerably different, in content and nature, by tradeoff salience condition and scenario choice. Those who expressed a preference for unregulated prices are, as a group, especially consistent and homogenous in their motivations.

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[22] In Stata, we rely on the command lsemantica (Schwarz 2019). Changing the dimension of the vectors (e.g. to 100) does not affect our findings.

Figure 9: Similarity among comments

Notes: Both on the x-axis and on the y-axis, each value between 1 and 6,362 represents a comment, after we sorted the dataset by tradeoff salience, scenario choice, and unique identifier of the respondent. Each cell in the heatmap represents a group of 200 comments after the sorting. The darker each cell, the higher the frequency of comments in that group whose most similar comment is in that group too. We computed similarity between each pair of comments via a Latent Semantic Analysis whereby we transformed each comment in a vector with a dimension equal to the number of unique words in all text corpus, with each entry indicating the presence of a particular word in a comment, adjusted with a term-frequency-inverse-document-frequency procedure (Deerwester et al. 1990). The Stata command is lsemantica. We excluded the stopwords in the list stopwords_en included in the Stata ngram package, as well as several other common words. We reduced the dimensionality of the matrix to 50. The vertical and horizontal lines within the heatmap separate the comments by tradeoff salience conditions and scenario choice by the respondents.

Finally, we conduct a topic modeling analysis (Latent Dirichlet Allocation, LDA), to identify what the overall major topics in the comments are.[23] We experimented with setting different numbers of topics in the procedure; we found that assuming four or more topics resulted in overlapping sets of characterizing words, making it difficult to infer an underlying argument. With three topics, the main keywords in each of them are different enough (see Table B4 in the Appendix) to allow us to establish different motives: we label them "fairness/exploitation", "access/affordability", "market/freedom", and "fairness/exploitation". Figure 10 shows that our

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[23] We use the Stata command ldagibbs (Schwarz 2018).

findings are consistent with those from the keyword, bigram and sematic similarity analyses. When tradeoffs are not salient, supporters of price controls and unregulated prices differ substantially in the arguments they raise to motivate their choices, with supporters of price controls being much more focused on arguments about fairness, exploitation, and affordability. In contrast, motivations based on the functioning of markets and freedom strongly dominate the open answers of those who support unregulated prices. The salience of tradeoffs significantly softens the differences in arguments between the two groups.

Figure 10: Estimated probability that a topic appears in an open comment, by scenario choice and salience of tradeoffs in wave 1
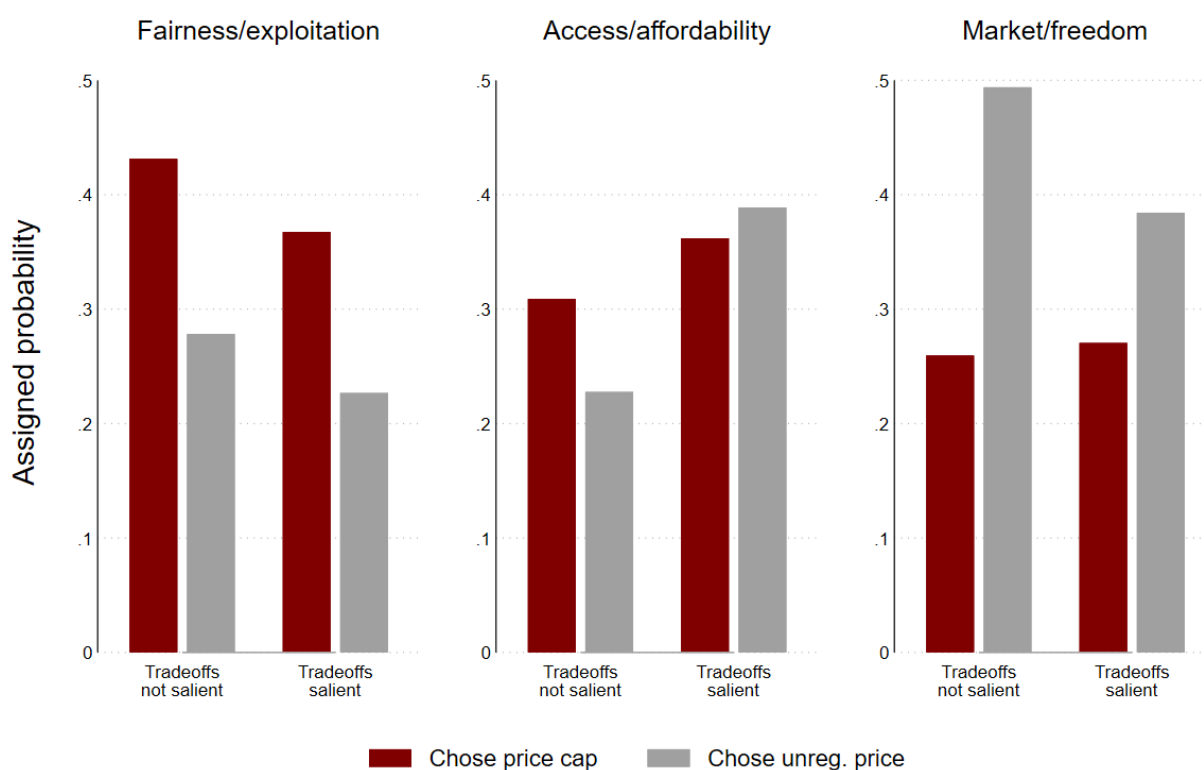
Notes: The graphs report the estimated probability that a topic appears in a comment. The responses are grouped by scenario choice of the respondents and whether the respondent reads scenarios with or without salience to tradeoffs. We applied Latent Dirichelet Allocation (LDA) to the text of all answers to the open-ended question in the survey that asked to motivate the fairness and morality judgments for each version of a scenario, and the choice of one of the versions. We used the ldagibbs command in Stata (Schwartz 2018). See Appendix Table B4 for more details.

4.2 Interpreting the tradeoff, cost, and pandemic effects

The main finding of this study concerns the large effect that including considerations about economic consequences and tradeoffs between policy regimes has on the support of unregulated prices versus price controls, the moral reactions the scenarios generate, the characteristics of the individuals who supported each scenario, and the motivations that respondents give to explain their preferences. The descriptions of the economic consequences of unregulated or controlled prices highlight general economic and social tradeoffs. However, to make the scenarios precise and avoid ambiguity, we included specific number figures to indicate the shares of consumers that would be served in each scenario and pricing regime. The addition of these specific figures, however, may influence responses not only because it makes tradeoffs more noticeable and prominent in the minds of respondents, but also because it reduces the uncertainty that participants might have about the outcomes in the two policy regimes. The analysis of the open comments may help us identify whether the effect of adding these descriptions occurred because participants reflected in general about the tensions between different economic effects, or reacted in particular to the specific, quantitative information that we included. Figure B9 in the Appendix shows the frequency of use, in the comments, of generic terms that indicate attention to the economic consequences in general (increase, raise, higher, better), and words – or, rather, numbers – that indicate attention to specific, quantitative information that was in our vignettes. The specific figures about prices and shares included in the vignettes appears in a negligible share of comments. More generic terms are significantly more frequent. Overall, the vast majority of respondents did not stress the specific quantitative information; this suggests that they were more affected by the explicit description of general economic consequences and tradeoffs, which likely were not salient in their minds unless described directly.

Appendix Figure B10 reports the relative frequency of use of the terms "cost", "additional costs" "pandemic" and "covid" in the comments, according to the assignment to a condition with or without cost factors, or to a condition that referred to a pandemic being at the origin of the sudden demand increases. In both cases, we want to assess whether respondents actually paid attention to these details of the texts. Recall that there were significant differences in preferences for unregulated prices according to whether a scenario explicitly mentioned that the company was incurring higher unit costs to produce and distribute the extra quantities. Conversely, framing the scenarios in a pandemic context did not have significant effects. An explanation for the lack of this

latter effect is that the respondents' preferences are general and not specific to health emergencies. An alternative explanation, however, is that conducting the survey *during* a disease pandemic might have made all respondents prone to interpret the scenarios as related to the pandemic itself, regardless of whether we mentioned it or not. The evidence reported in Figure B7 suggests, first, that respondents did pay attention to those experimental manipulations: they mentioned the words cost and pandemic much more often in the salient cost and pandemic conditions, respectively. The unequal frequency with which respondents used the term pandemic in the pandemic and no-pandemic conditions, and in particular the very rare occurrence of this term in the no-pandemic condition (only 1.5% of the comments), further suggests that living through a pandemic, per se, was not relevant for respondents as far as our survey was concerned. The term "covid" appears only in a handful of comment, moreover. As such, we conclude that the lack of a pandemic effect in our survey is more likely to indicate that the preferences that the respondents expressed have a more general valence.

4.3 Experimenter demand effects

We rely on the textual analysis of the comments also to investigate whether the primary survey responses of interest, and the motivations that participants reported in the comments, reflect experimenter demand effects. For example, we collected the moral reactions of the participants before asking them to openly describe the reasons for their choices. This order of questions might have led participants to focus their writing on issues related to fairness or moral acceptability, i.e., the topics of the closed questions about their moral views of each scenario. The frequency, semantic, and topic analyses that we described above lend limited support to this possibility. The term "fair" is frequent in the comments, but the respondents decline it largely in terms of exploitation and the risk of taking advantage of consumers, even though we did not mention this interpretation in the questions. Participants, moreover, mention more frequently other non-obvious terms, such as gouge, profit, market, and free, which were not present in the text of the preceding questions. The overall content and topic in the comments differ according to the assigned conditions and the choices of the respondents; if demand effects were prevalent, we would have seen a more uniform use of terms mentioned in the questions. More generally, although we find large and systematic differences in the use of certain words and expressions, the frequency of these

characterizing terms is never extremely high; respondents use a quite diverse vocabulary that is not restricted to the terms we employed in the preceding questions.

Finally, Appendix Figures B11 and B12 show the correlation between the score of relative fairness to consumers and moral acceptability of the unregulated price scenario, respectively, and the share of comments that included certain terms. The correlations of the relative ratings with terms reported in the moral reaction questions, such as Fair*, Moral*, Accept*, and Unaccept*, are low. In contrast, there are stronger associations between these relative moral ratings and the use of other terms, such as Goug*, Profit*, Market* and Free*. Overall, we conclude that demand effects are likely not a concern in our study and the interpretation of the findings.[24]

5. Additional results

5.1 The effect of tradeoff salience within subjects

Our primary analyses rely on between-subject variation, where we estimate a large positive effect of tradeoff salience on support for unregulated prices thanks to the random assignment of each respondent, in wave 1, to a scenario with or without tradeoff salience. We can use the evidence from wave 2 to compare the between- and within-individual effect. Recall that respondents in wave 2 of the survey received the same scenario they saw in wave 1, except that the tradeoffs were salient to every respondent in this second round. All other scenario features were the same in both waves; as such, our specific interest is in comparing the tradeoff salience effects in the between- and within-subject analyses. Figure 11 shows that support for unregulated pricing for respondents who saw a scenario without salient tradeoffs in wave 1 was about 20% in that wave and roughly 40% in wave 2. The support for unregulated pricing by the respondents assigned to scenarios with salient tradeoffs in both the first and second wave was around 40% in each wave.

In the first column of Table 7 we report, for comparison, the parameter estimates from our main regression specification for wave 1 -- the same as in column (1) of Table 3. The estimates in column (2) are from the same model, but the sample includes only respondents who participated in both waves. The estimates of the tradeoff effect are very similar in (22.77 and 23.17, respectively). Column (3) displays results from a regression with data from both waves, again including only respondents who participated in both surveys. Because all respondents in wave 2

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[24] De Quidt et al. (2018) show that experiment demand effect are likely to be modest, overall.

saw scenarios with salient tradeoffs, the variation in tradeoff salience from wave 1 identifies the coefficient of interest—a within-subject variation.[25]

Figure 11: Support for unregulated price scenarios in waves 1 and 2 by tradeoff salience in wave 1
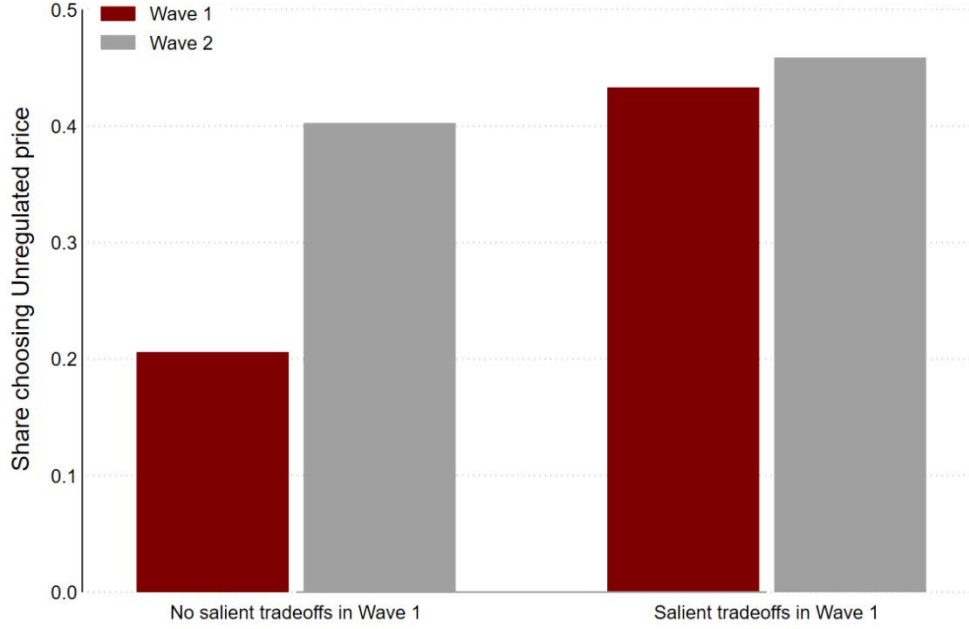
Notes: The sample includes participants who responded to both survey waves. In the second wave, all participants read scenarios with salient tradeoffs.

Again, the estimated effect of salient tradeoffs (23.06) is very similar to those in columns (1) and (2). In a model that includes individual fixed effects, the estimated effect of the salience of tradeoffs is 17.08 (column (4)). Therefore, overall, the effect of the salience of tradeoffs on the approval of unregulated pricing is similar between and within participants.[26]

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[25] Let $Y_{WT} = \alpha + \beta TO + \gamma W2$, where $TO = 1$ if the observed scenario includes salient tradeoffs, and zero otherwise, and $W2 = 1$ if the observation is in wave 2 and is zero if in wave 1. This implies that $Y_{W2=0, TO=0} = \alpha$; $Y_{W2=0, TO=1} = \alpha + \beta$; $Y_{W2=1, TO=1} = \alpha + \beta + \gamma$. Note that there are no observations with $W2 = 1$ and $TO = 0$. Therefore, the difference-in-differences of interest is $(Y_{W2=1, TO=1} - Y_{W2=0, TO=0}) - (Y_{W2=1, TO=1} - Y_{W2=0, TO=1}) = (\alpha + \beta + \gamma - \alpha) - (\alpha + \beta + \gamma - (\alpha + \beta)) = \beta$, that is, the coefficient on the salient tradeoff indicator TO.

[26] Appendix Figures B13-B15 report findings from text analyses of the open comments in waves 1 and 2 together, limited to the respondents who participated to both waves. The analyses are similar to those reported in Figures 7, 9 and 10 above, and so are the findings.

Table 7: Support for unregulated price scenario in waves 1 and 2: Regression estimates

	All respondents in Wave 1	Respondents in Wave 1 who participated in Wave 2	Respondents to Waves 1 and 2	
Outcome:		100 if chose Unregulated price, 0 if chose Price control		
Sample:				
	(1)	(2)	(3)	(4)
Drug	-18.80***	-19.01***	-16.81***	
	(1.54)	(2.52)	(2.12)	
Sanitizer	-11.27***	-10.31***	-6.66***	
	(1.58)	(2.61)	(2.23)	
Moisturizer	-7.17***	-6.28**	-7.11***	
	(1.61)	(2.63)	(2.19)	
Salient tradeoff	22.77***	23.17***	23.06***	17.08***
	(1.09)	(1.77)	(1.77)	(3.13)
Cost increase	4.74***	2.86	5.58***	
	(1.09)	(1.78)	(1.50)	
Pandemic	-1.59	-5.07***	-5.52***	
	(1.09)	(1.77)	(1.50)	
Canadian	-2.58**	-2.81	-2.10	
	(1.09)	(1.78)	(1.51)	
Constant	29.63***	31.77***	29.15***	23.46***
	(1.59)	(2.61)	(2.31)	(1.70)
Individual fixed effects				x
Observations	6,760	2,538	5,076	5,076
R-squared	0.084	0.086	0.063	0.669

Notes: In the second survey wave, all participants read scenarios with salient tradeoffs. The parameter estimates are from OLS regressions. Column (1) displays the same estimates as in column (2) of Table 2. Column (2) reports estimates from the same econometric specification as the estimates in column (1) but is limited to the responses, in wave 1, of the participants who took part in the survey in both waves. The estimates in columns (3) and (4) are from a regression that includes data from both waves, with two observations (one per wave) for each participant. Because we multiply the outcome variable indicator by 100, the reported figures correspond to estimated percentage point changes. Robust standard errors for the estimates in columns (1) and (2), and clustered by respondent for the estimates in column (3) and (4), are in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

5.2 The no-reason scenarios

In the Appendix, we report findings from the analysis of the responses to versions of the surveys where the market scenarios did not indicate any reason for the price increases. The objective of this additional condition was to investigate whether the respondents' choices and reasoning about price increases in the absence of any context differ from scenarios that included a reason for the price increase. On the one hand, in the absence of any explanations, individuals may presume that the higher prices are a response to demand changes, and as such, they end up penalizing consumers. If this is the prevailing conjecture, then their reaction to the no-reason scenarios should be similar to their reaction to the "no salient tradeoffs" conditions. On the other hand, if individuals view

prices as indicators of relative scarcity that guide consumption, production, and investment decisions, we would expect them to include a broader set of economic considerations in their reasoning; in this case, their responses would be closer to the respondents assigned to the "salient tradeoffs" scenarios.

Appendix Table B5 and Figures B16-B19 show that the choices of these respondents, their moral reactions, and the arguments they brought to motivate them are much more similar to those of the respondents who received scenarios without salient tradeoffs than those who evaluated scenarios with salient tradeoffs. Supporters of unregulated pricing when no context is provided focus even more on ideological arguments than those who read scenarios that described reasons for the price increases but did not make tradeoffs salient. Those respondents stressed arguments about the positive role of markets in society and the value of freedom. Therefore, an "economics textbook" perception of prices is not immediate for most respondents regardless of what information on context and the reasons for prices changes is provided to them.

5.3 Income and time preferences

In addition to analyzing the impact of our experimental manipulations on the moral reaction to, and the preference for one or the other version of each market scenario and, we were interested in assessing the relationship between the support of a price regime and respondents' overall attitudes toward the role of the market and the state in the economy.[27] As additional analyses, we consider here two other factors, among those that we measured in the survey, that might plausibly correlate with the respondents' preferences for a given pricing regime.

One such factor is a participant's economic status. Individuals with a low income, for example, might perceive price increases as more problematic because they may be more affected by this change. Appendix Table B6 shows that this is the case in our data. The support for unregulated pricing increases for higher-income brackets; the difference is large and statistically significant between individuals with annual incomes above and below $80,000 (on average, a 7 percentage-point difference). However, the effect of tradeoff salience is the same across the income spectrum, and moral reactions to the different scenarios do not differ systematically by income nor does their distribution and polarization according to tradeoff salience or the preferred market scenario (Figure

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[27] The analyses that we listed here are those that we included in our pre-registration.

B16). In regression models where we also add the pro-market attitude score, the coefficient estimates on the various income brackets decrease considerably and are generally not statistically different from zero. In fact, the pro-market attitude score is strongly correlated with income (as well as with political preferences, especially on economic issues). Overall, economic status is thus positively correlated with support for unregulated pricing, but this difference does not provide any additional insight beyond what our key variables explain.

Time preferences may also reasonably affect preferences for a pricing regime. In the scenarios concerning the pharmaceutical drug and the treadmill, when tradeoffs are salient, the economic consequences occur over time. In the short term, freely adjusting prices create more rationing than in a price control regime, whereas the opposite is true in the long term. As such, a more "patient" person may be more likely to support unregulated pricing.

To see how time preferences affect respondents' choices, we included a question from Falk et al. (2016) that produced a self-reported measure of patience. The regression estimates in Table B6 include, on the right-hand side, the time preference score and its interaction with the indicator for the salience of tradeoffs. We also ran separate analyses for each of the two products where tradeoffs emerged over time. This measure of patience does not have any explanatory power on the preference for a given pricing regime, nor does the effect of tradeoff salience interact with time preferences for any of the products. Thus, differences in time preferences are not relevant to describing the attitudes toward unregulated prices or price controls.

6. The donation experiment

In our incentivized donation module in the second round of the survey, respondents had the opportunity to earn an extra $1 if they allowed the researchers to donate $1 to the Future of Freedom Foundation (FFF). This organization supports free markets, believes that the market price is always "just," and is against regulations such as price caps in emergency situations. Thus, respondents who did not allow the researchers to donate effectively paid a monetary cost to avoid supporting unregulated pricing.

Figure 12 shows the donation rates by scenario choice. The low overall donation rate is consistent with the aversion to unregulated prices that the majority of respondents expressed in the survey. Moreover, respondents who chose the unregulated price in our survey experiment were less likely to allow the researchers to donate to FFF than those who chose the price control option

(30% versus 40%; *p*-value of the difference < 0.01). Figure 13 displays the donation rates of participants according to their sequence of scenario choices in waves 1 and 2. This more detailed breakdown shows that those who supported price controls in both survey rounds (about 46% of participants) signaled a significantly lower propensity to donate. Their strong, repeated (stated) opposition to letting prices adjust freely thus corresponds to a higher willingness to forgo the bonus payment to avoid providing financial support to a pro-market foundation.[28]

Figure 12: Donation rates by scenario choice in wave 2
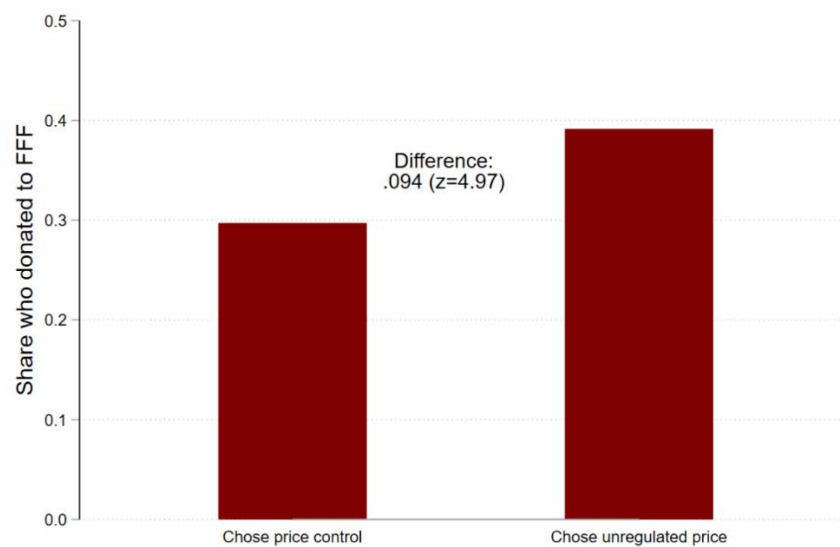
Notes: The figure shows the share of participants in the wave 2 survey who allowed the researchers to donate $1 to FFF, the Future of Freedom Foundation (in exchange for a $1 bonus), separately by those who selected the unregulated price scenario and those who chose the price control scenario. The z-score refers to a test of difference in proportions (*p*<0.01).

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[28] Within each category of participants in terms of their scenario preferences in each wave, those who agreed to support the FFF also reported stronger pro-market attitudes than those who did not agree to the donation. There was no difference in donation frequency by income of the respondents.

Figure 13: Donation rates in waves 1 and 2, by scenario choice in each wave and salience of tradeoffs in wave 1
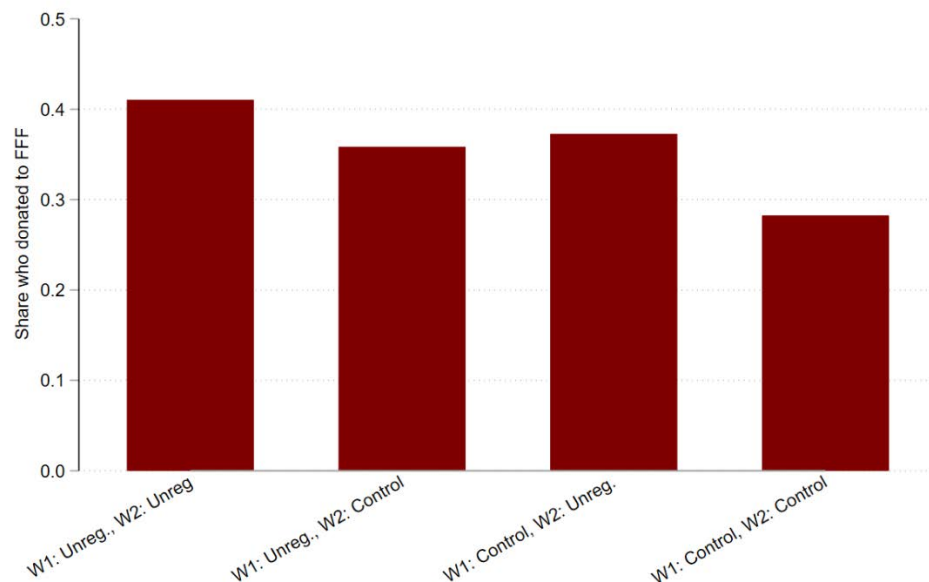
Notes: The figure shows the share of participants in the second survey wave who allowed the researchers to donate $1 to the Future of Freedom Foundation (in exchange for a $1 bonus), by sequence of scenario choice (unregulated price or price control) and separately by whether respondents received a scenario with or without salient tradeoffs in wave 1.

7. Conclusions

Our findings support the claim that people attribute moral valence to prices, instead of perceiving them as just signals of relative scarcity. Consistent with prior studies, price spikes in response to demand increases receive widespread opposition and generate moral aversion, mainly from concerns for fairness toward and exploitation of consumers. Moreover, ideological positions about the role of markets and the government in society significantly affect the perceptions and acceptance of price surges. However, when made explicit, economic tradeoffs considerations substantially increase the public's acceptance of price adjustments in response to demand surges. In particular, we find that people are more likely to tolerate price surges when they result in a shortage being alleviated or more supply becoming available at a lower price in the future. Ethical judgments are also affected by economic considerations. Specifically, if higher prices result in greater product availability across markets or over time, people's moral reactions are more positive and less polarized. Greater awareness about the drivers of companies' pricing decisions and their potential consequences for consumers' access to products may therefore induce less extreme views

about the role of the price mechanism in governing the economy. Less ideological and moral polarization may, in turn, improve the political discourse. These findings and interpretations are consistent with Sunstein's (2018) claim that considerations about the costs and benefits of certain policies reduce the influence of ideology on preferences for different regimes. The softening of moral reactions may also derive from a greater reliance by individuals on their "system 2" thinking (Kahneman 2011), reducing the appeal to pre-existing beliefs, or from a greater willingness to compromise between extreme views (Guzmán et al. 2022, Lieberman and Shenouda 2022).

Despite the large positive impact of explicit cost-benefit considerations on the acceptance of the free price mechanism to organize markets, most respondents, even when assigned to scenarios with salient tradeoffs, did not support a "laissez-faire" solution to demand surges. This suggests that this opposition is rooted in strong beliefs and norms whose violation could represent a cost to society. The public may therefore support policy choices and organizational practices that improve the functioning of markets and that reduce the likelihood of price spikes. These might include policies that reduce market power and dominant positions, and that credibly make markets more open and competitive, helping to shorten periods in which prices remain high. Also, the recent interest toward shaping a more "resilient" economy includes recommendations to build diversified supply chains and to allow for "redundancies" in manufacturing capacity or emergency stockpiles by companies and governments, particularly for essential goods (for which we document the strongest opposition to unregulated pricing solutions), and which would essentially "flatten" supply curves thereby reducing price increases in response to demand shocks.[29] Price surges, moreover, do not occur only during emergencies such as pandemics or natural disasters. From ride-sharing companies to airlines, firms use algorithms that adjust prices up or down depending on demand and supply conditions. In fact, the growing reliance on algorithmic pricing will likely multiply the cases in which automatic adjustments do not align with other societal values.[30]

More broadly, this study advances our understanding of the determinants of social support for markets and certain economic activities.[31] Although contemporary societies rely on market exchanges to function, many people find that certain transactions violate community or moral norms and wish to prohibit or place restrictions on them (Kahneman et al., 1986; Roth, 2007).

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[29] See, for example, Iakovou and White (2020), Martin (2019), and White House (2021).
[30] See, for example, Moriarty (2021), PricewaterhouseCoopers (2020), Seele et al. (2021), and Turilliazzi (2020).
[31] See Ambuehl (2017), Bénabou et al. (2020), Elias et al. (2019), Roth and Wang (2020) and Sullivan (2020).

Prohibition or regulation, however, may have unintended welfare consequences. Therefore, it is important to understand how people navigate the possible tradeoffs implied by different policy choices. Alsan et al. (2021) and Elias et al. (2019) adopt a similar approach to investigate how concerns about health safety affect attitudes toward temporarily suppressing civil liberties and how social support for payments to kidney donors responds to different hypothesized effects on the number of transplants, respectively. Stantcheva (2021) studies how people understand tax policies and weigh different principles, such as efficiency and fairness, and Landier and Thesmar (2022) investigate how individuals solve tradeoffs between an economically efficient situation and a pro-social objective.[32] Our study also contributes to a growing literature in economics that obtains insights from surveys and the analysis of free text. Ferrario and Stantcheva (2022) stress the importance of including open-ended questions in social surveys to better gauge peoples' views through natural-language processing techniques, and to assess the robustness of the experimental design. The revived interest in surveys represents promising progress for the economics discipline. These surveys broaden our knowledge of popular beliefs, opinions, and preferences about issues that are as important as they are hard to measure unless one directly asks. If properly designed to allow for causal identification, these investigations can help to shape policies that are both evidence-based and "bottom-up" or participatory and, as such, likely more thorough and accepted by the public.

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[32] In addition, see Benjamin et al. (2021), Benjamin et al. (2017), Benjamin et al. (2014), Fisman et al. (2020), Fisman and O'Neill (2009), Heffetz (2021), and Kuziemko et al. (2015) for additional recent survey-based work.

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APPENDIX A: THE SURVEY

PART 1: CONSENT SCRIPT

This study on "**Understanding public opinions on markets**" is conducted by university-based researchers. The study was approved by the Homewood Institutional Review Board of Johns Hopkins University and the Office of Research Ethics of the University of Toronto. In the survey we will ask you to **express your opinions regarding the pricing of certain goods under different scenarios**, as well as other questions regarding your characteristics and preferences.

Note that all of the answers that you provide will remain **anonymous and treated with absolute confidentiality**. The researchers do not know your identity, and they will not be able to match your name with the answers that you provide.

It should take you about **10 minutes** to complete the survey diligently. Payment is conditional on diligently completing the entire survey; however, withdrawal is possible at any time if you so desire (any data collected will be destroyed). By completing this survey or questionnaire, you are consenting to be in this research study. **Your participation is voluntary and you can stop at any time**.

The investigators, Drs. Nicola Lacetera and Mario Macis can be contacted for questions. Contact information for Dr. Lacetera: nicola.lacetera@utoronto.ca. Contact information for Dr. Macis: mmacis@jhu.edu. If you have questions about your rights as a research participant, you may contact the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580, e-mail: hirb@jhu.edu, or the Office of Research Ethics at the University of Toronto at (416) 946-3273 or e-mail: ethics.review@utoronto.ca.

If you agree to participate in this study, please continue. If you do not wish to participate, please close this window and your session will end.

PART 2: INFORMING POLICYMAKERS

[Canada]
After completing the study, we will provide all Members of the Federal Parliament as well as the Minister of Justice and Attorney General a comprehensive report of the findings from this survey about pricing and regulation.
Recall that there is no deception in this study. The letters will actually be sent to the subjects indicated above.
Also recall that, just like any other answer to this survey, your expressions of preference will be completely anonymous. Nobody, not even the researchers, will be able to match your responses to your name or identity.

[US]
After completing the study, we will provide US Congress Representatives a comprehensive report of the findings from this survey about pricing and regulation. We will send the same letter to your State's Attorney General.

Recall that there is no deception in this study. The letters will actually be sent to US House Representatives, Senators, and to the State's Attorney General.

Also recall that, just like any other answer to this survey, your expressions of preference will be completely anonymous. Nobody, not even the researchers, will be able to match your responses to your name or identity.

PART 3: RESPONDENT CHARACTERISTICS

What is your age group as of your last birthday?
- Under 18 *[these respondents would be automatically excluded]*
- 18-29
- 30-39
- 40-49
- 50-59
- 60 or above

Are you
- Male
- Female
- Other (please specify)
- Prefer not to answer

With which racial or ethnic group(s) do you most identify?
- Asian
- Black/African American
- Hispanic/Latino
- White/Caucasian
- Indigenous/First Nation
- Other (please specify)

What is your state [province] of residence?
- [choose from menu]

What is your highest degree of education attained?
[Canada]
- High school degree or lower
- Post-high school, non-bachelor degree (e.g., apprenticeship, CEGEP, college)
- Bachelor's degree or higher

 [US]
- High school degree/GED or lower
- Associates degree or some college
- Bachelor's degree or higher

What is your current relationship status?

- Single
- Unmarried but in a relationship
- Married/Domestic partnership
- Separated/Divorced
- Widow(er)
- Other (please specify)

What is your parental status?
- I have children
- I do not have children

Which of the following best describes your current labor market status?
- Employed full time
- Homemaker
- Employed part time
- Student
- Self-employed/Entrepreneur
- Retired
- Unemployed
- Other (please specify)

Approximately, what was your total household income, in **2019**?
- $0-$19,999
- $20,000-$39,999
- $40,000-$59,999
- $60,000-$79,999
- $80,000-$99,999
- $100,000-$119,999
- $120,000 +

What are your religious beliefs?
- Atheist/Agnostic
- Christian
- Jewish
- Muslim
- Other (please specify)

Have your financial conditions changed because of COVID-19?
- Financial conditions have worsened
- Financial conditions have stayed roughly the same
- Financial conditions have improved

On social policy matters, do you think of yourself as:
- Liberal
- Moderate
- Conservative
- Other (please specify)

On economic policy matters, do you think of yourself as:
- Liberal
- Moderate
- Conservative
- Other (please specify)

[US]
For what presidential candidate did you vote in 2020?
- Donald Trump
- Joe Biden
- Other
- I did not vote
- Prefer not to answer

[Canada]
For which party did you vote in the 2019 Federal Elections?
- Liberal party
- Conservative party
- Bloc Québécois
- New Democratic Party
- Green party
- People's party
- I did not vote
- Prefer not to answer

PART 4: VIGNETTES

[Note: Each respondent received one vignette randomly chosen from the 36 vignettes below]

PHARMACEUTICAL DRUG

NO REASON

Unregulated pricing	Price cap
A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. The company raises the price of the drug to $1,000 per treatment course.	A pharmaceutical company developed a d to treat a certain condition, and was selling the drug for $200 per treatment course. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. The company raises the price of the drug to $1,000 per treatment course.	A pharmaceutical company developed a d to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. As a consequence, demand for the drug increases. The company raises the price of the drug to $1,000 per treatment course.	An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. As a consequence, demand for the drug increases. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company raises the price of the drug to $1,000 per treatment course.	A pharmaceutical company developed a d to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company raises the price of the drug to $1,000 per treatment course.	An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. The company raises the price of the drug to $1,000 per treatment course. About 30% of patients in need manage to obtain the drug in	A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. As a consequence, demand for the drug increases. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and

Unregulated pricing (continued)	Price cap (continued)
the next 12 months. One year later, pharmaceutical companies introduce new drugs for the treatment of the disease. The increased supply and competition drive the price down to $300 per treatment course, and about 80% of patients in need obtain one of the available treatment drugs.	imposes a price cap at $200 per treatment course. About 50% of patients in need manage to obtain the drug in the next 12 months. One year later, this drug is still the only available drug to treat the disease, and again, about 50% of patients in need will obtain the treatment drug.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company raises the price of the drug to $1,000 per treatment course. About 30% of patients in need manage to obtain the drug in the next 12 months. One year later, pharmaceutical companies introduce new drugs for the treatment of the disease. The increased supply and competition drive the price down to $300 per treatment course, and about 80% of patients in need obtain one of the available treatment drugs.	A pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. New evidence shows that the drug is also effective at reducing the severity of another disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course. About 50% of patients in need manage to obtain the drug in the next 12 months. One year later, this drug is still the only available drug to treat the disease, and again, about 50% of patients in need will obtain the treatment drug.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. As a consequence, demand for the drug increases. The company raises the price of the drug to $1,000 per treatment course. About 30% of patients in need manage to obtain the drug in	An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. As a consequence, demand for the drug increases. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent

Unregulated pricing (cont.)	Price cap (cont.)
the next 12 months. One year later, pharmaceutical companies introduce new drugs for the treatment of the new disease. The increased supply and competition drive the price down to $300 per treatment course, and about 80% of patients in need obtain one of the available treatment drugs.	that, and imposes a price cap at $200 per treatment course. About 50% of patients in need manage to obtain the drug in the next 12 months. One year later, this drug is still the only available drug to treat the new disease, and again, about 50% of patients in need will obtain the treatment drug.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company raises the price of the drug to $1,000 per treatment course. About 30% of patients in need manage to obtain the drug in the next 12 months. One year later, pharmaceutical companies introduce new drugs for the treatment of the new disease. The increased supply and competition drive the price down to $300 per treatment course, and about 80% of patients in need obtain one of the available treatment drugs.	An infectious disease pandemic hits a country. Before the pandemic, a pharmaceutical company developed a drug to treat a certain condition, and was selling the drug for $200 per treatment course. During the pandemic, new evidence shows that the drug is also effective at reducing the severity of the new infectious disease. The company incurs higher per-unit costs to produce and distribute additional doses of the drug. The company plans to raise the price of the drug to $1,000 per treatment course. However, the government decides to prevent that, and imposes a price cap at $200 per treatment course. About 50% of patients in need manage to obtain the drug in the next 12 months. One year later, this drug is still the only available drug to treat the new disease, and again, about 50% of patients in need will obtain the treatment drug.

TREADMILL FOR HOME USE

NO REASON

Unregulated pricing	Price cap
A company that produces treadmills specific for home use was selling them at $200 each. The company raises the price of its treadmills to $1,000 each.	A company that produces treadmills specific for home use was selling them at $200 each. The company plans to raise the price of its treadmills to $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
A company that produces treadmills specific for home use has been selling them at $200 each. At some point, more people start exercising at home. As a consequence, the demand for treadmills for home use increases. The company raises the price of its treadmills to $1,000 each.	A company that produces treadmills specific for home use has been selling them at $200 each. At some point, more people start exercising at home. As a consequence, the demand for treadmills for home use increases. The company plans to raise the price of its treadmills $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a company that produces treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. As a consequence, the demand for treadmills for home use increases. The company raises the price of its treadmills to $1,000 each.	An infectious disease pandemic hits a country. Before the pandemic, a company that produces treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. As a consequence, the demand for treadmills for home use increases. The company plans to raise the price of its treadmills to $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
A company that produces treadmills specific for home use has been selling them at $200 each. At some point, ore people start exercising at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company raises the price of its treadmills to $1,000 each.	A company that produces treadmills specific for home use has been selling them at $200 each. At some point, more people start exercising at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company plans to raise the price of its treadmills $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
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DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
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DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
A company that produces treadmills specific for home use has been selling them at $200 each. At some point, ore people start exercising at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company raises the price of its treadmills to $1,000 each. About 30% of customers looking for such a treadmill manage to obtain one in the next 12 months. One year later, more physical exercise equipment producers decide to produce treadmills specific for home use. The increased supply and competition drive the price of treadmills down to $300, and about 80% of customers looking for such a treadmill are able to buy one.	A company that produces treadmills specific for home use has been selling them at $200 each. At some point, more people start exercising at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company plans to raise the price of its treadmills $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill. About 50% of customers looking for a treadmill manage to buy one in the next 12 months. One year later, no other companies have entered the market, and again 50% of customers looking for such a treadmill are able to buy one.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a company that produces treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. As a consequence, the demand for treadmills for home use increases. The company raises the price of its treadmills to $1,000 each. About 30% of customers looking for such a treadmill manage to obtain one in the next 12 months. One year later, more physical exercise equipment producers decide to produce treadmills specific for home use. The increased supply and competition drive the price of treadmills down to $300, and about 80% of customers looking for such a treadmill are able to buy one.	An infectious disease pandemic hits a country. Before the pandemic, a company that produces treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. As a consequence, the demand for treadmills for home use increases. The company plans to raise the price of its treadmills to $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill. About 50% of customers looking for a treadmill manage to buy one in the next 12 months. One year later, no other companies have entered the market, and again 50% of customers looking for such a treadmill are able to buy one.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Before the pandemic, a company that produces	An infectious disease pandemic hits a country. Before the pandemic, a company that produces

treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company raises the price of its treadmills to $1,000 each. About 30% of customers looking for such a treadmill manage to obtain one in the next 12 months. One year later, more physical exercise equipment producers decide to produce treadmills specific for home use. The increased supply and competition drive the price of treadmills down to $300, and about 80% of customers looking for such a treadmill are able to buy one.	treadmills specific for home use was selling them at $200 each. Because of the pandemic, more people exercise at home. The company incurs higher per-unit costs to produce and distribute additional treadmills. The company plans to raise the price of its treadmills to $1,000 each. However, the government decides to prevent that, and imposes a price cap at $200 per treadmill. About 50% of customers looking for a treadmill manage to buy one in the next 12 months. One year later, no other companies have entered the market, and again 50% of customers looking for such a treadmill are able to buy one.

HAND SANITIZER

NO REASON

Unregulated pricing	Price cap
The typical price of hand sanitizer is $4 per bottle. A company raises the price to $20 per bottle.	The typical price of hand sanitizer is $4 per bottle. A company plans to raise the price to $20 per bottle. However, the government decides to prevent that, and imposes a price cap of $4 per bottle.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle.	The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country.	An infectious disease pandemic hits a country.

Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle.	Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit costs of distribution. The company now sells the hand sanitizer it brings to the region at $20 per bottle.	The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit costs of distribution. The company plans to sell the hand sanitizer it brings to the region at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company now sells the hand sanitizer it brings to the region at $20 per bottle.	An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company plans to sell the hand sanitizer it brings to the region at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle. About 80% of customers who wish to purchase hand sanitizer are able to do so, whereas 20% are not.	The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle. The company decides to no longer move its inventory to the region with the shortage. About 50% of customers who wish to purchase hand sanitizer are able to do so, whereas 50% are not.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle. About 80% of customers who wish to purchase hand sanitizer are able to do so, whereas 20% are not.	The typical price of hand sanitizer in a certain region is $4 per bottle. The demand for hand sanitizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle. The company decides to no longer move its inventory to the region with the shortage. About 50% of customers who wish to purchase hand sanitizer are able to do so, whereas 50% are not.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory of hand sanitizer from another region to the one with the shortage, and sells it at $20 per bottle. About 80% of customers who wish to purchase hand sanitizer are able to do so, whereas 20% are not.	An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and plans to sell it at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle. The company decides to no longer move its inventory to the region. About 50% of customers who wish to purchase hand sanitizer are able to do so, whereas 50% are not.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company now sells the hand sanitizer it brings to the region at $20 per bottle. About 80% of customers who wish to purchase hand sanitizer are able to do so, whereas 20% are not.	An infectious disease pandemic hits a country. Washing and sanitizing hands helps reducing infections. As a consequence of the outbreak and its uneven spread across regions, hand sanitizer becomes hard to find in stores in the more severely affected areas. The typical price of hand sanitizer is $4 per bottle. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company plans to sell the hand sanitizer it brings to the region at $20 per bottle. However, the local government decides to prevent that, and imposes a price cap of $4 per bottle. The company decides to no longer move its inventory to the region. About 50% of customers who wish to purchase hand sanitizer are able to do so, whereas 50% are not.

HAND MOISTURIZER

NO REASON

Unregulated pricing	Price cap
The typical price of hand moisturizer is $4 per tube. A company raises the price to $20 per tube.	The typical price of hand moisturizer is $4 per tube. A company plans to raise the price to $20 per tube. However, the government decides to prevent that, and imposes a price cap of $4 per tube.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and sells it at $20 per tube.	The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and plans to sell it at $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and sells it for $20 per tube.	An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and plans to sell it for $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand	The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand

| moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit cost of distribution. The company now sells the hand moisturizer it brings to the region for $20 per tube. | moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit cost of distribution. The company plans to sell the hand moisturizer it brings to the region for $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube. |

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, NO SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company now sells the hand moisturizer it brings to the region at $20 per tube.	An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, incurring higher per-unit costs of distribution. The company plans to sell the hand moisturizer it brings to the region at $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube.

DEMAND INCREASE, NO PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and sells it at $20 per tube. About 80% of customers who wish to purchase hand moisturizer are able to do so, whereas 20% are not.	The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory of hand moisturizer from another region to the one with the shortage, and plans to sell it at $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube. The company decides to no longer move its inventory to the region with the shortage. About 50% of

	customers who wish to purchase hand moisturizer are able to do so, whereas 50% are not.

DEMAND INCREASE, NO PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit cost of distribution. The company now sells the hand moisturizer it brings to the region for $20 per tube. About 80% of customers who wish to purchase hand moisturizer are able to do so, whereas 20% are not.	The typical price of hand moisturizer in a certain region is $4 per tube. The demand for hand moisturizer in that region increases unexpectedly, and is currently higher than the local availability. A company decides to move some of its inventory to that region, incurring higher per-unit cost of distribution. The company plans to sell the hand moisturizer it brings to the region for $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube. The company decides to no longer move its inventory to the region with the shortage. About 50% of customers who wish to purchase hand moisturizer are able to do so, whereas 50% are not.

DEMAND INCREASE, PANDEMIC, NO SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and sells it for $20 per tube. About 80% of customers who wish to purchase hand moisturizer are able to do so, whereas 20% are not.	An infectious disease pandemic hits a country. Because of the pandemic, more people spend time at home, which causes their skin to be dry. As a consequence of the outbreak and its uneven spread across regions, hand moisturizer becomes hard to find in stores in the more severely affected areas. The typical price of hand moisturizer is $4 per tube. A company decides to move some of its inventory to one of the regions where the disease is more widespread, and plans to sell it for $20 per tube. However, the local government decides to prevent that, and imposes a price cap of $4 per tube. The company decides to no longer move its inventory to the region with the shortage. About 50% of customers who wish to purchase hand moisturizer are able to do so, whereas 50% are not.

DEMAND INCREASE, PANDEMIC, SALIENT COST FACTORS, SALIENT TRADEOFFS

Unregulated pricing	Price cap
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MORALITY JUDGMENTS AND CHOICE

Respondents saw each version of their assigned scenario sequentially – first the "unregulated pricing", then the "price cap" version. For each version, they were asked the following three questions:

Using the slider below, please rate this scenario as:

Completely unfair to customers   Completely fair to customers
       -10_____0_____+10

Completely unfair to the company   Completely fair to the company
       -10_____0_____+10

Completely morally unacceptable   Completely morally acceptable
       -10_____0_____+10

Next, respondents were shown the two versions of their assigned scenario side-by-side, and they were asked the following two questions:

We now ask you to select, among the two scenarios described above, the one that you would prefer to have in place in your country.
- [scenario 1]
- [scenario 2]

Please briefly describe in the space provided the main reason(s) for your answers and choice above [open answer]

PART 5: ATTITUDES TOWARD MARKETS AND REGULATION

Please answer the following questions by placing the sliders in the position that best represents your view on each specific topic.

Some people think that the market system leads to an unfair distribution of income and other resources. Others think that the market system is fair in rewarding productivity and hard work. Which of these views is closer to your own view?

The market system is extremely   Neither fair nor unfair   The market system is extremely
unfair   fair
-10_____0_____+10

Some people think that the market system is essential to encourage innovation and promote economic growth. Others think that the market system is harmful to innovation and economic growth. Which of these views is closer to your own view?

The market system is harmful   Neither   The market system succeeds
to innovation and economic   promotes   at encouraging innovation
growth   nor harmful   and promoting economic
                             growth
-10_____0_____+10

Some people think the government should do more to solve people's problems. Others think that the government does too many things that should be left to individuals and businesses (where "government" includes federal, state, and local). Which of these views is closer to your own view?

The government should do   The government is currently   The government is doing way
much more   providing the right amount   too much
            of intervention

-10_____0_____+10

[NOT INCLUDED IN WAVE 2]
For each of the following products or services, please indicate whether you think there should be more government intervention (where "government" includes federal, state, and local) or whether the provision
should be left to the market system.

Pharmaceutical drugs

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Health care services

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Home fitness equipment

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Personal hygiene and beauty products

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Hand sanitizer, face masks and other protective equipment

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Electronics

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

Education

The government should
do much more to ensure access

There is currently the right
balance of market-based
provision and government
support

Provision should
be left entirely
to the market system

-10_____0_____+10

PART 6: PERCEPTION OF IDEOLOGICAL OR POLITICAL BIAS

Did you feel this survey was politically biased?
- Yes, left-wing biased
- Yes, right-wing biased
- No, not politically biased

Did you feel this survey was ideologically biased?
- Yes, pro-market biased
- Yes, pro- government regulation BIASED
- No, not ideologically biased

PART 7: MORALITY, TIME PREFERENCES, TRUST, ALTRUISM
[NOT INCLUDED IN WAVE 2]

Now we want to ask you a different type of question that helps us better understand how people think about decisions involving life and death. Please consider the following hypothetical scenario:

Casey is a crewperson on a marine-research submarine traveling underneath a large iceberg. An onboard explosion has damaged the ship, killed and injured several crewmembers. Additionally, it has collapsed the only access corridor between the upper and lower parts of the ship. The upper section, where Casey and most of the others are located, does not have enough oxygen remaining for all of them to survive until the submarine has reached the surface. Only one remaining crewmember is located in the lower section, where there is enough oxygen. There is an emergency access hatch between the upper and lower sections of the ship. If released by an emergency switch, it will fall to the deck and allow oxygen to reach the area where Casey and the others are. However, the hatch will crush the crewmember below, who was knocked unconscious and is lying beneath it. Casey and the rest of the crew are almost out of air though, and they will all certainly die if Casey does not do this.

Is it appropriate for Casey to release the hatch and crush the crewmember below to save himself and the other crew members?
- Yes
- No

The next questions will help us to better understand your general attitudes and preferences.

In comparison to others, are you a person who is generally willing to give up something today in order to benefit from that in the future or are you not willing to do so?
Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to give up something today" and a 10 means you are "very willing to give up something today". You can also use the values in-between to indicate where you fall on the scale.

Completely unwilling to give up   Very willing to give up
something today   something today

      0_____10

How well does the following statement describe you as a person? As long as I am not convinced otherwise, I assume that people have only the best intentions.
Please use a scale from 0 to 10, where 0 means "does not describe me at all" and a 10 means "describes me perfectly". You can also use the values in-between to indicate where you fall on the scale.

Does not describe me at all   Describes me perfectly

0_____10

How do you assess your willingness to share with others without expecting anything in return when it comes to charity?
Please use a scale from 0 to 10, where 0 means you are "completely unwilling to
share" and a 10 means you are "very willing to share". You can also use the values in between to indicate where you fall on the scale.

Completely unwilling to share   Very willing to share

0_____10

PART 8: INCENTIVIZED DONATION
[INCLUDED ONLY IN WAVE 2]

We will now give you the possibility to make a donation to the following organization:

"Future of Freedom Foundation"
The mission of the Future of Freedom Foundation is to advance freedom by providing an uncompromising moral and economic case for individual liberty, free markets, private property, and limited government.
Here are some excerpts from a recent Future of Freedom Foundation article on "just prices":
- *A just price is the market price.*
- *A just price is any price based on supply and demand.*
- *A just price includes any price that is raised in times of shortages and natural disasters.*
- *A just price is any price not constrained by some government regulation.*

If you decide to have $1 donated to Future of Freedom Foundation, we (the researchers) will also transfer $1 to you. So, if you decide to donate to Future of Freedom Foundation, you will receive an additional $1. If instead you decide not to donate to Future of Freedom Foundation, you will not receive this additional
payment.

Note: Just like any other answer to this survey, your donation decision will be anonymous. that is, the researchers will be unable to match your donation decision to your name.

So, would you like to have us donate $1 on your behalf to the Future of Freedom Foundation?

- Yes
- No

[SHOWED IN A SEPARATE PAGE AFTER THE RESPONDENTS HAD MADE THEIR DONATION DECISION]:
Please note: Funding for the donation is provided by a University of Toronto grant. The donation option was included purely for research purposes and it does not represent an endorsement of the organization by Johns Hopkins University or the University of Toronto, or by the authors of the study.

We thank you for your time spent taking this survey. Your response has been recorded.

APPENDIX B: ADDITIONAL ANALYSES

Figure B1: Balance analyses
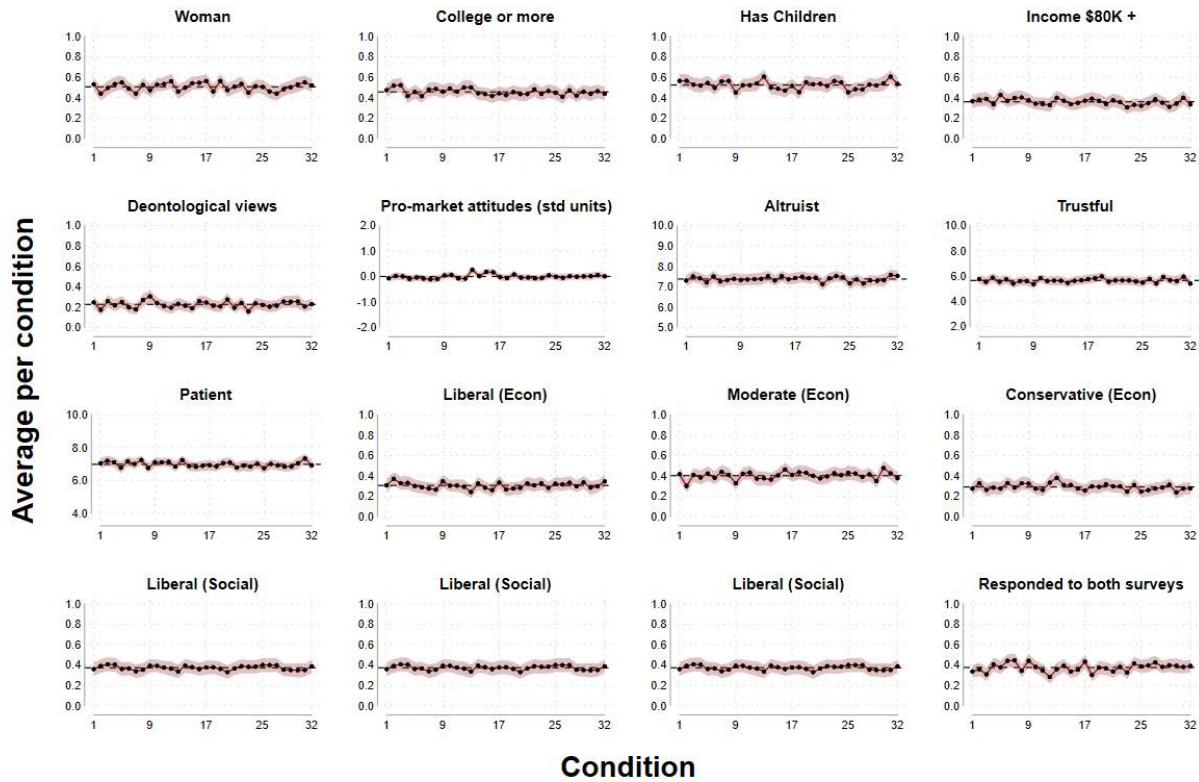
Notes: In each chart, the horizontal axis indicates the thirty-two conditions that result from the cross-randomization of products, salience of costs, context and salience of tradeoffs. The horizontal dashed line indicates the overall average of the variable indicated in the title of the panel; the red line and black dots reports the average of that variable for each condition, and the shaded area represent the 95% confidence intervals around the means.

Figure B2: Correlation between scores on relative fairness to customers and relative moral acceptability of the unregulated price scenarios, by product
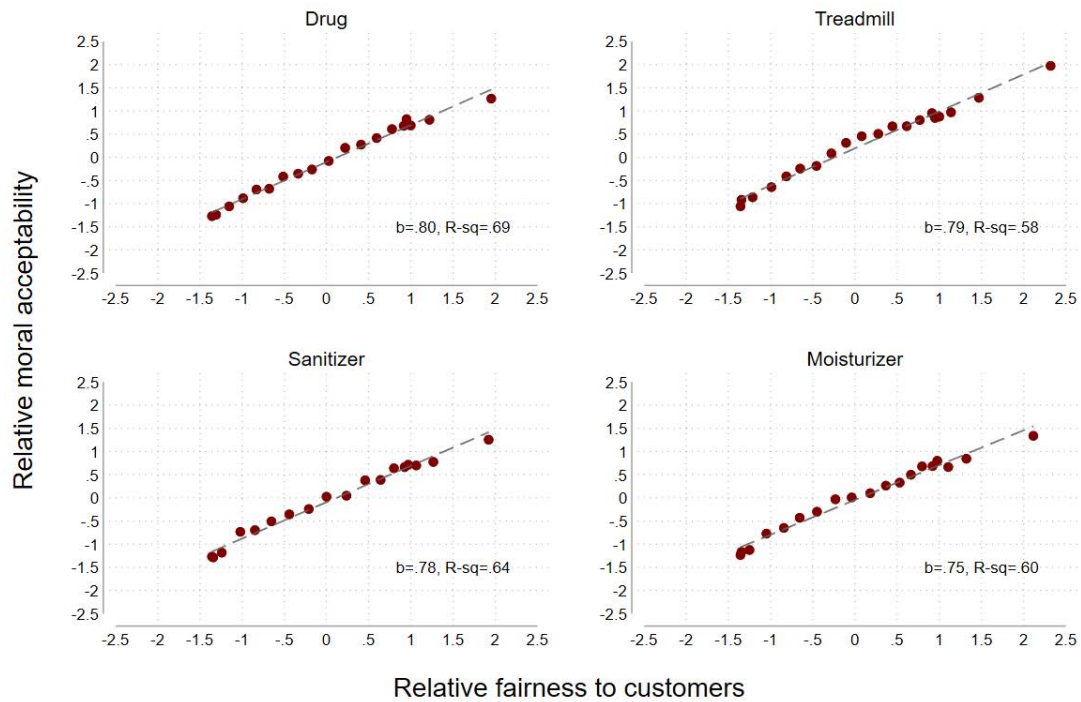
Notes: The graphs report binned scatterplots of the relationship between the relative scores of moral acceptability and fairness to customers of the unregulated price scenario, separately for each of the four products. The values inside each graph refer to the OLS estimate of the slope and the R-squared from the regression of the relative moral acceptability score on the relative fairness to customers score. Values on the y and x-axes are in standard deviation units.
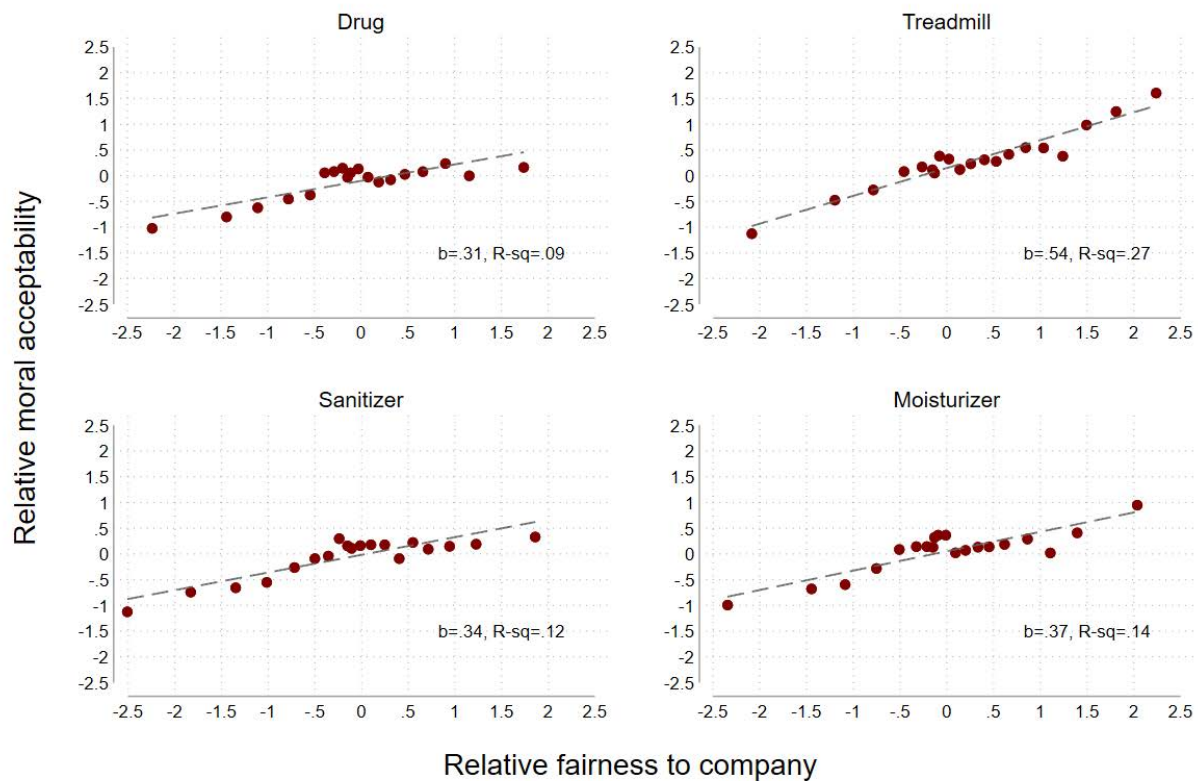
Figure B3: Correlation between scores on relative fairness to the company and relative moral acceptability of the unregulated price scenarios, by product

Notes: The graphs report binned scatterplots of the relationship between the relative scores of moral acceptability and fairness to company of the unregulated price scenario, separately for each of the four products. The values inside each graph refer to the OLS estimate of the slope and the R-squared from the regression of the relative moral acceptability score on the relative fairness to the company score. Values on the y and x-axes are in standard deviation units.

Figure B4: Distribution of *fairness to consumer* scores for each scenario version, by selected version and salience of tradeoffs

Notes: The charts display the distribution of the standardized scores on fairness to the customers that participants reported for each of the two version of their assigned scenario, separately by the version they chose and whether the versions they read includes salient tradeoffs or not. The score cores could take values between -10 and +10, in 0.1 increments, and its average value is -4.39 for the unregulated price version of a scenario, and 3.22 for the price control version. The values on the x-axes are in standard deviation units.

xxx

Figure B5: Distribution of *fairness to the company* scores for each scenario version, by selected version and salience of tradeoffs
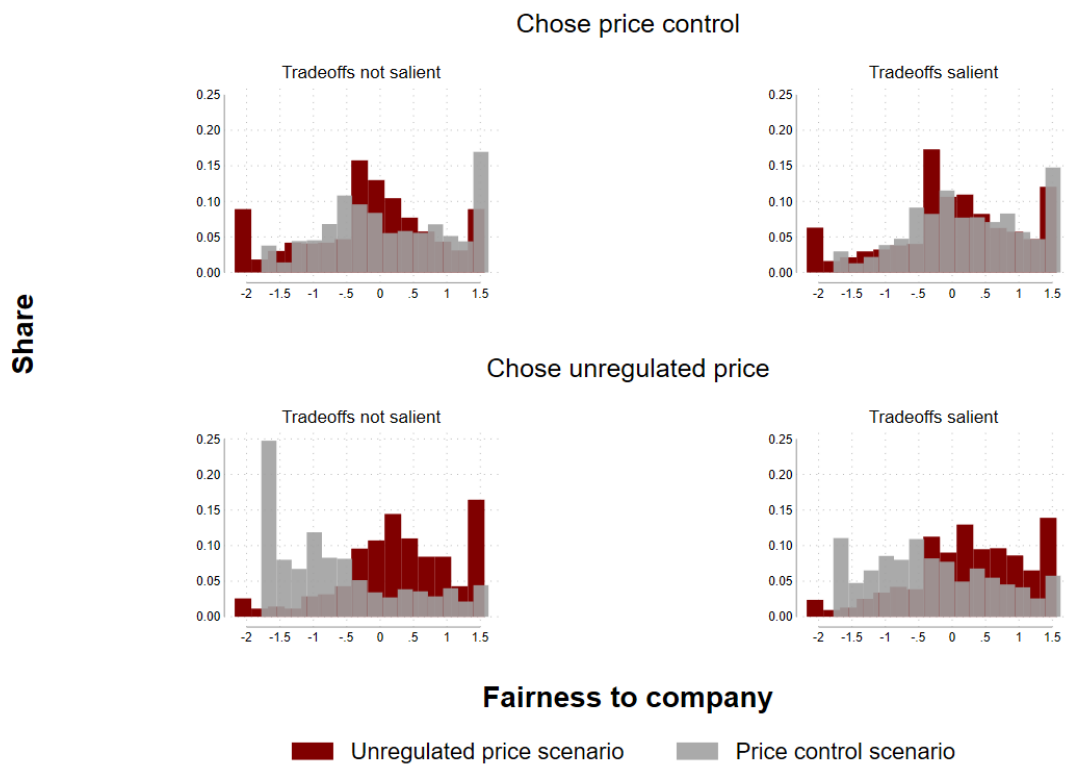
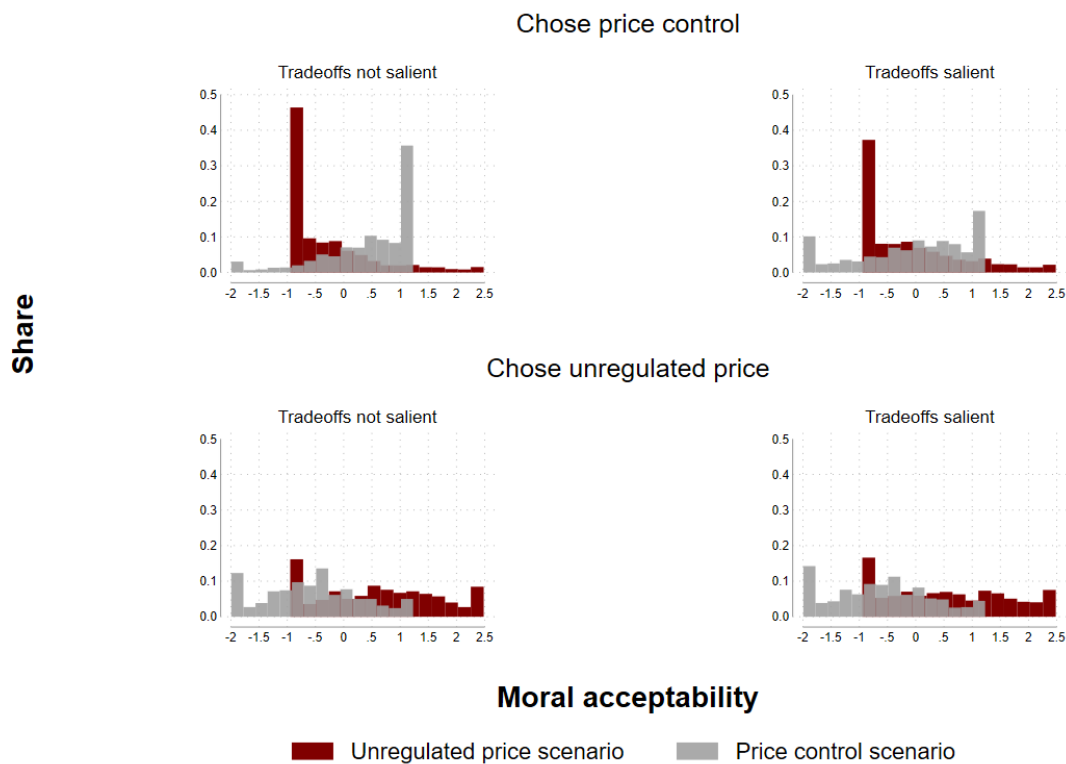*Notes*: The charts display the distribution of the standardized scores on fairness to the company that participants assigned to each of the two version of their assigned scenario, separately by the version they chose and whether the versions they read includes salient tradeoffs or not. The score cores could take values between -10 and +10, in 0.1 increments, and its average value is -1.76 for the unregulated price version of a scenario, and 0.51 for the price control version. The values on the x-axes are in standard deviation units.

Figure B6: Distribution of moral acceptability scores for each scenario version, by selected version and salience of tradeoffs

Notes: The charts display the distribution of the standardized scores on moral acceptability that participants assigned to each of the two version of their assigned scenario, separately by the version they chose and whether the versions they read includes salient tradeoffs or not. The score cores could take values between -10 and +10, in 0.1 increments, and its average value is –4.28 for the unregulated price version of a scenario, and 2.20 for the price control version. The values on the x-axes are in standard deviation units.
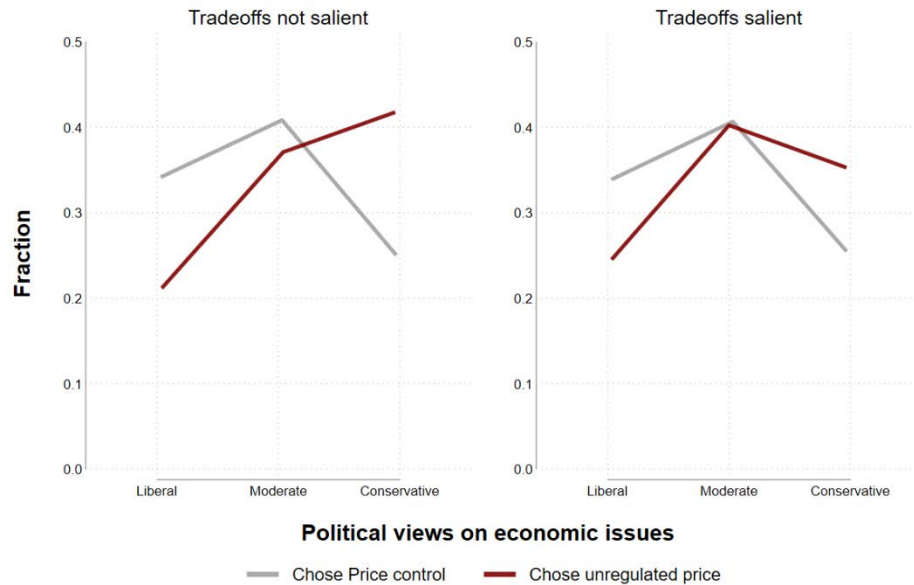
Figure B7: Distribution of political views on economic and social issues, by selected price regime and salience of tradeoffs

A: Views on economic issues

B: Views on social issues
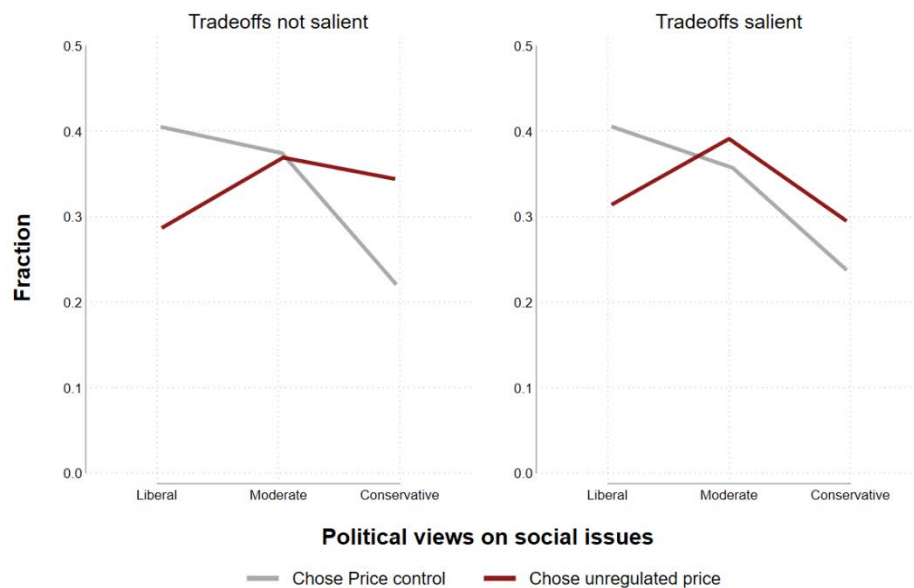
Notes: The graphs display the share of respondents who indicated that their views on economic (chart A) and social (chart B) issues were liberal, moderate or conservative, separately by chosen price regime and salience of tradeoffs in the scenarios that the participants read. The figures exclude the about 3% of respondents who selected the "Other" option in the questions about their views on economic and social issues.

Figure B8: Frequency of key words in open comments in Wave 1, by salience of tradeoffs and scenario choice

Notes: The figure reports the share of open comments in wave 1 that contained the term above each graph. The comments are grouped by whether participants evaluated scenarios with or without tradeoff salience, and by scenario choice. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. The title above each graph reports the stemmed version of each group of words. For example, Monopoli* includes such words as monopoly, monopolization, monopolize.

Figure B9: Frequency of key words in open comments in Wave 1, by salience of tradeoffs and scenario choice

Notes: The figure reports the share of open comments in wave 1 that contained the term above each graph. The comments are grouped by whether participants evaluated scenarios with or without tradeoff salience, and by scenario choice. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. The title above each graph reports the stemmed version of each group of words. For example, "increas" includes such words as increase, increasing, increased.

Figure B10: Relative frequency of use of the terms "cost" and "pandem", by condition
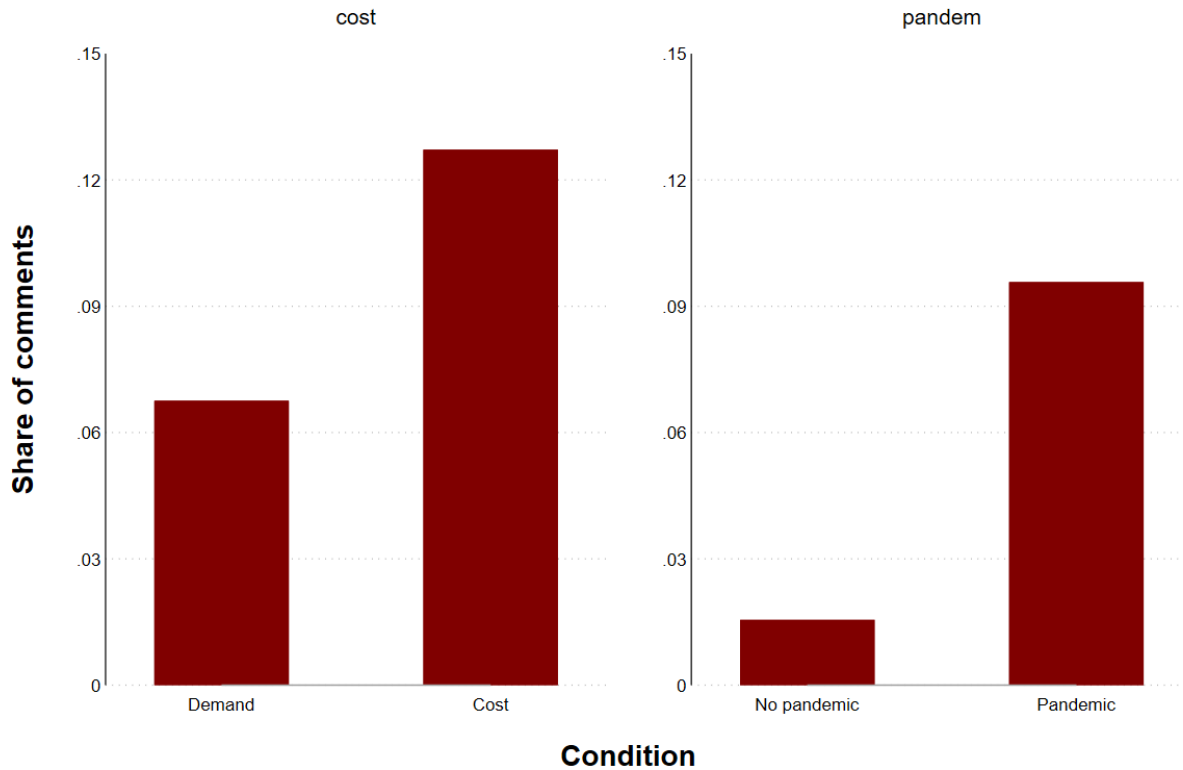
The figure reports the share of open comments that used the term "cost" by whether the respondents was assigned to a condition with or without salient costs (left), and that used the term "pandemic" by whether the respondent was in a condition that presented the scenarios occurring in a generic context or in a pandemic context. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. We limited to search to words of at least four letters. The title above each graph reports the stemmed version of each group of words. For example, "cost" includes such words as cost, costs and costly, and "pandem" includes pandemic and pandemics.

Figure B11: Correlation between scores on relative fairness to customers of the unregulated price scenarios and use of certain terms in the comments

Relative fairness to customers of unregulated price
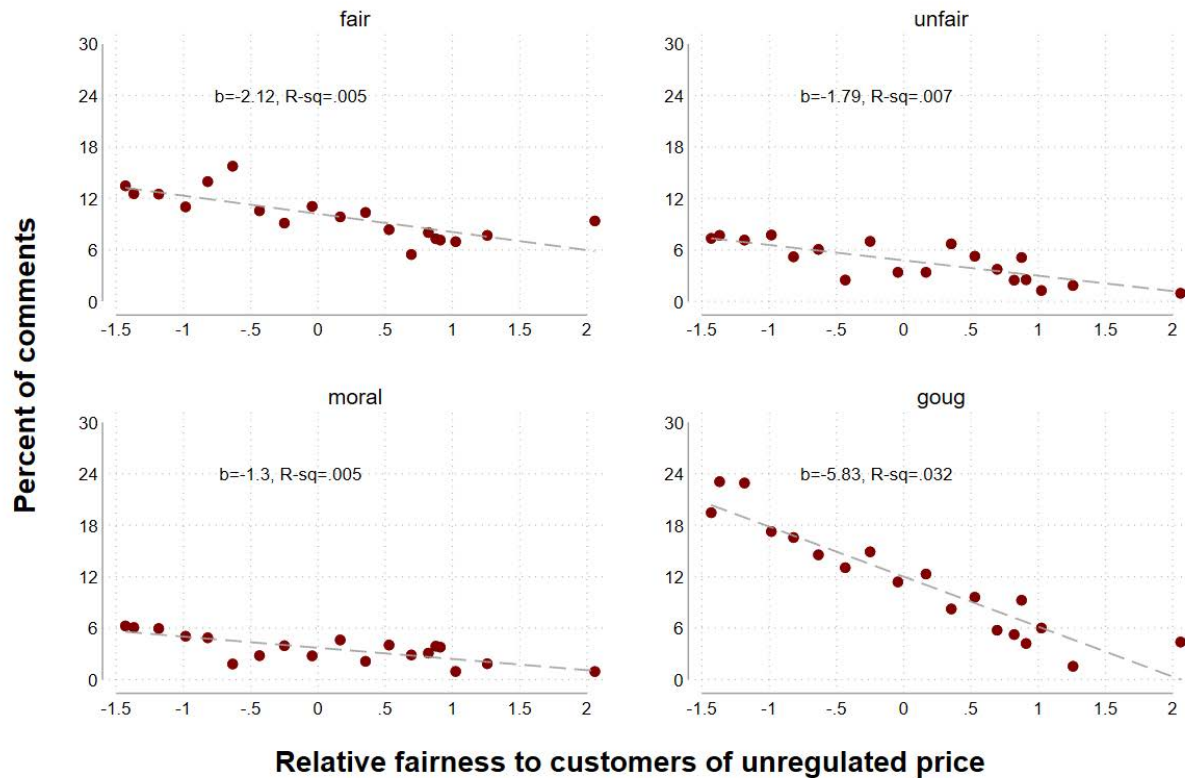
Notes: The graphs report binned scatterplots of the relationship between the use of a certain term in a comment and the relative score on fairness to customers of the unregulated price scenario. The title above each graph reports the stemmed version of each group of words. For example, "goug" includes such words as gouge and gouging. The values inside each graph refer to the OLS estimate of the slope and the R-squared from the regression of the use of a certain word (a binary indicator) in a comment on the standardized score for relative fairness to customers of the unregulated price scenario. The values on the x-axes are in standard deviation units. The title above each graph reports the stemmed version of each group of words.

Figure B12: Correlation between scores on moral acceptability of the unregulated price scenarios and use of certain terms in the comments
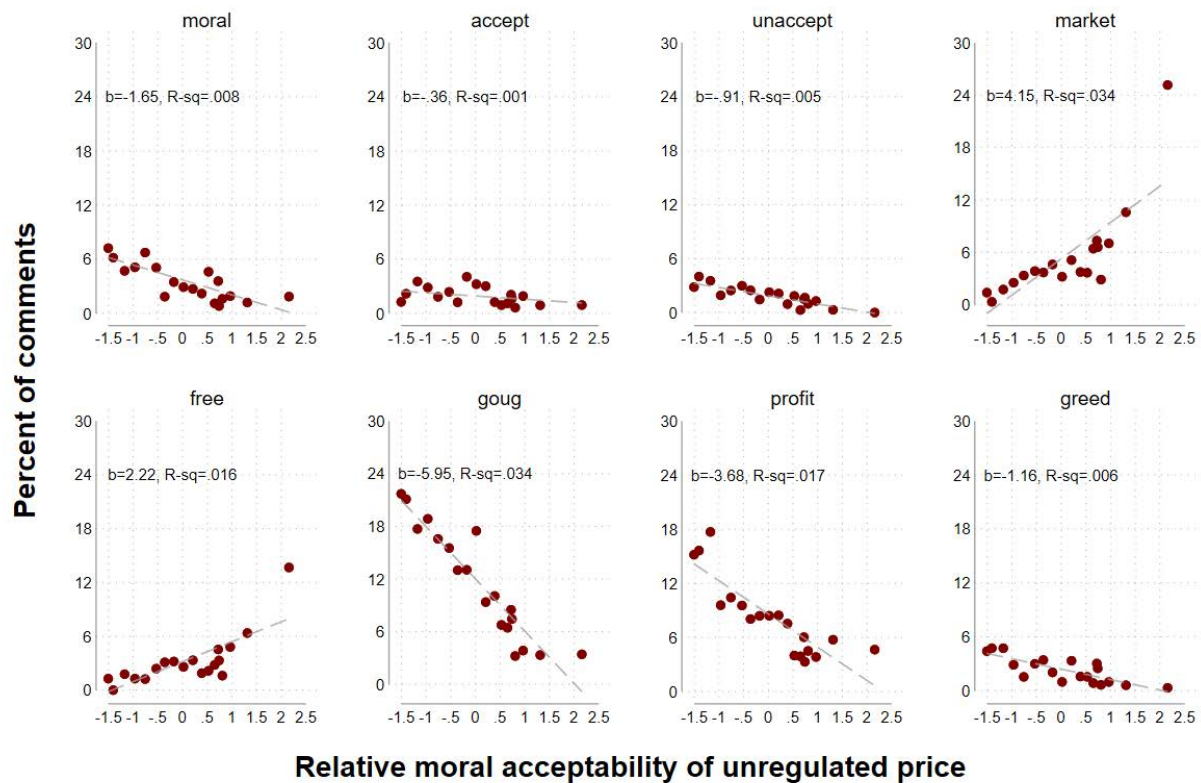
Notes: The graphs report binned scatterplots of the relationship between the use of a certain term in a comment and the relative score on moral acceptability of the unregulated price scenario. The title above each graph reports the stemmed version of each group of words. For example, "goug" includes such words as gouge and gouging. The values inside each graph refer to the OLS estimate of the slope and the R-squared from the regression of the use of a certain word (a binary indicator) in a comment on the standardized score for relative moral acceptability of the unregulated price scenario. The values on the x-axes are in standard deviation units.

Figure B13: Frequency of key words in open comments in Waves 1 and 2, by salience of tradeoffs and scenario choice
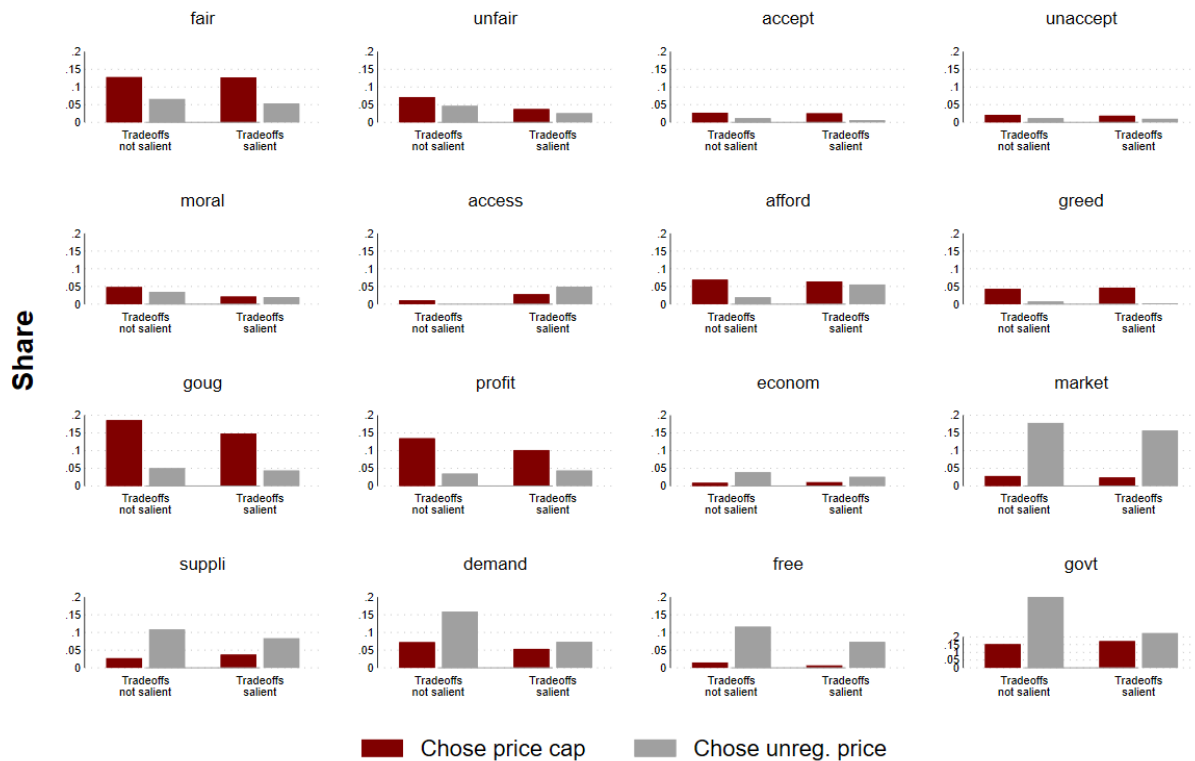
Notes: The figure reports the share of open comments in waves 1 and 2 by respondents who participated in both survey waves, which contained the term above each graph. The comments are grouped by whether participants evaluated scenarios with or without tradeoff salience, and by scenario choice. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. Note that the "Tradeoffs not salient" group includes only observations from wave 1, because all respondents who participated in wave 2 received scenarios with salient tradeoffs. We limited to search to words of at least four letters, excluded the stopwords present in the list stopwords_en of the Stata ngram package, and relied on the stemming procedure that the Stata command ngram incorporates. The title above each graph reports the stemmed version of each group of words. For example, "accept" includes such words as accept, accepted, acceptable.

Figure B14: Similarity among comments, waves 1 and 2
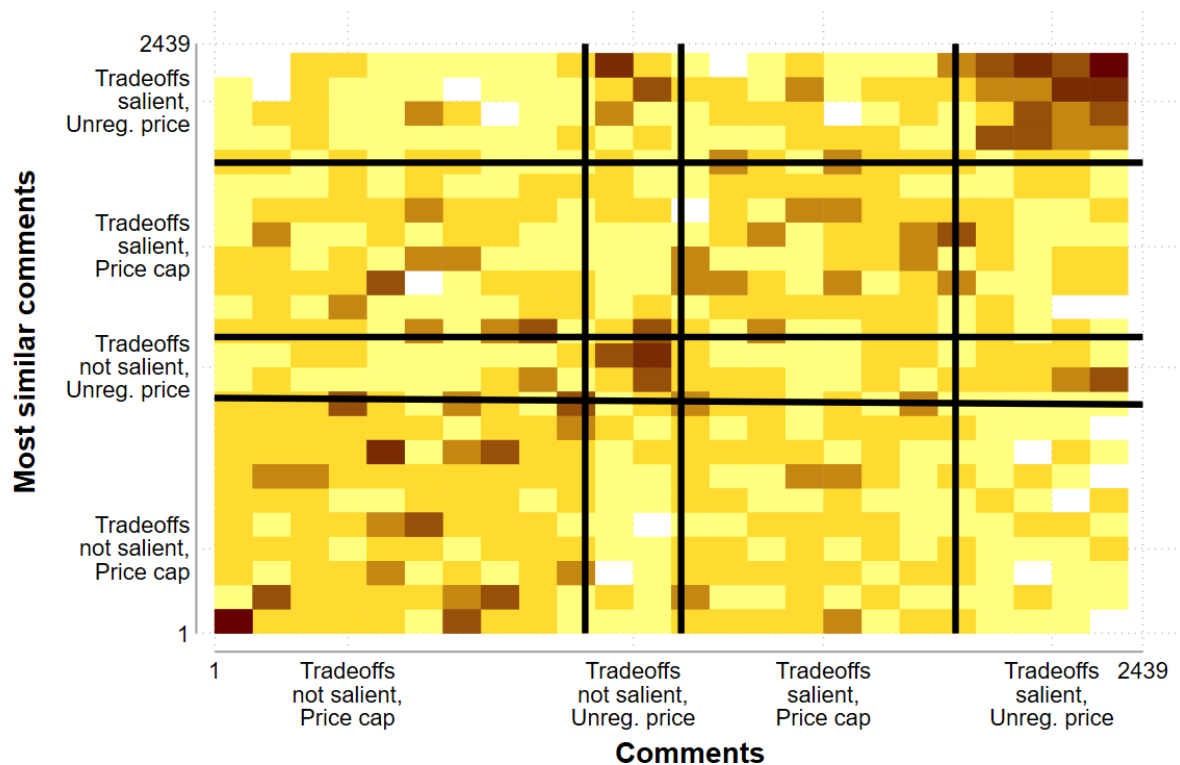
Notes: Both on the x-axis and on the y-axis, each value between 1 and 2,439 represents a comment, after we sorted the dataset by tradeoff salience, scenario choice, and unique identifier of the respondent. The sample includes the comments of the respondents who participated to both waves of the surveys. Each cell in the heatmap represents a group of 100 comments after the sorting. The darker each cell, the higher the frequency of comments in that group whose most similar comment is in that group too. We computed similarity between each pair of comments via a Latent Semantic Analysis whereby we transformed each comment in a vector with a dimension equal to the number of unique words in all text corpus, with each entry indicating the presence of a particular word in a comment, adjusted with a term-frequency-inverse-document-frequency procedure (Deerwester et al. 1990). The Stata command is lsemantica. We excluded the stopword in the list stopwords_en of the Stata Ngram package, as well as several other common words. We reduced the dimensionality of the matrix to 50. The vertical and horizontal lines within the heatmap separate the comments by tradeoff salience conditions and scenario choice by the respondents. Note that the "Tradeoffs not salient" group includes only observations from wave 1, because all respondents who participated in wave 2 received scenarios with salient tradeoffs.

Figure B15: Estimated probability that a topic appears in an open comment in Waves 1 and 2, by scenario choice and salience of tradeoffs in Wave 1
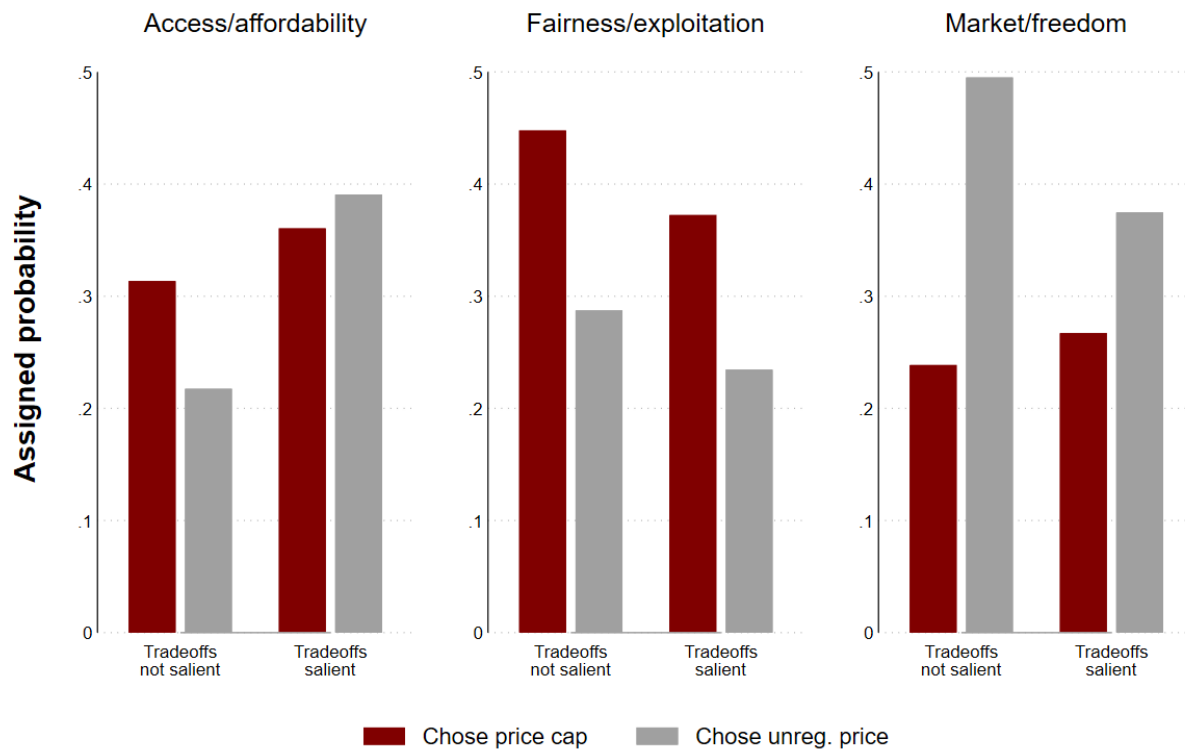
Notes: The graphs report the estimated probability that a topic appeared in an open comment in Waves 1 and 2 by respondents who completed both surveys. The responses are grouped by the respondents' scenario choice in each wave and by salience of tradeoffs in the scenarios they read.

Figure B16: Distribution of relative moral acceptability of unregulated prices by scenario choice and salience of tradeoffs, including scenarios with no reasons for price surges reported

Notes: The graphs display the distribution of the relative moral acceptability of the unregulated price option by the respondents' choice (unregulated price or price control) and whether the scenario had salient tradeoffs, no salient tradeoffs, or did not indicate any reasons for the price surge. The relative moral acceptability of the unregulated price scenario is the difference between the score on the moral acceptability of the unregulated price option and the score on the moral acceptability of the price control option. Each of the two scores could take values between -10 and +10, in 0.1 increments. The overall average value of the relative score is -6.84. The values on the x-axes are in standard deviation units.

Figure B17: Distribution of attitudes toward markets by scenario choice and salience of tradeoffs, including scenarios with no reasons for price surges reported
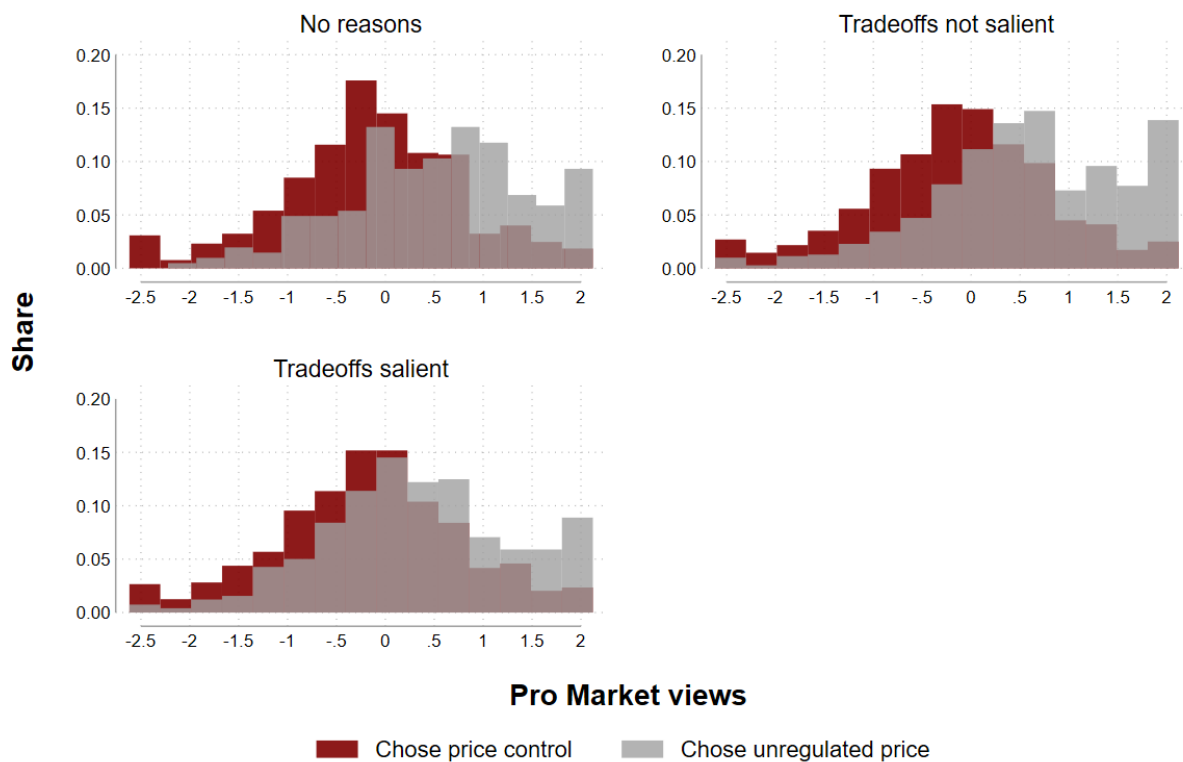
Notes: The charts display the distribution of the Pro-market attitude score of respondents, by their choice (unregulated price or price control) and whether the scenario had salient tradeoffs, no salient tradeoffs, or did not indicate any reasons for the price surge. The Pro-market attitudes score is the average of three scores: agreement with the claim that markets are fair for society, agreement with the statement that markets promote innovation and growth, and agreement with the statement that the government is too active in the economy. Each of the three scores could take values from -10 to +10 in 0.1 increments. The overall average value of the score is 1.05. The values on the x-axes are in standard deviation units.

Figure B18: Frequency of key words in open comments for scenarios with no reason for price increases reported, by scenario choice
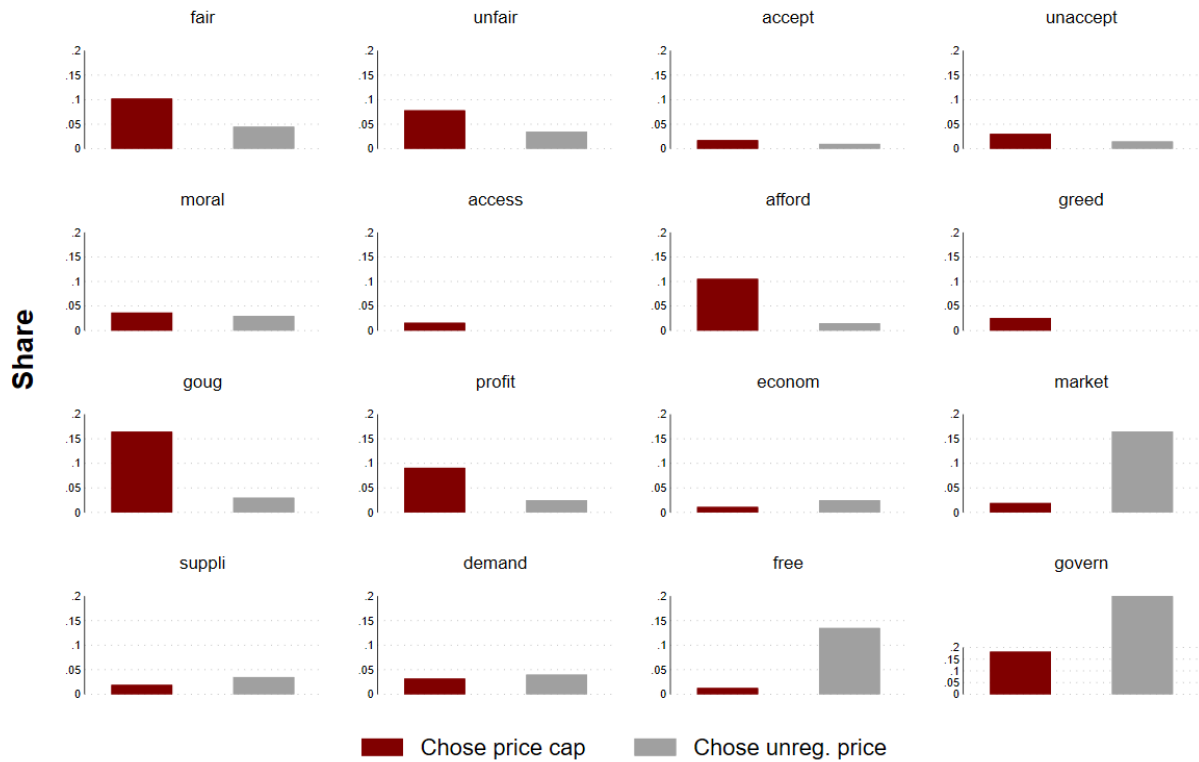
Notes: The figure reports the share of open comments by respondents assigned to the "no reason" scenarios that contained the term above each graph. The comments are grouped by the respondents' scenario choice. We used the Stata command ngram to extract all words and determine whether each of them was present in a given comment. We limited to search to words of at least four letters, excluded the stopword present in the list stopwords_en of the Stata ngram package, and relied on the stemming procedure that the command ngram incorporates. The title above each graph reports the stemmed version of each group of words. For example, "accept" includes such words as accept, accepted, acceptable.

Figure B19: Distribution of relative moral acceptability of unregulated prices by scenario choice, salience of tradeoffs and income of the participants
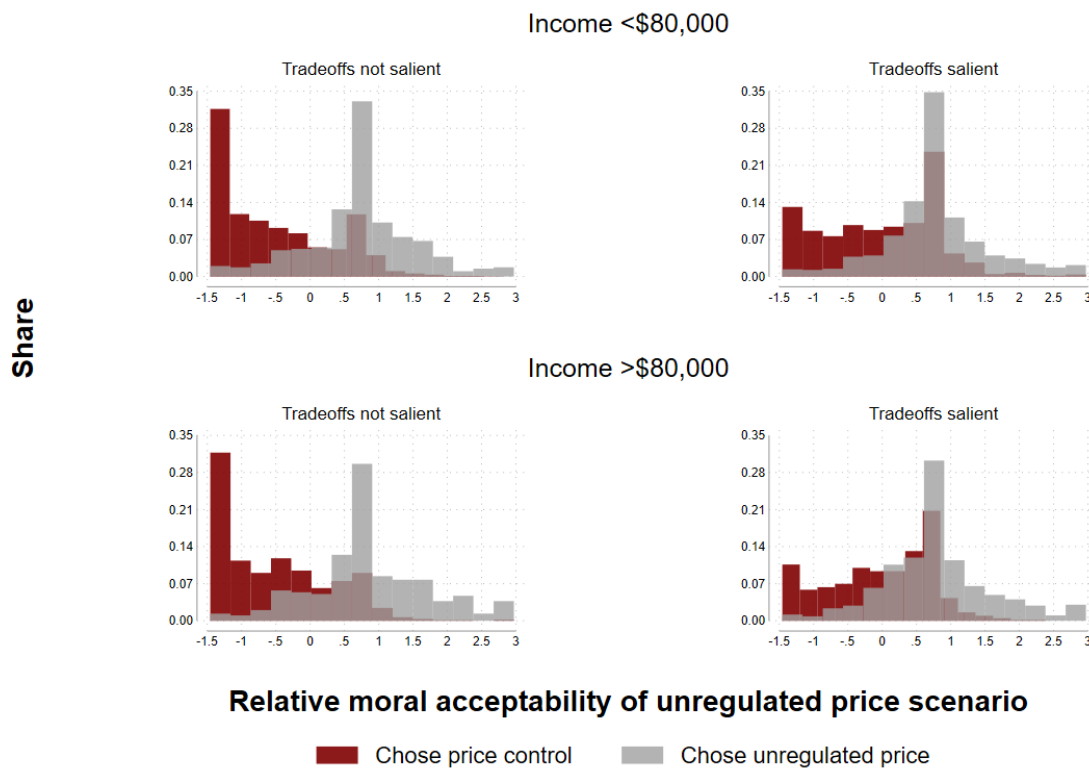

Notes: The graphs show the distribution of the relative moral acceptability of the unregulated price option by the respondents' choice (unregulated price or price control), salience of tradeoffs in assigned scenarios, and whether respondents reported an annual income below or above $80,000. The relative moral acceptability of the unregulated price scenario is the difference between the score on the moral acceptability of the unregulated price option and the score on the moral acceptability of the price control option. Each of the two scores could take values between -10 and +10, in 0.1 increments. The values on the x-axes are in standard deviation units.

Table B1: Scenario features and choice: Regression estimates with multiple hypotheses testing corrections

	Outcome variable:	= 100 if chose Unregulated price, 0 if chose Price control					
	Sample:	Full Sample	Drug	Treadmill	Hand sanitizer	Hand moisturizer	Full Sample
		(1)	(2)	(3)	(4)	(5)	(6)
Drug		-18.80					-18.82
		0.000					0.000
		0.031					0.030
Sanitizer		-11.27					-11.29
		0.000					0.000
		0.019					0.021
Moisturizer		-7.17					-7.2
		0.000					0.000
		0.016					0.023
Salient tradeoff		22.77	22.02	13.96	31.71	23.74	21.88
		0.000	0.000	0.000	0.000	0.000	0.000
		0.017	0.030	0.028	0.020	0.031	0.023
Salient cost side		4.74	1.69	3.41	6.35	7.67	3.98
		0.000	0.999	0.933	0.054	0.000	0.204
		0.015	1.000	1.000	0.074	0.024	0.272
Pandemic		-1.59	-0.32	-3.42	0.34	-2.77	-3.24
		0.931	0.997	0.939	0.985	0.981	0.741
		1.000	1.000	1.000	1.000	1.000	1.000
Salient tradeoff x Pandemic							1.78
							0.997
							1.000
Salient cost side x Pandemic							1.52
							0.994
							1.000
Canadian resident		-2.58	-0.04	-2.57	-0.96	-6.54	-2.57
		0.348	0.985	0.994	0.999	0.024	0.359
		0.500	0.985	1.000	1.000	0.039	0.503
Observations		6,760	1,648	1,731	1,666	1,715	6,760

Notes: For each variable, the first row reports the parameter estimates from Table 3 in the paper. The second row displays p-values adjusted based on List et al. (2019), which consider the dependence between the hypotheses, and the third row shows p-values adjusted with the procedures by Bonferroni-Holm (Holm 1979) which treat the hypotheses as independent. We estimated these corrections with the Stata command *mhtreg* (Barsbai et al. 2020), which extends the procedure from List et al. (2019).

Table B2: Scenario features and moral judgments: - Regression estimates with multiple hypotheses testing corrections

Outcome variable:	Unregulated pricing version			Price controls version			Relative morality judgments (unregulated pricing - price controls)		
	Fairness to customer	Fairness to Company	Moral acceptability	Fairness to customer	Fairness to Company	Moral acceptability	Relative fairness to customers	Relative fairness to company	Relative moral acceptability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Drug	-0.41	-0.1	-0.42	-0.13	0.43	0.23	-0.17	-0.37	-0.43
	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.024	0.040	0.017	0.028	0.015	0.025	0.022	0.030	0.024
Sanitizer	-0.56	-0.28	-0.55	-0.36	0.34	0.03	-0.11	-0.42	-0.38
	0.000	0.000	0.000	0.000	0.000	0.999	0.013	0.000	0.000
	0.028	0.014	0.027	0.032	0.029	1.000	0.027	0.023	0.022
Moisturizer	-0.41	-0.14	-0.4	-0.36	0.26	-0.01	-0.01	-0.28	-0.25
	0.000	0.000	0.000	0.000	0.000	0.999	0.998	0.000	0.000
	0.019	0.018	0.029	0.018	0.016	1.000	1.000	0.025	0.026
Salient tradeoffs	0.39	0.2	0.31	-0.81	0.02	-0.56	0.83	0.12	0.58
	0.000	0.000	0.000	0.000	0.996	0.000	0.000	0.000	0.000
	0.019	0.020	0.015	0.025	1.000	0.026	0.022	0.014	0.026
Salient cost factors	0.12	0.01	0.15	-0.03	-0.19	-0.13	0.1	0.14	0.19
	0.000	1.000	0.000	0.938	0.000	0.000	0.000	0.000	0.000
	0.018	1.000	0.027	1.000	0.031	0.016	0.020	0.021	0.027
Pandemic	-0.08	-0.08	-0.11	-0.02	0.07	-0.02	-0.04	-0.1	-0.06
	0.034	0.000	0.000	1.000	0.199	0.999	0.826	0.000	0.194
	0.051	0.021	0.017	1.000	0.264	1.000	1.000	0.029	0.256
Canadian resident	-0.03	0.05	-0.02	0.06	-0.04	0.05	-0.06	0.06	-0.04
	0.985	0.759	0.997	0.210	0.879	0.710	0.130	0.353	0.713
	1.000	1.000	1.000	0.280	1.000	1.000	0.168	0.517	1.000
Observations	6,760	6,760	6,760	6,760	6,760	6,760	6,760	6,760	6,760

Notes: For each variable, the first row reports the parameter estimates from Table 4 in the paper. The second row displays p-values adjusted based on List et al. (2019), which consider the dependence between the hypotheses, and the third row shows p-values adjusted with the procedures by Bonferroni-Holm (Holm 1979) which treat the hypotheses as independent. We estimated these corrections with the Stata command *mhtreg* (Barsbai et al. 2020), which extends the procedure from List et al. (2019).

Table B3: Relative frequency of use of the most frequent 2-, 3- and 4-grams in the open comments

N-gram	Share of comments		N-gram	Share of comments	
	Unconditional	Conditional on the 1gram being present		Unconditional	Conditional on the 1gram being present
abl	8.27%		free	3.17%	
abl_afford	1.04%	12.59%	free_market	2.10%	66.18%
abl_bui	0.78%	9.44%			
abl_get	0.86%	10.37%	access	2.70%	
abl_price	0.35%	4.26%	access_product	0.37%	13.64%
abl_purchas	0.78%	9.44%			
abl_rais	0.35%	4.26%	goug	12.00%	
abl_sell	0.32%	3.89%	goug_consum	0.48%	3.96%
abl_raise	0.32%	3.89%	goug_custom	0.90%	7.54%
			goug_peopl	0.37%	3.07%
advantag	4.90%				
advantag_consum	0.32%	6.56%	moral	3.71%	
advantag_custom	0.51%	10.31%	moral_right	0.35%	9.50%
advantag_peopl	1.01%	20.63%	moral_unaccept	0.35%	9.50%
advantag_situat	0.72%	14.69%	moral_wrong	0.64%	17.36%
govern	17.79%		fair	10.21%	
govern_abl	0.40%	2.24%	fair_compani	1.09%	10.66%
govern_allow	0.38%	2.15%	fair_consum	0.64%	6.31%
govern_control	0.63%	3.53%	fair_cusustom	0.93%	9.16%
govern_get	0.41%	2.33%	fair_everyon	0.31%	3.00%
govern_helpp	0.37%	2.07%	fair_peopl	0.44%	4.35%
govern_impos	0.38%	2.15%	fair_price	0.83%	8.11%
govern_iinterfer	0.78%	4.39%	fair_consum_ETX	0.31%	3.00%
govern_interven	0.55%	3.10%	fair_custom_ETX	0.37%	3.60%
govern_intervent	0.70%	3.96%			
govern_involv	0.51%	2.84%	profit	8.61%	
govern_need	0.78%	4.39%	profit_margin	0.38%	4.45%
goverintervent	0.34%	1.89%			
govern_protecct	0.35%	1.98%	take	5.84%	
govern_put	0.55%	3.10%	taken	0.44%	7.61%
govern_regul	0.48%	2.67%	take_advantag	4.52%	77.43%
govern_right	0.74%	4.13%	take_advantage_consum	0.32%	5.51%
govern_stai	0.32%	1.81%	take_advantage_custom	0.46%	7.87%
govern_step	1.44%	8.10%	take_advantage_peopl	1.00%	17.06%
govern_get_involv	0.38%	2.15%	take_advantage_situat	0.67%	11.55%

Notes: The table reports shows the relative frequency of use of the most frequent 2-, 3- and 4-grams, overall and conditional on the presence of a word composing that N-gram in a comment for example, if a comment includes the word "afford", the figures indicate the frequency with which the stemmed bi-gram abl_afford (which for example includes the expression "able to afford") occurs in the comments overall and the frequency with which, when the 1-gram "abl" occurs, it occurs as part of that bi-gram.

Table B4: Ten most frequent words in each topic

	Fairness/ expoitation	Topic Market/ freedom	Access/ affordability
1	companx	government	people
2	costx	companx	affordx
3	gougx	market	able
4	profit	demand	need
5	advantage	supply	fairx
6	customerx	consumerx	companx
7	fairx	freex	money
8	consumerx	gougx	everyone
9	unfairx	fairx	patientx
10	raise	business	costx

Notes: We applied Latent Dirichelet Allocation (LDA) to the text of all answers to the open-ended question in the survey that asked to motivate the fairness and morality judgments for each version of a scenario, and the choice of one of the versions. To rely on a larger sample and enhance the accuracy of the predicted topics, we conducted the analysis on all comments in the first and the second wave of the survey. We used the *ldagibbs* command in Stata (Schwartz 2018). Before running this procedure, we manually "stemmed" several words and indicate various terms with the same root as the same word. For example (as also visible in the table above), terms such as fair, fairer, fairness, fairest are all subsumed into "fairx"; free and freedom are lumped together in freex; and so on. We also excluded several common words (believe, think, the name of the four products, myself, herself) and stop words, punctuation symbols, and any word with three letters or less.

Table B5: Scenario features, choice and moral judgments - Regression estimates, including "No reasons" scenarios

Outcome variable:	= 100 if chose unregulated price	Unregulated pricing version			Price controls version			Unregulated pricing version: relative judgements		
		Fairness to customer	Fairness to Company	Moral acceptability	Fairness to customer	Fairness to Company	Moral acceptability	Relative fairness to customers	Relative fairness to company	Relative moral acceptability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Drug	-19.88***	-2.24***	-0.52***	-2.40***	-0.60***	2.50***	1.63***	-1.63***	-3.03***	-4.02***
	(1.44)	(0.18)	(0.16)	(0.19)	(0.18)	(0.19)	(0.19)	(0.26)	(0.26)	(0.28)
Sanitizer	-12.25***	-3.08***	-1.47***	-3.15***	-1.84***	2.02***	0.49**	-1.24***	-3.49***	-3.64***
	(1.49)	(0.18)	(0.17)	(0.18)	(0.18)	(0.19)	(0.20)	(0.26)	(0.27)	(0.28)
Moisturizer	-7.27***	-2.15***	-0.77***	-2.22***	-1.94***	1.45***	0.06	-0.21	-2.22***	-2.28***
	(1.52)	(0.18)	(0.17)	(0.19)	(0.18)	(0.19)	(0.19)	(0.26)	(0.27)	(0.28)
No reasons	3.39**	-1.21***	-0.47**	-0.81***	0.08	-0.48**	-0.30	-1.30***	0.01	-0.51
	(1.58)	(0.19)	(0.22)	(0.20)	(0.19)	(0.23)	(0.22)	(0.31)	(0.35)	(0.34)
Salient tradeoffs	22.88***	2.23***	1.06***	1.84***	-5.04***	0.08	-3.48***	7.27***	0.98***	5.32***
	(1.09)	(0.13)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.19)	(0.19)	(0.21)
Canadian resident	-2.51**	-0.11	0.30**	-0.08	0.33***	-0.22*	0.27**	-0.45**	0.52***	-0.34*
	(1.02)	(0.12)	(0.12)	(0.13)	(0.13)	(0.13)	(0.14)	(0.18)	(0.19)	(0.19)
Constant	31.64***	-3.59***	1.76***	-3.24***	6.68***	-0.89***	3.28***	-10.27***	2.65***	-6.52***
	(1.34)	(0.16)	(0.15)	(0.17)	(0.16)	(0.17)	(0.17)	(0.23)	(0.24)	(0.26)
Mean of the outcome variable	31.23	-4.65	1.64	-4.48	3.52	0.46	2.37	-6.84	-8.17	1.19
Observations	7,612	7,612	7,612	7,612	7,612	7,612	7,612	7,612	7,612	7,612
R-squared	0.082	0.090	0.023	0.071	0.184	0.027	0.086	0.192	0.031	0.119

Notes: The parameter estimates are from OLS regressions. Each observation corresponds to a different respondent. The right-hand side variable reported in the first column are binary indicators for the product in the scenario (treadmill omitted), salience of tradeoffs and of cost factors, context, and residence of the participant. In column 1, we multiplied the outcome variable indicator by 100; therefore, the reported numbers correspond to estimated percentage point changes. Robust standard errors are in parenthesis. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

Table B6: Scenario features, income, time preferences and choice and moral judgments - Regression estimates

Outcome variable:		= 100 if chose unregulated price			Relative fairness to customers	Relative fairness to company	Relative moral acceptability
Sample:	Full		Product: Drug	Product: Treadmill		Full	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Drug	-19.01***	-17.37***			-1.53***	-3.09***	-3.94***
	(1.53)	(1.47)			(0.28)	(0.27)	(0.29)
Sanitizer	-11.22***	-10.18***			-0.97***	-3.45***	-3.40***
	(1.57)	(1.52)			(0.27)	(0.28)	(0.30)
Moisturizer	-7.10***	-6.35***			-0.08	-2.27***	-2.29***
	(1.61)	(1.54)			(0.27)	(0.27)	(0.30)
Salient tradeoffs	25.48***	25.82***	25.55***	21.30***	5.54***	1.28*	3.99***
	(3.47)	(3.40)	(6.19)	(7.41)	(0.65)	(0.67)	(0.69)
Salient cost factors	4.81***	4.74***	2.12	4.29*	0.88***	1.18***	1.70***
	(1.09)	(1.05)	(1.93)	(2.20)	(0.19)	(0.19)	(0.20)
Pandemic	-1.51	-1.29	-0.31	-2.73	-0.33*	-0.81***	-0.54***
	(1.08)	(1.05)	(1.93)	(2.19)	(0.19)	(0.19)	(0.20)
Canadian resident	-3.52***	-1.52	1.42	-1.56	-0.60***	0.21	-0.49**
	(1.10)	(1.06)	(1.97)	(2.20)	(0.19)	(0.19)	(0.21)
Annual income ($):, 20-39K	-1.12	-1.81	-4.25	-3.82	-0.72*	0.45	-0.56
	(1.98)	(1.94)	(3.67)	(4.07)	(0.37)	(0.37)	(0.38)
Annual income ($): 40-59K	2.86	0.14	-4.12	4.08	-0.05	1.54***	0.49
	(2.00)	(1.96)	(3.58)	(4.09)	(0.37)	(0.37)	(0.38)
Annual income ($): 60-79K	1.15	-2.84	-3.46	-6.38	-0.23	1.26***	0.20
	(2.08)	(2.04)	(3.76)	(4.17)	(0.38)	(0.39)	(0.40)
Annual income ($): 80-99K	7.74***	3.19	-0.44	2.59	0.48	2.09***	0.87**
	(2.21)	(2.15)	(4.00)	(4.49)	(0.39)	(0.39)	(0.42)
Annual income ($): 100-119K	8.62***	2.65	-7.93*	3.25	0.28	2.56***	0.86*
	(2.48)	(2.44)	(4.44)	(5.20)	(0.43)	(0.45)	(0.45)
Annual income ($): 120K+	9.34***	3.18	-3.25	5.19	0.67*	3.17***	1.15***
	(2.16)	(2.11)	(3.86)	(4.33)	(0.38)	(0.39)	(0.40)
Patience	0.12	-0.24	0.03	-0.53	-0.29***	0.07	-0.31***
	(0.30)	(0.29)	(0.47)	(0.69)	(0.07)	(0.07)	(0.07)
Tradeoff salient X Patience	-0.39	-0.50	-0.43	-1.52	0.24***	-0.05	0.18*
	(0.47)	(0.46)	(0.84)	(1.00)	(0.09)	(0.09)	(0.10)
Pro-market attitudes		2.76***	2.38***	4.20***			
		(0.13)	(0.24)	(0.24)			
Constant	25.65***	26.77***	10.67**	33.52***	-8.58***	0.68	-5.31***
	(2.91)	(2.83)	(4.22)	(6.22)	(0.60)	(0.62)	(0.63)
Observations	6,760	6,760	1,648	1,731	6,760	6,760	6,760
R-squared	0.091	0.151	0.129	0.164	0.190	0.056	0.132

Notes: The parameter estimates are from OLS regressions. Each observation corresponds to a different respondent. The right-hand side variables reported in the first column are binary indicators for the product in the scenario (treadmill omitted), salience of tradeoffs and of cost factors, context, residence of the participant, and income brackets; and continuous variables measuring time preferences and attitudes toward the role of markets in society. In column 1, we multiplied the outcome variable indicator by 100; therefore, the reported numbers correspond to estimated percentage point changes. Robust standard errors are in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.

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