

Opposing Views on Public Ownership and Their Influence on Citizens' Attitudes

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Abstract

We study the effects on citizens' opinions of exposing them to opposing views in relation to the public vs private property nature of companies providing a public service. We focus on the issue of private vs public property of water distribution operators. Whether such operators should be publicly or privately owned is a hotly debated topic all over the world. The view of mainstream economic experts is rather agnostic about property. The crucial issue is considered to be the quality of the regulation of operators. However, there is also a broad citizen movement in favor of the opinion that water supply operators should be public property. In an online experiment we compare the effect on citizens' opinions in Spain of three different texts: a neutral expository one, one which contains only arguments in favor of public operators and a third one which contains both the pro public property view and that of mainstream economic experts. We find that by itself the message of those in favor of public ownership does affect citizens opinion. However, the arguments of expert economists are effective at more than compensating the influence of the pro public companies arguments. This suggests that economists and expert thinking has a role to play in the public debate, beyond the role played in advising politicians or through the decision-making process in regulatory agencies.

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1 Introduction

There are many economic issues for which the opinion of mainstream economic experts and that of the general public or significant parts of it diverge considerably. The general challenge then is how to communicate mainstream opinions effectively to broad audiences of citizens. In recent years economists and other social scientists have been working on several distinct issues related to communication of economists' knowledge. One issue is to simply improve how the economic information is formulated and presented to broad audiences of citizens (Haldane and McMahon (2018), 2018; Coibion et al. (2019) and Coibion et al. (2020)). A second related issue is to investigate how people think about economic issues (Stantcheva (2021)). The results of such research can be the basis for improving the design of economic information. A third issue is how to communicate economics' knowledge about particular issues about which the public has entrenched misconceptions. In such cases, communication strategies may need to be particularly tailored to dispelling misconceptions (Brandts et al.) (2022) and Brandts et al. (2024).

A fourth issue is the one we focus on in this paper. In the public debate mainstream economists' views and other views are simultaneously present and compete with each other. An important question is whether the views of mainstream economic experts can have an influence on citizens' opinions in the presence of opposing views. We believe that this issue is of considerable importance, since particularly in democracies, there are many political actors who freely and legitimately express their opinions and economists should not expect the public to only listen to them. In this sense, economists a well as other social scientists need to learn to interact with citizens in the open market place of ideas.

This interaction often takes place with narratives that directly challenge some of the core views of conventional economic thinking, as it happens with some manifestations of what is broadly called populism (Guriev and Papanioannou (2022)). Populists usually target mainstream economic expert thinking and technocratic institutions, such as independent central banks or regulatory agencies. The reputation of such institutions has recently suffered especially as a result of the difficulties of reacting to the global financial crisis. Despite such difficulties we are convinced that it is important for the public to be exposed to the mainstream economic experts views. At the same time, in democracies citizens are free to form their own opinions and it is important to gain insights into how such opinions arise. Some scholars have underscored the importance of experts taking seriously the formation of opinions and preferences by ordinary citizens and engaging with them (see Kahan et al. (2006) and Bhargava and Loewenstein (2015)).

There is some broadly related research on the effects of opposing views. Minson et al. (2024) develop a scale to measure people's receptiveness to views opposed to their own views. Their focus is on the psychology of disagreement, in particular on understanding the willingness of people to consider the views of others. Bail et al. (2018) also focus on views that are opposed to those of a

sample of people finding that exposure to such opposing views can increase political polarization. Our focus is quite different. We study the effects on a sample of citizens of communication containing simultaneously two opposing views on a particular issue. Our experimental design will make it possible to disentangle the effects of the two opposing views on citizens' opinions. We are not aware of any previous work on the specific issue we investigate.

We study opposing views in relation to the public vs private property nature of companies providing a public service. This is an important overall issue in public economics. Specifically, we focus on the issue of private vs public property of water distribution operators in Spain. The issue of whether such operators should be publicly or privately owned is a hotly debated topic all over the world.

Perhaps surprisingly, particularly for non-economists, the economic mainstream is rather agnostic about property. The crucial issue is considered to be the quality of the regulation of operators. With good regulation both private and public operators can work well and, by contrast, with inadequate regulation both types of regulation can lead to unsatisfactory outcomes. Laffont and Tirole (1993) (see ch.17) criticize the conventional wisdom at the time about the advantages and disadvantages of public vs private regulated ownership. They argue that the disadvantages of i) absence of capital market monitoring, ii) soft budget constraints, iii) risk of expropriation of investments, iv) lack of precise objectives and v) presence of lobbying, are not universal in, or exclusive of, full public ownership. Similarly, the advantages of i) consideration of social welfare objectives and ii) centralized control, can be attained with appropriate contracts or regulation keeping private ownership. Newbery (1999) surveys the history of network utilities in several regions of the world, and concludes that there is not much difference in terms of performance between a publicly owned monopolistic utility and a privately owned regulated monopolistic utility. Both must try to alleviate the commitment problem, which arises from the specific nature of assets in infrastructure industries such as water distribution: once sunk, the investments are vulnerable to regulatory or political risk, which may deter investment in the first place. Similarly to Laffont and Tirole (1993), Newbery (1999) points out that both private and public sector owners delegate operations in a board and a managerial team, which enjoy a degree of discretion.

However, in many countries there is a broad citizen movement in favor of water supply operators always being of public property. The spokespersons of this movement argue that there is a human right to water, that can only be satisfied by the direct management of the service by the municipality or by organized citizenship and that the introduction of a private operator is an obstacle to the satisfaction of such a right. Two examples of countries in which the property of water operators has been an issue are Chile and Spain. In Chile the universal right of access to water (and its tension with private ownership) has been one of the central issues of the debate around the writing of a new constitution between 2019 and 2023. In Spain the political movement led by a new generation of left-wing politicians that emerged around 2011 made the creation of

new public operators in the water and energy sectors one of its salient policy proposals. In the UK, the privatization of water operators at the end of the XXth century remained controversial in 2024, with debate surrounding the performance of the privatized utilities and its regulation. According to Mayer (2023) in his critique of the British system, the notion that a benevolent regulator separated from the day-to-day work of companies ("arms-length regulation") that are solely accountable to their shareholders and have profit maximization as their objective, will succeed in imposing the public interest, is naive. In Italy, a 2011 national referendum, was won by water activists to combat the privatization of water companies and, according to Muehlebach (2020) has been subsequently ignored by most major political parties.

In summary, in many countries there is a lively debate around issues of water provision and the view mainstream economic experts has been subject to criticism. However, we think that this economic expert mainstream view still has value. At any rate, the fact that in this case the view of mainstream economists is an agnostic one makes it intrinsically open to taking into account different realities.

We conduct an online experiment in which we compare the impact on the opinions of a sample of citizens of different written texts. In these texts we present both the position of economic experts and that of the movement favorable to public ownership in what we believe is a moderate tone. Whenever ones uses natural language there are many tone variations that one can use. In writing the texts we have made a conscious effort to convey the basic rationales of the two positions in an intentionally soft way. In particular, we have used formulations such that the positions can stand next to each other without clashing.

In our view, the defense of public property of water provision companies can be based on a mostly emotional position, but also be the result of a reasonable prudent view of the issues at stake. As we hope will become clear below in our work we portray the pro public property position in an nuanced way. Our objective is not in any way to refute that position, since it is a perfectly defensible position under certain circumstances. We portray this position in a way consistent with the positive interpretation of a populist tradition, as understood for example in Frank (2020). Rather, we want to see whether in the context of a debate in which opposing views are both present, the mainstream economists' position can make itself be heard.

Accordingly, we think that the economic experts' position is a well-grounded one that the public should know about, but in writing these texts we strived to portray it in a moderate way. Indeed, in our case the economic experts' position is - as already mentioned - what we call an agnostic position, which admits both types of property, as long as appropriately regulated. To study this issue we expose participants in our experiment separately to three different texts: T1, T2 and T3. T1 is our baseline in which we expose in a neutral way the reality of water ownership and regulation in Spain. T2 contains similar information as T1 in a summarized way to which we add arguments of sophisticated left-wing populists in favor of public companies providing water.

T3 contains similar information as T1 and T2 to which we add the arguments typical of expert mainstream economists.

Our main finding is that citizens that receive different inputs have on average a different opinion about the nature of ownership of water operators. As we expected, the citizens that responded to our online questionnaire expressed an opinion more favourable to public ownership when exposed to what we argue is serious and well constructed populist rhetoric. However, those citizens that were exposed both to populist rhetoric and to the arguments of conventional economists had a much more agnostic view, in line with these arguments. This suggests that economists and expert thinking have a role to play in the public debate, beyond the role played in advising politicians or through the decision-making process in regulatory agencies.

The rest of the paper is organized as follows. In section 2 we present the experimental design, in section 3 the procedure, in section 4 the analysis, in section 5 the results and in section 6 the conclusions. Section 7 contains all the tables we refer to in the text.

2 Experimental Design

We ran three treatments; T1, T2 and T3. In all three treatments participants are asked about their opinion about the private vs public property of water companies. The treatments differ with respect to the texts participants have to read before they give their opinion, as explained below.

With our experimental design we want to test two simple hypotheses that were pre-registered, together with the procedures, at AsPredicted Registry, Wharton Credibility Lab (University of Pennsylvania) on September 9, 2022 number 107735. ¹

Hypothesis 1: Treatment 2 modifies participants' average opinion with respect to treatment T1. Hypothesis 2: Treatment 3 moderates the effect of treatment T2.

A crucial design choice is the length of the texts of the different treatments. Since by going from T1 to T2 and T3 we add information, one option would have been to let the texts become longer. We considered this option, but decided not to go down that route and instead to make all three texts have the same length. In making this choice we were guided by the fact that long texts may be harder to absorb in an experimental situation like ours. We think that modifying the exact content of the texts while keeping the length constant corresponds to how issues are often presented in the evening news on radio and tv, where the length is necessarily limited but where the exact content can be altered slightly by giving more or less voice to different views on the matter.

In what follows we present the full texts, translated from Spanish, for the three treatments and point out the differences between them. In appendix A we reproduce the instructions in full and indicate where the texts were embedded.

¹Anonymized versions of the pre–registrations are available here: https://aspredicted.org/ZQX_XYB.

The text used in T1 (treatment 1) is the following:

In Spain the service of supplying water to households is provided by private, public or mixed private-public operators, depending on the municipality. In all cases the price and the quality are subject to regulation by the local public authorities. This means that these authorities (like city governments) decide on the price of water and other items households have to pay for as part of their water bill, even when the property of the provider is private. Public authorities have also the power to decide on the water quality and to supervise it, typically in agreement with norms of higher than the local level (autonomous community, Spanish or European).

The canalization and depuration of water has an important cost, since it requires investment in infrastructure, maintenance costs and the operation of the service. The fight against climate change, the problems of drought and other environmental issues require even higher investments in new technology for the reuse, desalination and saving of water. Efficiency in front facing these costs is, hence, an important aspect to take into consideration. The resources for face fronting such expenditures and investments have to come from the price water users pay or from public subsidies financed by taxes.

Approximately half of Spanish municipalities have water provided by a public operator, and the rest have it provided by private or mixed operators. In Spain, there are large cities where the provider is public and large cities where the provider is private or mixed. On the international level, there is also a great variety of cases. Historically, investments to provide drinking water to populated areas have been fundamental for eradicating diseases and guaranteeing a suitable quality of life.

In some cases there have been changes in property, although these are not frequent. For example, at the end of 20th century England and Chile privatized their water providers, while Buenos Aires and Paris re-nationalized and re-municipalized their operators.

We will ask you a number of questions in relation to such operators.

The text used in T2 is the following:²

In Spain the service of supplying water to households is provided by private, public or mixed private-public operators, depending on the municipality. In all cases the price and the quality are subject to regulation by the local public authorities.

The canalization and depuration of water has an important cost, since it requires investment in infrastructure, maintenance costs and the operation of the service. The fight against climate change, the problems of drought and other environmental issues require even higher investments in new technology for the reuse, desalination and saving of water.

In recent years a strong movement has emerged that claims that water supply operators should always be of public property. This movement has had some important success at the international level, like in the remunicipalization of water supply in Paris or the success in a referendum about

²In preparing the text for T2 we relied on Caamaño (2022).

the public management of water in Italy, and has been very influential in Latin America.

The spokesmen of this movement argue that there is a human right to water, that can only be satisfied by the direct management of the service by the municipality or by organized citizenship. That is, they consider that the introduction of a private operator is an unnecessary interference that distorts the satisfaction of such a right.

These spokespeople add that water is a common good, like forests, and that as a consequence its management should in no cases be under the control of a company with privater interests.

One of the concerns of this movement is that management by privater operators can give rise to a higher price. Public operators can, according to these spokespeople, manage at the same cost as private operators, but with a higher degree of transparency, allowing for prices closer to costs. They add that with a public operators there is no money that goes to business profits, something that also facilitates low prices.

We will ask you a number of questions in relation to such operators.

In going from T1 to T2 we keep the first two sentences of the first paragraphs as well as the first two paragraphs of T1. This leads to the first two paragraphs of T2 being shorter than those of T1. We then add four paragraphs in which we briefly present the arguments of the sophisticated left-wing populists.

The text used in T3 is the following:

"In Spain the service of supplying water to households is provided by private, public or mixed private-public operators, depending on the municipality. In all cases the price and the quality are subject to regulation by the local public authorities.

The canalization and depuration of water has an important cost, since it requires investment in infrastructure, maintenance costs and the operation of the service. The fight against climate change, the problems of drought and other environmental issues require even higher investments in new technology for the reuse, desalination and saving of water.

In recent years a strong movement has emerged that claims that water supply operators should always be of public property. This movement has had some important success at the internationa level, like in the remunicipalization of water supply in Paris or the success in a referendum about the public management of water in Italy, and has been very influential in Latin America.

There are experts, however, who consider that public operators as well as private or mixed ones can provide an adequate service, depending on the context and efficiency of the operating company. This efficient depends on the management by the managerial people and the workers of the company, be it public or private.

If price and quality regulation by local authorities is appropriate, prices will be more or less high, depending on the management by the operating company. There are example of good management by both public and private companies. A good concession contract by public authorities can impose conditions on a private company, for example with respect to service expansion, investment,

quality....

In some cases, regulated private companies can supply financing and technology to which a public operator does not have easy access. The profit of the private operator can be limited through appropriate regulation that limits the return to capital to the amount that is strictly necessary to facilitate investment.

We will ask you a number of questions in relation to such operators.

The first two paragraphs of T3 are identical to those of T2. The third paragraph is a summarized version of the populists' arguments presented in T2. To that we add three paragraphs presenting the position of economic experts.

3 Experimental Procedure

The experiments were run on—line by the specialized company Playstudies. An advantage of an on—line experiment is that it is less intrusive than delivering the message in a physical laboratory environment and it also allows us to access a sample from the general adult population. The experiments were run in September 2022. The experiment was approved by the ethics committee of the Universitat Autònoma de Barcelona (Ethics Committee on Animal and Human Experimentation, Number CEEAH 6172).

Playstudies recruited 1,050 adult participants. The procedure and questionnaires to elicit beliefs are the same across treatments. Subjects could participate from their digital devices. The 1,050 participants are randomly allocated to the three treatments, with 351, 352 and 347 in treatments T1, T2 and T3 respectively. This sample size is similar to the one used in Brandts et al. (2024) in an experiment that is similar in spirit, albeit on a different topic. The distribution of characteristics of participants in the three treatments are shown in Table A-1 in Appendix C. We designed two questionnaires to elicit participants' beliefs. One was to be completed before the intervention, that is before the reading of the corresponding treatment text, and the other after it. Both questionnaires include three questions. The first one (the ex ante one) starts with a general question about preferences for state intervention in the economy, and follows with two related to knowledge and satisfaction about the operation of water distribution in the subject's location. The distribution of participants' responses to the three questions can be seen in Table A-2 in Appendix C.

The second one (the ex post one) starts with the main question of interest for us, the one about the preferences for public versus private (but regulated) water ownership, continues with a question about how important this topic is to the respondent relative to other topics, and finishes with an open quesion where the subjects have the opportunity to provide open-ended thoughts. The questionnaires are identical across the three treatments (see Appendix). The question that refers to the the nature of ownership in water operators asks the subjects to reveal with which of

five statements each of them agrees more with, where this five statements, ordered on a five-level scale, are: 1-The water operator should be in all municipalities a public firm. 2-The water operator should be a public firm as long as it is not very inefficient. 3-It does not matter whether the water operator is a public or private firm, as long as it is well regulated. 4-The water operator should be a private firm, regulated by the City Council, as long as the private firm does not influence in the regulation. 5-The water operator should be, in all municipalities, a private firm regulated by the City Council.

These are the seven steps of the experimental procedure:

- Consent form.
- Initial instructions.
- Socio-demographic questionnaire.
- First opinion questionnaire.
- Text T1, T2 or T3.
- Comprehension questions about the texts.
- Second opinion questionnaire, including the question about the ownership of water operators.
- Payment

In detail, the experiment procedes in the following way. First, participants see on their screens a consent form, where they are informed that the experiment is part of a research project in social sciences, that their personal data will be confidential, that their decisions will be anonymized, and that they will be paid if they agree to participate. If they do so, they are asked to sign the consent form. The next screen explains in the initial instructions that participants will be asked to complete several tasks, and that if they complete all of them, they will receive a payment of six euros -one less if they do not answer correctly a comprehension question. Participants are also told that the tasks will take about 20 minutes but that they can use more time if they wish. Instructions emphasize that in the opinion questionnaires there are no correct or incorrect answers, and remind participants that payment does not depend on these answers, but on task completion (see the initial instructions in Appendix A).

Next they answer a socio-demographic questionnaire with eight questions on gender, age, origin, size of place of residence, education and work status After the set of socio-demographic questions, participants fill out the first opinion questionnaire. On the next screen, participants see either the T1, the T2, or the T3 according to the treatment they have been assigned to. They can take their time to read and re-read the texts, as they are not given a time limit. After participants have read the texts, we assess their attention and understanding of the content by

showing a screen with one comprehension question for each treatment. If participants answer this question incorrectly, their payment decreases by 1 euro from 6 if they answer correctly. They cannot go back to previous screens with the text to answer the question. They are informed about this before being presented with the text. Note that, through this question, we incentivise that participants pay attention to the text, as this is an essential aspect of the experiment. These are the only questions that have a correct or an incorrect answer. We do not incentivate answers to all other questions and statements, since for these there are no correct or incorrect answers. We expect participants to answer in good faith by informing them, from the outset, that the study is part of a social research project carried out by professors from several universities, who will not be able to see or verify their personal identity, and that the purpose of the study is to contribute to a better understanding of our society by investigating people's views. Moreover, since polls and studies are often used by policy–makers, participants in our study may have an intrinsic interest in revealing their true beliefs.

After the comprehension question, participants answer the final opinion questionnaire. In the closing screen participants are informed about the total payment and thanked for their collaboration. The Appendix shows all the instructions given to participants on each screen, which are the same across conditions.

4 Analysis

To test the hypotheses, we specify the following general regression, where D represents the treatment variables and C the demographic controls:

$$y_i = \alpha + \beta D_i + \gamma C_i + \varepsilon_i \tag{1}$$

To test for the first hypothesis we estimate equation (1) by comparing the responses chosen in T1 to those in T2. Hence D_i is a dummy variable equal to one if the participant is exposed the text corresponding to T1 and zero if she/he is exposed to the T2 text. To test for the second hypothesis we estimate equation (1) by comparing the responses chosen to T3 to those in T2. In this specification, D_i is a dummy variable equal to one if the participant is exposed to text T3 and zero if she/he is exposed to text T2. The estimations are results of OLS regressions.

Furthermore, we explore whether the difference in beliefs is correlated with other factors.

5 Results

We first show descriptive statistics and then the results of regression analysis. In the regression analysis we first test for the hypotheses about the treatment effects in isolation and then relate the treatments effects to other variables. Note that our pre-registered hypotheses pertained to the average effects of the treatments and not to the correlation of the treatment variables with

other factors, but we believe that the additional results are also of some interest. Finally, we also discuss some of the content of the responses to the open questions.

5.1 Descriptives

Table 1 shows the distribution of the percentages of responses to the main question about water company property in the three treatments. In treatment 1 the choice of 3 is the most frequent one, with the choice of 1 being the second most frequent one. Compared to treatment 1, in treatment 2 the most frequent choice is 1, with the choice of 3 being now the most frequent one. For treatment 3 one can see that the choice of 3 is now the most frequent one and the choice of 1 the second most frequent.

The mean and medians are 2.405 and 3 for T1, 1.972 and 2 for T2 and 2.703 3 for T3. At first sight the shifts in distributions are in line with our hypotheses 1 and 2, with T3 appearing to not only moderating the effects on opinions of T2, but even going beyond. Observe, in particular, how for T2 response 3, 'Does Not Matter', is the most frequent one. This is the response that most closely corresponds to economists' agnostic opinion about the matter at hand.

5.2 Estimation results

Table 2 shows the estimated treatment effects on participants' final opinions from linear regressions, with and without demographic controls. Columns (1) and (2) shows a significantly negative impact of T2 relative to T1 with the inclusion of the control variables making little difference. This result is consistent with our first hypothesis, in the sense that adding pro public property arguments to the text changes opinions in the direction of public property. The results in columns (5) and (6) show that T3 has a significantly positive effect on participants' opinions with respect to T2, consistent with our second hypothesis; T3 indeed moderates the effect of T2. Columns (3) and (4) document an additional feature of the data, which we did not anticipate in our hypotheses: T3 is able to shift the average opinion beyond T1.

Table 3 shows the same treatment effects as in Table 2 but disaggregated according to whether participants agree or disagree with government intervention for redistribution or don't know how to respond. A large fraction of participants agree with government redistribution. For this group the treatment effects are significant and have the same sign as for the overall sample. For those who do not agree or don't know the treatment effects are not significant but have the same sign as for the overall comparison. Remarkably, the view of mainstream economic experts to be open to private property has an impact in a sample of participants who are mostly in favor of redistribution.

Table 4 shows results as a function of the level of satisfaction with the local water companies. Most participants indicate a degree of satisfaction of 2 or 3, on a scale of 0 to 4. Focusing on the regression results with controls observe that the effect of T2 vs T1 is significantly negative for all

levels of satisfaction. For the T3 vs T1 comparison, the results show that the effect is positive and significant for satisfaction levels 2 and 3, the two most frequently chosen levels. For levels 1 and 4 the effect is not significant. For level 0 the effect is negative and weakly significant. We can not rely on this result, since there are only 29 participants at that level. Finally, for the T3 vs T2 comparison the effect is positively significant for all satisfaction levels except 0.

Table 5 shows results as a function of the water company ownership in the area. Note that perhaps naturally the modal answer here is 'Do not know'. Focusing again on the regression results with controls, we can see that the negative effect for the T1 vs T2 comparison holds for those participants who declare that the water supply company in their municipalities is private or of mixed property or do not know, but nor for those who declare that it is public. For the T1 vs T3 comparison we can see that the effect is strongly significant for those who think that the water supply company is of mixed property or do not know. Finally for the T2 vs T3 comparison the effect is strongly significant in all cases. Perhaps one can highlight here that the quantitative effect is highest for mixed property.

Table 6 shows regression results for the same treatment comparisons as above where we have added two additional variables. The first is the correct answer to a test question and the second is reading time. The effects of these variables are either not significant or quantitatively very small and the treatment differences are little affected by their inclusion. The interpretation is that differences in attention did not affect the results.

5.3 Answers to the open question

At the end of our second questionnaire, we asked our subjects if they wanted to add anything about the ownership of water operators. They were free, if they wanted, to add any open text with their final thoughts. In this way, we gave them the opportunity to express themselves openly and freely, without priming them or constraining them with our constructs. Recent work by Stantcheva and her co-authors about beliefs on taxation and inflation (Stantcheva (2024)) has also used this methodology. As Ferrario and Stantcheva (2022) argue with respect to the example of taxation, by being less guided, open questions "may teach us things that we may otherwise have missed and that we may not be used to thinking about as economists." By coding the answers and using text analysis (for example, the presence of some key words), they were able to correlate some feeling of citizens with other traits or variables from the same sample, or just do descriptive analysis of the prevalence of certain attitudes.

More than half of our participants took this opportunity to express something else, beyond the closed answers to our questionnaires. Here we briefly describe what we find, as complementary information to the quantitative analysis above. The answers reveal a great diversity of views, and the lack of a majority consensus on how to own and manage water operators. Some of the subjects expressed the gratitude for having been given the opportunity to think about the subject. Others,

but a minority, seem to have very strong opinions against or in favour of public ownership. Here is an illustrative sample of answers:

- -"Whether public or private, the water supply must primarily be efficient and beneficial for society."
- -"I didn't know how the water operator worked in Spain; it seems like something important for everyone to know."
- -"I don't care who operates the water in the town hall; what seems shameful to me are the prices they charge. It doesn't matter if you use a lot or a little, in my town, they charge a minimum based on the square meters of the house. They should charge based on consumption, not on how big or small the house is. For example, my house is 59m², and three adults live here, and I pay about 55€. I have a ground floor apartment of 49m² where there's only one bathroom, so there's almost no water consumption, and I pay 52€. I went to ask how it was possible to pay almost the same, and they told me that since I don't reach the minimum, I pay by m². It's a disgrace."

-"I would prefer a public company accessible to everyone, but if it were private, it should have a business model more focused on offering quality at an affordable price to the customer rather than trying to squeeze every cent from people's pockets."

We asked two research assistants to independently code with yes or no whether the answers satisfied 10 statements (with substatements in some of them, see appendix). Table 7 shows the results.

This evidence illustrates the following:

- -The answers are nuanced and not easy to code. The two research assistants, of a similar background and educational level, show differences in the coding of some of the answers.
- -Most answers are difficult to describe as pro or against public ownership, expressing some complaint about their experience, or their satisfaction with the questionnaire.
- -For both research assistants, there are still more people in favor of public ownership than of private ownership, although the sum of private and "doesn't matter public or private" is higher than the number of those in favor of public.
 - -Although there are general complaints in a populist tone, these are not in a high proportion.

All in all, the evidence on the open question shows a great diversity of views, although a strong minority against private ownership remains.

6 Conclusions

We set out to see whether the received mainstream opinion of economists can come through to citizens in the public debate. We find that our participants react to the content of the different texts. This is true for what we call the prudent populist view of the issue at hand. Indeed T2 shifts participants opinions in the direction of this view compared to the more neutral text T1.

Importantly, we also find that the arguments of expert economists are effective at more than compensating the influence of the pro public companies arguments. T3 shifts opinions beyond those of T2. We think that this is good news. Economists' reasons have a significant influence on participants' opinions even in the presence of contrary arguments. This suggests that economists and expert thinking have a role to play in the public debate, beyond the role played in advising politicians or through the decision-making process in regulatory agencies.

In writing our texts we tried to give a balanced view of both the pro public and the pro private property views. In particular, we have attempted to present a moderate and nuanced version of the pro public private property view. Naturally, many other ways of writing the texts are possible. When one uses natural language in texts that are more than just short messages one is inevitably left with various ways of formulating things. A systematic study of this issue could be an interesting line for future work.

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7 Tables

Table 1: Distribution of percentages across opinions

| Treatment | Public | Public | Does not | Private | Private | N |
|-----------|--------|-----------------|----------|-----------------|---------|-----|
| | | with conditions | matter | with conditions | | |
| | 1 | 2 | 3 | 4 | 5 | |
| T1 | 28.2 | 12.3 | 51.3 | 7.4 | 0.8 | 351 |
| T2 | 45.7 | 19.3 | 27.6 | 6.8 | 0.6 | 352 |
| Т3 | 19.6 | 7.5 | 59 | 10.7 | 3.2 | 347 |

Table 2: Estimated Treatments Effects on Final Opinion

| | T1 v | s T2 | T1 v | s T3 | T2 vs T3 | | |
|----------------|------------------------|------------------------|---------------------|---------------------|---------------------|---------------------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| Treatment 2 | -0.433^{***} (0.077) | -0.421^{***} (0.077) | - | - | - | - | |
| Treatment 3 | - | - | 0.299*** (0.076) | 0.300*** (0.077) | 0.732*** (0.077) | 0.747*** (0.077) | |
| Controls | No | Yes | No | Yes | No | Yes | |
| N | 703 | 703 | 698 | 698 | 699 | 699 | |
| \mathbb{R}^2 | 0.044 | 0.055 | 0.022 | 0.028 | 0.115 | 0.141 | |

^{*}p<0.1; **p<0.05; ***p<0.01

Table 3: Estimated Treatments Effects on Final Opinion, conditional on opinion about government intervention about redistribution

| | Panel A. T1 vs T2 | | | | | | | | | |
|----------------|------------------------|------------------------|------------------|------------------|------------------|------------------|--|--|--|--|
| | Ag | ree | Do no | t know | Disc | <i>igree</i> | | | | |
| | (1) | (2) | (1) | (2) | (1) | (2) | | | | |
| Treatment 2 | -0.494^{***} (0.082) | -0.474^{***} (0.082) | -0.604 (0.475) | -0.563 (0.566) | -0.117 (0.218) | -0.131 (0.233) | | | | |
| Controls | No | Yes | No | Yes | No | Yes | | | | |
| N | 579 | 579 | 25 | 25 | 99 | 99 | | | | |
| \mathbb{R}^2 | 0.059 | 0.071 | 0.066 | 0.111 | 0.003 | 0.048 | | | | |

| | Panel B. T1 vs T3 | | | | | | | | | |
|--|---------------------|---------------------|-------------------|--------------------|-------------------|--------------------|--|--|--|--|
| | Ag | ree | Do no | t know | Disagree | | | | | |
| | (1) | (2) | (1) | (2) | (1) | (2) | | | | |
| Treatment 3 | 0.347*** (0.080) | 0.356*** (0.081) | -0.086 (0.547) | 0.510 (0.631) | 0.085 (0.242) | 0.187 (0.269) | | | | |
| Controls $ \begin{array}{c} N\\R^2 \end{array} $ | No 595 0.030 | Yes 595 0.041 | No 24 0.001 | Yes 24 0.003 | No 79 0.002 | Yes 79 0.055 | | | | |

| | Panel C. T2 vs T3 | | | | | | | | |
|----------------|---------------------|---------------------|-----------------|-----------------|-----------------|-----------------|--|--|--|
| _ | Ag | ree | Do no | t know | Disagree | | | | |
| | (1) | (2) | (1) | (2) | (1) | (2) | | | |
| Treatment 3 | 0.841*** (0.080) | 0.841*** (0.080) | 0.518 (0.509) | 0.520 (0.591) | 0.202 (0.255) | 0.177 (0.262) | | | |
| Controls | No | Yes | No | Yes | No | Yes | | | |
| N | 586 | 586 | 21 | 21 | 92 | 92 | | | |
| \mathbb{R}^2 | 0.159 | 0.184 | 0.052 | 0.294 | 0.007 | 0.086 | | | |

^{*}p<0.1; **p<0.05; ***p<0.01

Table 4: Estimated Treatments Effects on Final Opinion, conditional on satisfaction

| | | | | | Panel A | . T1 vs T2 | | | | |
|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| | l |) | j | 1 | 2 | | ę | 3 | 4 | 4 |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 2 | -0.956*** (0.426) | -0.980*** (0.464) | -0.477** (0.238) | -0.549** (0.252) | -0.292** (0.134) | -0.299** (0.134) | -0.395*** (0.125) | -0.363*** (0.127) | -0.628*** (0.195) | -0.532*** (0.200) |
| | (0.420) | (0.404) | (0.250) | (0.202) | (0.104) | (0.194) | (0.120) | (0.121) | (0.130) | (0.200) |
| Controls | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| $rac{ m N}{ m R^2}$ | $\frac{24}{0.146}$ | $\frac{24}{0.447}$ | $78 \\ 0.050$ | $78 \\ 0.077$ | $\frac{223}{0.021}$ | $\frac{223}{0.055}$ | $262 \\ 0.037$ | 262 0.063 | 116 0.083 | $\frac{116}{0.175}$ |
| | | | | | | | | | | |
| | | | | | Panel B | T1 vs T3 | | | | |
| | ι |) | j | 1 | ; | 2 | ę | 3 | 4 | 4 |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 3 | -0.448 | -0.890* | 0.284 | 0.252 | 0.486*** | 0.502*** | 0.266** | 0.291** | 0.152 | 0.105 |
| | (0.428) | (0.467) | (0.252) | (0.240) | (0.123) | (0.125) | (0.129) | (0.133) | (0.196) | (0.202) |
| Controls N | No 29 | Yes 29 | No 73 | Yes 73 | No 247 | Yes 247 | No 237 | Yes 237 | No 112 | Yes 112 |
| R^2 | 0.039 | 0.319 | 0.018 | 0.224 | 0.060 | 0.075 | 0.018 | 0.028 | 0.005 | 0.041 |
| | | | | | Panal C | . T2 vs T3 | | | | |
| | | 7 | | 1 | | 2 | | 3 | | 4 |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 3 | 0.508 | -0.030 | 0.760*** | 0.855*** | 0.778*** | 0.851*** | 0.266** | 0.291** | 0.780*** | 0.809*** |
| | (0.461) | (0.555) | (0.260) | (0.294) | (0.130) | (0.131) | (0.129) | (0.133) | (0.206) | (0.202) |
| Controls | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| N | 23 | 23 | 69 | 69 | 240 | 240 | 237 | 237 | 106 | 106 |
| \mathbb{R}^2 | 0.055 | 0.343 | 0.113 | 0.162 | 0.130 | 0.172 | 0.018 | 0.028 | 0.121 | 0.241 |

^{*}p<0.1; **p<0.05; ***p<0.01

Table 5: Estimated Treatments Effects on Final Opinion, conditional on ownership in the area

| | | | | Panel A | T1 vs T2 | | | | |
|----------------|---------------------------------|---|---|--|---|---|---|--|--|
| Pu | blic | Pri | vate | Mi | xed | Oth | her | Don't | know |
| (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| -0.202 (0.193) | -0.145 (0.196) | -0.409** (0.185) | -0.385** (0.182) | -0.528*** (0.174) | -0.527^{***} (0.179) | -0.833 (0.569) | 0.857 | -0.501^{***} (0.112) | -0.469^{***} (0.113) |
| No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| 124 0.009 | 124 0.085 | 125 0.038 | 125 0.133 | 138 0.063 | 138 0.090 | 5 0.417 | 5 1 | 311 0.061 | 311 0.083 |
| | | D . | | | | 0.1 | | | , |
| Pu | blic | Pri | vate | Mi | xed | Oth | ner | Don't | know |
| | (1) -0.202 (0.193) No 124 0.009 | -0.202 -0.145 (0.193) (0.196) No Yes 124 124 | (1) (2) (1) -0.202 -0.145 -0.409** (0.193) (0.196) (0.185) No Yes No 124 124 125 0.009 0.085 0.038 | (1) (2) (1) (2) -0.202 -0.145 -0.409** -0.385** (0.193) (0.196) (0.185) (0.182) No Yes No Yes 124 124 125 125 0.009 0.085 0.038 0.133 | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | (1) (2) (1) (2) (1) (2) -0.202 -0.145 -0.409** -0.385** -0.528*** -0.527*** (0.193) (0.196) (0.185) (0.182) (0.174) (0.179) No Yes No Yes No Yes 124 124 125 125 138 138 0.009 0.085 0.038 0.133 0.063 0.090 | Public Private Mixed Other (1) (2) (1) (2) (1) (2) (1) -0.202 -0.145 -0.409** -0.385** -0.528*** -0.527*** -0.833 (0.193) (0.196) (0.185) (0.182) (0.174) (0.179) (0.569) No Yes No Yes No Yes No 124 124 125 125 138 138 5 0.009 0.417 Panel B. T1 vs T3 | $\begin{array}{ c c c c c c c } \hline Public & Private & Mixed & Other \\ \hline (1) & (2) & (1) & (2) & (1) & (2) & (1) & (2) \\ \hline -0.202 & -0.145 & -0.409^{**} & -0.385^{**} & -0.528^{***} & -0.527^{***} & -0.833 & 0.857 \\ (0.193) & (0.196) & (0.185) & (0.182) & (0.174) & (0.179) & (0.569) \\ \hline No & Yes & No & Yes & No & Yes & No & Yes \\ 124 & 124 & 125 & 125 & 138 & 138 & 5 & 5 \\ 0.009 & 0.085 & 0.038 & 0.133 & 0.063 & 0.090 & 0.417 & 1 \\ \hline & & & & & & & & & & \\ \hline \end{array}$ | Public Private Mixed Other Don't (1) (2) (2) (1) (2) (2) (2) (2) (2) (2) |

| | Pu | blic | Pri | vate | Mi | xed | Ot | her | Don't | t know |
|----------------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------|----------------------------|-------------------------|--------------|--------------------------|---------------------------|
| Treatment 3 | (1) 0.267 (0.201) | (2) 0.294 (0.208) | (1) 0.318* (0.191) | (2) 0.227 (0.190) | (1) 0.518*** (0.162) | (2) 0.549*** (0.169) | (1) 1.667 (0.667) | (2) -0.154 | (1) 0.204* (0.108) | (2) 0.225** (0.110) |
| Controls | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| N | 124 | 124 | 120 | 120 | 148 | 148 | 4 | 4 | 302 | 302 |
| R ² | 0.014 | 0.035 | 0.023 | 0.112 | 0.066 | 0.096 | 0.758 | 1 | 0.012 | 0.021 |

| | | | | | Panel C. | T2 vs T3 | | | | |
|----------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|------------------|-------|---------------------|---------------------|
| | Pu | blic | Pri | vate | Mi: | xed | Oth | ier | Don't | know |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 3 | 0.469** (0.199) | 0.431** (0.204) | 0.727*** (0.182) | 0.661*** (0.188) | 1.046*** (0.169) | 1.161*** (0.176) | 2.500 (0.866) | 2.000 | 0.705*** (0.112) | 0.697*** (0.110) |
| Controls | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| N | 128 | 128 | 123 | 123 | 132 | 132 | 3 | 3 | 313 | 313 |
| \mathbb{R}^2 | 0.042 | 0.075 | 0.117 | 0.152 | 0.228 | 0.306 | 0.893 | 1 | 0.114 | 0.166 |

^{*}p<0.1; **p<0.05; ***p<0.01

Table 6: Estimated treatment effects adding comprehension and attention measures

| | | | P | anel A. T1 v | rs T2 | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------|--------------------|--------------------|--------------------|
| | Uncone | ditional | Ag | ree | Do no | t know | Dis | agree |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 2 | -0.413^{***} (0.077) | -0.420^{***} (0.077) | -0.462^{***} (0.082) | -0.475^{***} (0.082) | -0.529 (0.504) | -0.574 (0.558) | -0.130 (0.235) | -0.13 (0.238) |
| Text Question | -0.142 (0.112) | - | -0.219^* (0.120) | - | 2.551** (1.069) | - | -0.026 (0.320) | - |
| Reading Time | - | 0.0003 (0.0003) | - | 0.0005 (0.0003) | - | -0.004 (0.003) | - | -0.000 $(0.001$ |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| $ m N m R^2$ | 703 0.057 | $703 \\ 0.056$ | 579 0.077 | 579 0.075 | $\frac{25}{0.060}$ | $\frac{25}{0.183}$ | 99 0.048 | 99 0.048 |
| | | | Р | anel B. T1 v | rs T3 | | | |
| | Uncone | ditional | Ag | ree | Do no | t know | Dis | agree |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 3 | 0.306*** (0.077) | 0.289*** (0.076) | 0.362^{***} (0.082) | 0.350*** (0.081) | 0.571 (0.602) | 0.305 (0.624) | 0.182 (0.270) | 0.168 $(0.273$ |
| Text Question | 0.095 (0.098) | - | 0.087 (0.104) | - | 1.714 (1.045) | - | -0.201 (0.310) | - |
| Reading Time | - | 0.001** (0.0003) | - | 0.001** (0.0004) | - | 0.002 (0.001) | - | 0.000 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| $^{ m N}_{ m R^2}$ | 698 0.029 | 698 0.036 | 595 0.042 | 595 0.051 | $\frac{24}{0.412}$ | $\frac{24}{0.396}$ | $79 \\ 0.061$ | 79 0.059 |
| 10 | 0.029 | 0.030 | | | | 0.550 | 0.001 | 0.058 |
| | | ditional | | anel C. T2 v rree | | t know | Dio | agree |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| Treatment 3 | 0.751*** | 0.746*** | 0.837*** | 0.840*** | 0.890 | 0.441 | 0.195 | 0.183 |
| Text Question | (0.078) 0.036 | (0.077) | (0.081) -0.046 | (0.080) | (0.545) $3.053**$ | (0.647) | (0.264) 0.265 | (0.278 |
| Reading Time | (0.105) | 0.001 (0.0003) | (0.109) | 0.0002 (0.0003) | (1.381) | 0.0004 (0.001) | (0.357) | -0.000 $(0.001$ |
| Controls $ \begin{array}{c} N \\ R^2 \end{array} $ | Yes 699 0.141 | Yes 699 0.141 | Yes 586 0.184 | Yes 586 0.185 | Yes 21 0.498 | Yes 21 0.303 | Yes 92 0.092 | Yes 92 0.086 |

^{*}p<0.1; **p<0.05; ***p<0.01

Table 7: Frequently used codes

| Code | Research assistant 1 | Research assistant 2 |
|--|----------------------|----------------------|
| Does not matter public or private as long as service is good | 109 | 122 |
| In favor of public | 132 | 159 |
| In favor of private | 23 | 61 |
| General complaint in populist tone | 32 | 97 |

Appendix

A. Consent form

CONSENT

Welcome. You have the opportunity to participate in a paid online experiment by Playstudies. Please read the following information carefully.

a) INFORMATION FOR PARTICIPANTS

This project has been designed by researchers from the Universitat Autònoma de Barcelona and the IAE-CSIC. Its aim is to study how people make economic and social decisions. You will be presented with a hypothetical and simulated situation. From that moment, you will make decisions anonymously. Just for participating and completing the experiment, you will receive a fixed payment of 5 euros. Additionally, you will receive an additional variable amount depending on the decisions you make. Please note that the average payment for this study (between the fixed and variable payment) is around 6 euros per participant, and the estimated duration of the experiment is 20 minutes. While you may withdraw at any time, if you do not complete the experiment, you will not receive any payment and will not be able to participate in any other paid studies by Playstudies in the future. This experiment is anonymous and has no effect on your health, image, or reputation. Decisions are anonymous, and the identity of participants will never be disclosed.

b) CONFIDENTIALITY OF PERSONAL DATA

Personal data requested on the registration platform are required to communicate with you and ensure the validity of the experiment. They will only be used to determine if your profile is compatible with the study and to manage the payment you will receive at the end of the experiment. This process is necessary to comply with the methodological approach of experimental economics studies and to obtain validated high-quality results for the research team. Data will be encrypted and will never be linked to the decisions you make in the study. Playstudies complies with all procedures established by Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter, GDPR). Our team is committed to establishing appropriate hardware and software security measures to protect your rights. You have the right to request access, modification, and deletion of your personal data by attaching an identification document to your request, addressed to contact@playstudies.com.

c) ANONYMITY OF RESULTS DERIVED FROM DECISIONS

Data regarding the decisions you make, opinions, and any other results from your participation will be anonymized and will not be associated with your identity. The link between your personal data and the decisions will be broken before the start of the experiment, right after accepting this consent. These data will be available exclusively to the researchers involved in the project to draw conclusions and prepare scientific publications associated with them.

c) PAYMENTS AND RECEIPTS

When you finish the experiment, we will request essential data to process your payment. These data will not leave the country, will not be linked to your decisions, and will not be shared with anyone except those public entities to which we are obliged to provide your personal data in compliance with any law. For example, the Tax Law requires the Tax Agency to provide certain information about economic transactions that exceed a certain amount, but this is not the case with this study. In the event that, aside from the above cases, we need to communicate your personal information to other entities, we will ask for your permission beforehand through clear options that will allow you to decide in this regard. If there is anything about the study or your participation that is not clear or that you do not understand, or if you have questions or wish to report a research-related issue, you can contact: contact@playstudies.com.

d) CONSENT

To participate, indicate that you understand and accept this consent.

OPTION 1- I accept

OPTION 2- I do not accept

B. Instructions

INITIAL INSTRUCTIONS FOR PARTICIPANTS:

You are about to participate in an activity to collect opinions on economic and social issues. At the end of a series of specific questions in questionnaire format, and after reading a text, you will have the opportunity to express your opinions openly, to further elaborate on your questionnaire responses, or to add anything you deem appropriate on the topics discussed.

For completing the different tasks we present, you will receive a financial compensation of 6 EUROS if you answer a comprehension question about a text we will show you correctly, and 5 EUROS otherwise. This amount will be paid to you via PayPal. The tasks may take you around 20 minutes, but you can take more time if you wish. You have a total of one hour to complete everything.

We will inform you if you have earned the extra euro by completing all the tasks we request.

In this activity you are about to start, we will first ask you to provide us with some sociodemographic data. Then, we will ask for your opinion on some economic and social issues. There are no right or wrong answers to these questions. We only ask for your honest opinion, and your answers will not affect the final financial payment.

Afterwards, we will present a brief text. We would appreciate it if you read it carefully and then answer 1 question aimed at checking your comprehension of this text. If you answer the question correctly, you will earn an extra euro in your final financial payment.

Finally, we will ask for your personal opinion on some economic and social issues, and we will also give you the opportunity to express yourself openly about them. There are no right or wrong answers. We only ask for your honest opinion. Your answers will not affect the final financial payment.

All your responses will be treated anonymously.

This activity is part of a social research project that a group of professors from various research centers is conducting. Your effort and attention in responding to all sections are very valuable for the success of this study, which will contribute to a better understanding of our society.

We thank you in advance for your collaboration!

SOCIO-DEMOGRAPHIC INFORMATION

- 1) What is your gender? A. Male B. Female C. I prefer not to say
- 2) What is your year of birth?
- 3) What is your country of birth? A. Spain B. Other (please specify)
- 4) What is your province of habitual residence?
- 5) What is approximately the size of your municipality of habitual residence? A. Less than 10,000 inhabitants B. Between 10,000 and 100,000 inhabitants. C. More than 100,000 inhabitants.
- 6) What is the highest level of education you have completed? A. Primary studies, 6th grade, school certificate. B. Compulsory education (8th grade, ESO, School Graduate, Elementary Baccalaureate, First Grade Vocational Training). C. BUP, COU, Upper Baccalaureate, Pre-university, Second Grade Vocational Training, Medium Grade Vocational Training. D. University education (degree, diploma, technical engineering, graduate, master, doctorate, higher grade vocational training).
 - 7) Are you currently pursuing higher education? A. Yes B. No

If the participant selected option A in question 7, question 7b will be asked next. Otherwise, the questionnaire will move on to question 8 (see below).

7.b) What higher education are you pursuing? A. A University Degree in the Branch of Sciences or Engineering (for example, Mathematics, Biology, Architecture, Computer Engineering, etc.). B. A University Degree in the Branch of Health Sciences (for example, Medicine, Psychology, Nutrition, etc.). C. A University Degree in the Branch of Humanities and Arts (for example, Philology, History, Translation, Philosophy, etc.). D. A University Degree in the Branch of Social Sciences (for example, Law, Political Science, Economics, Primary Education Teacher, Journalism,

etc.). E. A Higher Vocational Training Cycle. F. A postgraduate degree (master, doctorate)

If the participant selected option A, B, C, or D in question 7b, questions 7c and 7d will be asked next. Otherwise, the questionnaire will move on to question 8 (see below).

- 7.c) What was your pathway to your current degree studies? A. Baccalaureate B. Higher Vocational Training Cycle (CFGS, FP2) C. Over 25 years old D. Others (previous university studies, etc.)
- 7.d) What was your university admission grade? Note to Playstudies: open question (write 0 if you did not take the University Admission Tests)
- 8) What is your MAIN current employment situation? A. Employee (salaried worker) B. Self-employed worker (freelancer; entrepreneur) C. Unemployed and looking for work D. Studying E. Performing household chores F. Retired G. Unemployed but not currently seeking work H. I am on ERTE or similar situation I. Other (please specify)

INITIAL OPINION QUESTIONNAIRE

Below are various statements or questions about economic and social issues. Please read them carefully and select the option that best reflects your personal opinion at this time. There are no right or wrong answers. We just want to know your honest opinion, and your answers DO NOT INFLUENCE the final financial payment.

Governments should intervene in the economy to ensure equal opportunities between children from low-income families and children from high-income families. A. Totally disagree B. Disagree C. I don't know D. Agree E. Totally agree

According to the information you have, is the water distribution operator in your municipality a public, private, public-private mixed, or some other type of company, or do you not know? A. It is a public company. B. It is a private company. C. It is a mixed public-private company. D. The water supply company is neither public, nor private, nor mixed public-private. E. I am not aware of the nature of the water supply company in my municipality.

Rate from 0 (not satisfied at all) to 4 (completely satisfied) your satisfaction level with the quality/price ratio of the water supply service in your municipality. A. 0 B. 1 C. 2 D. 3 E. 4

TEXTS FOR TREATMENTS T1, T2 or T3 (The full texts for the different treatments are reproduced in section 2 of the paper).

CONTROL QUESTION FOR T1 Instructions for participants: Below, we present you with a question about the text you just read. Please indicate which of the statements you think is correct. If you answer correctly, you can win an extra 1 euro at the end. Therefore, you can win a total of 6 euros. At the end of the questionnaire, we will inform you of the correct answer and your final monetary payment.

Question 1. The text states that: A. The price of water is decided by the operating company, whether public or private. B. The price of water in Spain is decided by public authorities, regardless of the ownership of the operating company. C. Water in Spain is very expensive because all

the operating companies are private.

CONTROL QUESTION FOR T2: Instructions for participants: Below, we present you with a question about the text you just read. Please indicate which of the statements you think is correct. If you answer correctly, you can win an extra 1 euro at the end. Therefore, you can win a total of 6 euros. At the end of the questionnaire, we will inform you of the correct answer and your final monetary payment.

Question 1. The text states that: A. People in favor of public ownership of water claim that water consumption will be free under their proposal. B. The movement in favor of public ownership of water would accept, in some cases, the possibility of private companies profiting from water. C. People in favor of public ownership of water argue that the price will be lower with their proposal.

CONTROL QUESTION FOR T3:Instructions for participants: Below, we present you with a question about the text you just read. Please indicate which of the statements you think is correct. If you answer correctly, you can win an extra 1 euro at the end. Therefore, you can win a total of 6 euros. At the end of the questionnaire, we will inform you of the correct answer and your final monetary payment.

Question 1. The text states that: A. There are experts who claim that poor people can have access to water at an affordable price, even if the operating company is private. B. Regulated private companies always supply water at a higher price than public companies. C. Private companies operating in water supply will always seek to obtain the maximum possible profit, even if they are regulated.

SECOND OPINION QUESTIONNAIRE:

Instructions for the participant: Below, we present you with two questions on economic and social topics. Please read them carefully and mark the option that best reflects your personal opinion at this moment in question 1, and rank the options in question 2. There are no right or wrong answers. We just want to know your honest opinion, and your answers do NOT affect the final payment. At the end of the two questions, you will have the opportunity to express your opinion more openly, to elaborate on your answers or to add anything you wish about these issues.

Which of the following statements do you identify with the most? 1. The water operator should be a public company in all municipalities. 2. The water operator should always be a public company unless it is very inefficient. 3. It doesn't matter if the operator is public or private, as long as it is well regulated. 4. The water operator should be a private company regulated by the municipality, as long as the private company does not influence the regulation. 5. The water operator should be a private company regulated by the municipality in all municipalities.

Please rank the following issues in order of importance to you: A. Macroeconomic issues, such as inflation and unemployment. B. The price and quality of housing. C. The public, private, or mixed ownership of the water operator. D. The efficiency of the municipality's cleaning services.

E. The presence of green spaces and other public areas in your municipality.

Open-Ended Question: Finally, we give you the opportunity to express, in up to 400 words, any additional opinions on the issue of water supply ownership, either to elaborate on any of the previous questions or to add any further reflections.

C. Additional tables

Table A-1: Characteristics of participants in each treatment

| Characteristic | T1 | T2 | Т3 | Diff. | Diff. | Diff. |
|--------------------|------|------|----------|---------|---------|----------|
| | | | | (T1-T2) | (T1-T3) | (T2-T3) |
| Female | 0.60 | 0.66 | 0.76 | 0.7081 | 0.01492 | 0.004961 |
| Age | 31 | 32 | 32 | 0.3416 | 0.1617 | 0.6445 |
| Spanish | 0.90 | 0.93 | 0.93 | 0.09804 | 0.2466 | 0.6204 |
| $City\ Size$ | | | | | | |
| Large City | 0.49 | 0.47 | 0.45 | 0.4769 | 0.2854 | 0.7215 |
| Mid City | 0.37 | 0.39 | $0,\!41$ | 0.4550 | 0.2275 | 0.6437 |
| Small City | 0.14 | 0.14 | 0.14 | 0.99 | 0.99 | 0.99 |
| Education | | | | | | |
| Primary | 0.01 | 0 | 0 | - | - | - |
| Compulsory | 0.11 | 0.12 | 0.11 | 0.7307 | 0.866 | 0.5915 |
| Upper secondary | 0.27 | 0.32 | 0.30 | 0.0869 | 0.2707 | 0.5441 |
| Tertiary | 0.61 | 0.56 | 0.59 | 0.1153 | 0.5071 | 0.3647 |
| Currently Tertiary | 0.66 | 0.71 | 0.68 | 0.1851 | 0.6471 | 0.388 |

Table A-2: Initial opinions

| Question | T1 | T2 | T3 | Diff. | Diff. | Diff. |
|----------------|----------|------|----------|---------|---------|---------|
| | | | | (T1-T2) | (T1-T3) | (T2-T3) |
| $Govt\ interv$ | | | | | | |
| Total disagree | 0.04 | 0,04 | 0,02 | 0.8437 | 0.0883 | 0.1294 |
| Disagree | 0.08 | 0,12 | 0,08 | 0.0802 | 0.8548 | 0.1181 |
| Don't know | 0.04 | 0,03 | 0,03 | 0.5371 | 0.4231 | 0.8509 |
| Agree | 0.47 | 0,47 | 0,48 | 0.9718 | 0.7678 | 0.7408 |
| Total agree | 0.37 | 0,34 | $0,\!39$ | 0.4614 | 0.6119 | 0.2141 |
| Property | | | | | | |
| Public | 0,17 | 0,18 | 0,18 | 0.7057 | 0.6414 | 0.9288 |
| Private | 0,17 | 0,18 | 0,17 | 0.7811 | 0.8954 | 0.6829 |
| Mixed | 0,22 | 0,17 | 0,20 | 0.1337 | 0.6339 | 0.3076 |
| None | 0,03 | 0,01 | 0,01 | 0.6564 | 0.3222 | 0.5686 |
| Don't know | 0,43 | 0,46 | $0,\!44$ | 0.3850 | 0.7760 | 0.5607 |
| Satisfaction | | | | | | |
| 0 | 0,04 | 0,02 | 0,04 | 0.2159 | 0.8746 | 0.2808 |
| 1 | $0,\!12$ | 0,10 | 0,09 | 0.6410 | 0.2891 | 0.5515 |
| 2 | 0,33 | 0.31 | 0,38 | 0.5885 | 0.1453 | 0.0461 |
| 3 | 0,34 | 0.41 | 0,34 | 0.0572 | 0.9772 | 0.0618 |
| 4 | 0,17 | 0,16 | 0,15 | 0.5538 | 0.3352 | 0.7090 |