Fairness Unchained – The Determinants of a Fair Local Tax burden

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Abstract

The current socioeconomic paradigm of most modern societies clearly constraints the citizen's capacity to conceive alternative economic models and their viability. Policy-qualifiers such as rigour or consistency are now tarnished by social views' reinforcement through changing fairness connotations among communities.

We put the spotlight on the municipality of l'Ametlla del Vallès to study the possible determinants behind a fair local tax contribution. Through a survey experiment and local administrative and tax records, we assess the possible relationship between a perceived fair local tax contribution and (1) the local tax burden, (2) public spending, (3) social position and (4) redistribution. We also control for the effect of information and some possible locally-based bias through a difference-in-difference treatment design.

We do not find a causal relationship for the tax burden patterns, while satisfaction towards public services is found to be statistically significant. We also find evidence of a causal relationship for social position and redistribution views. The role of information is found not interfere in the allocation of a fair local contribution.

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1. Introduction

Over time, the human condition has been struggling to find the appropriate collaboration between economy and society. For every historical stage, one could easily set apart multiple arrangements between both sciences which were believed to be ideal for their specific socioeconomic paradigm of that time. If one attempts to associate this to some of the examples history teaches, such thought will unavoidably be tied to an ideologically-biased contemporary connotation, which will jumble the genuine economic theory with the historical events that unfolded as a result of a rising movement or a big historical event. Regardless of the worst atrocities humankind has performed, it seems as though disputes between civilizations and war victors have constrained our views towards economic models simply because of the ideas or perceptions a specific society had at the time. This shows us how the views and perceptions people have, and also the information we are given, strongly influence the yardstick from which we base our judgment as individuals.

This does not come as something new, though. Among all the existing applied sciences, those fields which have to cope or be related in a practical way with society the most will always face a constant non-scientific trial. One could argue its general interest. The extent of technology and medicine's progress, for instance, is recurrently under a controversial debate regarding the thresholds of the human condition. Science and society collide on many topics in a very natural way. When it comes to applied economics, however, given the current socioeconomic system, there seems to be little autonomy for it to perform naturally just as other applied sciences do. Economics is strongly related to society, and both need to operate side by side. At the very end, the applied economics focus on merely studying the organisational methods of a society in order to satisfy their needs through goods and resources. The first serves the second. Nevertheless, the applied economics have for so long melted into the social constraints, which hampers any proper analysis of an economic policy or any redistribution system.

This background matters when one intends to assess the efficiency of a certain policy through an economic model, for instance. Whichever binding or workable results such a model could provide will require a social behaviour assessment on the side, should the first ever come into existence outside de books. In other words, an effective economic policy will not only be acknowledged by its theoretic consistency but also by its popular reinforcement. A merely technical study does not suffice: it also has to match the region-and-time-changing fairness connotations of the society at issue.
One could advocate the unquestionable benefits the current socioeconomic paradigm has brought into welfare societies, and how the human greedy condition is to blame for its flaws. Such a discussion aside, from a theoretical point of view, the current coexistence of both sciences, regardless of its advantages, clearly constraints the citizen's capacity, individually but especially as a society, to conceive alternative economic models and their viability.

Precisely on account of the point raised so far and its disclosure, properly assessing the ties of social behaviour and applied economics can be rather onerous, especially on global frameworks. For that matter, in this master thesis, we set the scale on the municipal level to see how the local economy and the social behaviour cope with one another. Such ring-fenced working fields, one has to admit, tend to hamper a potential extrapolation of the outcomes for other research purposes. At the same time, however, it also provides much more clearance when assessing them at the spot at issue.
The local field is a yet challenging but rewarding area of work. On the one side, in terms of social behaviour, every municipality has its own particular fixed effects every research should take into account. On the other side, regarding the local economy, their structure and policymaking competences are quite standardized among them, which eases its understanding and field analysis.

The aim of this research is to identify the determinants of a fair local tax contribution in the municipality of l'Ametlla del Vallès. We assess the possible links between the contribution a citizen perceives as fair and their views and knowledge regarding (1) local tax burden, (2) public expenditures, (3) social position and (4) redistribution. The project is implemented in concert with the treasury department of the city hall of the village, ongoing since the spring of this year, and will not be concluded until this fall. In this sense, this master thesis analyses the early results updated as of August 31st and cannot sadly include the ultimate database version, which will not be available until the end of September.

The empirical strategy consists of implementing a survey experiment to all the citizens of the village born in the year 2005 or earlier. We ask questions regarding their knowledge and perceptions of the four groups abovementioned and then cross the outcomes with the official local administrative and tax data. Thereupon we document the bias and linkages between both datasets and assess the results with some control variables. Furthermore, the survey experiment also includes a difference-in-difference design to control for the role of information on the matter and the possible local bias for certain outcomes.

The empirical findings do not show statistical significance for the tax burden parameters when it comes to determining a perceived fair tax burden. We find a relation neither for the households' tax burden nor the general knowledge of local taxation. On the other side, general satisfaction towards the public services is found to be statistically significant at the 0.1 % level. For both cases, the role of information does not interfere in the allocation of a fair local contribution.
As per social views, we find some evidence of statistical significance at the 10 % level by relating the views of the respondents in terms of poorer households and their perception of a fair contribution.
Last but not least, views for redistribution are also found to be related to the desired local contribution adjustment at up to the 5 % level.

The thesis composition is organized as follows. Section 2 focuses on the background of the municipality for both citizens and local administration, section 3 analyses the current literature and its relation to the research, section 4 exposes the empirical strategy followed to fulfill the purposes of research, section 5 exposes the results obtained through the different regressions and section 6 concludes the work with some final comments and a critical discussion.

2. Background

2.1. The village

L'Ametlla del Vallès[1] is a medium-sized town located approximately thirty kilometres north from Barcelona. It is one of the 39 self-governed municipalities of the Catalan historical region of the "Vallès Oriental[2]", between the Mediterranean pre-coastal range – by the Montseny hills – and the Vallesan plain depression, whose capital is the city of Granollers.

TABLE 1: BASIC INFORMATION OF THE MUNICIPALITY

Population (2021)	Density	Surface	Elevation
8.983	632,61 inh/km²	14,2 km²	281 m

Source: Institut d'Estadística de Catalunya (IDESCAT).

Its uneven terrain provides a particular and privileged landscape to its visitors and citizens, by combining the uphill neighbourhoods to Puiggraciós and the gentle slope by the regional esplanade. The calmness such a position provides has made l'Ametlla throughout the past thirty years a wealthy and desired destination for vacation and second residences, creating a contentious mix between local families and newcomers.

This trend has partially contributed to establishing high levels of annual average disposable income of the "*Ametllatans*", which explains its position among the top-10 of the region of Catalonia[3], top-30 in Spain.

Notwithstanding such a well-to-do environment, l'Ametlla is not immune to the constraints many local and regional administrations face towards budgetary stability. As it is going to be shown thoroughly further down, an extensive town which needs to cope with a noteworthy number of public expenses – such as street maintenance, a local gym, public pools, local police force, etc – struggles to make ends meet by simply having the property tax as its main income resource.

L'Ametlla limits east with the municipalities of La Garriga and Les Franqueses del Vallès, south with Canovelles and Santa Eulàlia de Ronçana, west with Bigues i Riells and north with Montmany – Figaró.

2.1.1. Demographics of l'Ametlla

The population of the town has been experiencing substantial changes in type, size and origin with its turning point at the last century's decades. Such turns are not negligible, as every one of them entails a change in the local society which is worth considering.

Population growth
As one can see in figure A-4, there is a clear upward trend in the local population even though there are many accountable slope-changing periods.

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[1] See figure A-1 and A-2.
[2] See figure A-3.
[3] [Website] Roger Tugas (2020), "*Quins són els pobles més rics del Vallès Oriental?*".

1985	2000	Growth	Aggregate growth
2.376	5.697	239,77 %	3.321

Source: Institut d'Estadística de Catalunya (IDESCAT).

Migration

The first worth-mentioning migration period took place between the 80s and the 00s. It was monopolised by inner-state migration: people moved to l'Ametlla mostly from the metropolitan area of Barcelona and other provinces of Spain. This can be explained by the fact that, over those years, l'Ametlla became a desired destination for young or starting families, who wanted to start a quiet and more rural life out of the city of Barcelona, which was becoming busier and more crowded after the big implications and success behind the Olympic Games of 1992. This explains why through that decade the municipality experienced its highest annual growth rate in its history and, at the same time, kept a rather low outer-state immigration rate.

By the time the year 2000 arrived, l'Ametlla had had doubled its population at a 221 newcomers per year with an immigration rate of 4,46 %, the lowest ever registered.

Such a growth in a short period of time urged l'Ametlla not only to become a more accessible city, by arranging new bus lines and better road infrastructure, but also to undertake nearly mass-construction housing programs at a time the sector was skyrocketing. In this sense, as observable in figure A-5, one can clearly see how the outer-state immigration rate accounts for this second phase of population growth. Reached this point, by the time the economic recession began, the population initiated its path towards stabilization, between years 2008 to 2017, in which the immigration rate kept decreasing, sooner than at the regional level, and the low but continuous in-state migrants prevailed.

The recent sudden population change in the municipality is mainly accountable for in-state mobility from big urban cities to rural areas due to the lifestyle changes the COVID-19 pandemic has brought to some people.

In short, and as it will be exposed in the local society section, the evolution and changes of population and its migration implications has created a particular scenario in which several distinguishable groups are met in the municipality. A typical country-side village where everyone knew each other moved to become a residential city, with most of the people as Barcelona as its origin and reference, and with the offspring of the first local generations claiming the local life these "foreigners" came to fade in exchange for comfort.

Age and gender

At the tables A-1 and A-2, one can find the main information in terms of age and gender of the town, compared at a regional level. The differences appear to be insignificant for statistical purposes. Nonetheless, in the figure A-6, such analysis is deepened into a more exhaustive data by showing the different age groups and discriminating by gender.

Setting the spotlight on this figure, one can see a clear age-range predominance. This range, for both men and women, goes from 40 to 55 years old. Furthermore, there are more young males than females and, as usual, in the older ranges more women than men are found.

It is also interesting to highlight how the share of the typical starting family age range has been rather constant over the last years. This suggests the young population is likely to keep growing proportionally for the following years, which defines a healthy municipality in terms of depopulation. This is also relevant given the issues such a thread brings to municipalities as l'Ametlla.

2.1.2. Local society and economy.

As it has been introduced, the strongly-changing demographics over the past 40 years have created a rather particular social scenario. Even though it is clear every municipality has its own particular issues, l'Ametlla combines the proximity of a village with the coldness of a big city.

In this sense, it could be easily affirmed that part of the population supports an active town in which everyone knows each other, with many activities and celebration, and the other part simply spends their time in town for resting and relaxing purposes, having their social and leisure activities occurring somewhere else. For such matter, even though l'Ametlla is clearly a wealthy town with a well-to-do lifestyle, this contender creates a rather particular vindicatory vein which, regardless of their goods and lifestyle, intends to compensate somehow the residential town l'Ametlla has become.

TABLE 3: HOUSING REGIME AT LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
Property	2.261	119.327	2.188.657
Rent	343 **(12,58 %)**	21.277 **(15,13 %)**	582.701 **(21 %)**
Total	2.726	140.604	2.771.358

Source: Institut d'Estadística de Catalunya (IDESCAT).

After all, then, l'Ametlla is a town where many people come to raise a family. This explains why the average figures of homeowners, as shows table 3, is higher than the average.

Such a residential and rural environment creates notable mobility of the offspring. When it comes to pursue a university education, mostly in Barcelona, l'Ametlla does not count with enough transportation structure to easily support a studying-life. Therefore, most of the students, when they reach the age of 18, move to Barcelona and hardly ever come back to l'Ametlla, as it does not provide what a young lifestyle requires.

L'Ametlla has two elementary schools, "CEIP Els Cingles" and "CEIP El Bertí", and a high school, "INS Eugeni Xammar". All three educational centres are public and belong to the regional government education department. It is also worth mentioning the high school "SEK Catalunya", a private education centre, to which many citizens also attend.[4]

As per the wealth of the citizens, given that income does not belong to the scope of the survey and the local administrative data, there are a couple typical indicators which might help give a quick overview of its condition.

The first and most obvious one would be to take a look into the GDP. Nevertheless, such indicator has many limitations when assessing the wealth of a municipality as l'Ametlla, given its low industry and economic activity.

The average disposable income, however, strongly refers to the matter at stake, and might be worth studying for evaluation purposes. In table A-7, one can see the aggregate and average disposable income for the municipality and at the regional level. If we take such analysis even further by looking at table A-8, we will see how, as per the year 2018, l'Ametlla ranked 9th of Catalonia in terms of average disposable income.

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[4] For further data regarding local and regional education, see table A-3.

Through the dissertation it will be many times highlighted the importance of not relating tax contribution or property with the actual wealth of the citizen. Nevertheless, sometimes we automatically assume so.

As per the employment, we observe uncommon low levels of unemployment[5] even though the municipality does not provide much job opportunities. This helps explaining how mobility is an important issue for most citizens. Furthermore, the amount of non-active population, through retired people, is also worth-mentioning through table A-10.

All this social context creates a remarkable difference when it comes to analyse the people's perception of local issues. In this sense, the social factor has great incidence in the opinion a citizen could have regarding the matters this research intends to analyse.

2.2. The institution

Over the past years, the local finances have been struggling to achieve budgetary stability ever since the economic recession had a major impact on the construction sector. The remarkable decrease such an event implied to the city hall's revenue, together with the gradual increase of the public services costs and some new budget constraints due to a poor funds administration, have made the local budget a hot potato. At table 8 the revenue and public spending for chapters and 2020 is exposed.
That is why the institution is currently working on reducing the public expenditure and to find new tax policymaking strategies to increase the revenue so both assets can meet again in holy balance.
With such purpose, the city hall of l'Ametlla del Vallès, through its treasury department, partakes in the implementation of this local economy study as one of the stages of the 2022 budget plan project.

Regardless of all the control variables and local fix effects, whose extent and nature will be exposed afterwards, a study which, among others, focuses on the local tax burden has to duly define the scope of its study and to properly gather the appropriate information. After all, a city hall does not only deal with many expenses and revenue but also with many administrative or minor taxes which, either the government cannot regulate due to higher state jurisdiction or have no impact at all to the general local taxation policymaking.

In that sense, through table 4 and 5 one can find outlined the main local taxes and public services the treasury department and this research considered as suitable the most for the purposes of this research. Further ahead, at tables 6 and 7, one can observe the aggregate figures for 2020, its share among all revenue and spending, and the per capita figures, should it apply.
As one clearly sees, the property tax, IBI, holds nearly the 40 % of the local revenue. A figure which is quite comparable to the cost of the local administration human operation. The other taxes do not hold any particular condition apart from the typical popular constraints to identify them.
As per the public spending, it raises one's attention to analyse the costs of maintaining the municipality through its streets, waste and sewage. Nevertheless, what surely should surprise anyone with some background on the matter is the cost the municipality faces for covering the losses of the managing concessionaire company of the local gym, which sums more than half the streets maintenance of the whole municipality. This is a particularly sensitive topic that has been going on for years, lawsuits and bankruptcy included, which will also bring more content to the literature.

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[5] See table A-9.

TABLE 4: LOCAL TAXES UNDER STUDY

Tax	Description
Property tax (IBI)	Local Ad valorem tax on the value of the property owned in the municipality. Paid annually.
Road tax (IVTM)	Local tax for circulating with a motor vehicle. Varies according to its horsepower. Paid annually.
Construction tax (ICIO)	Local tax on construction works conducted in the municipality. Paid per issued construction licence.
Capital gain tax (IIVTNU)	Local tax on the capital gain of property in a transfer. Paid per sale, donation or inheritance.
Waste management fee	Local fee for the municipal waste management service.
Sewage management fee	Local fee for the municipal sewage network maintenance.

Notes: Exposition of the main local taxes of l'Ametlla this study considers[6].
Source: Treasury department of the city hall of l'Ametlla del Vallès.

TABLE 5: PUBLIC SERVICES UNDER STUDY

Tax	Description
Local administration	Cost of the human operation of the municipal administration. Local civil servants' salaries.
Streets maintenance	Costs of streets' cleaning and restoration through third parties.
Local gym	Cost of covering the losses of the incumbent concessionaire managing company.
Waste management	Costs of the collection, transport and processing of the household and commercial waste.
Music school	Cost of the human operation of the municipal school.
Summer pool	Costs of the annual tuning of the two municipal summer swimming pools.
Sewage maintenance	Costs of the servicing and restoration of the infrastructure.

Notes: Exposition of the public services of l'Ametlla this study considers[6].
Source: Treasury department of the city hall of l'Ametlla del Vallès.

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[6] Local taxation is regulated by the *Llei catalana de règim local* (2/2003 de 28 d'abril) and state regulation (7/1985 de 2 de abril).

TABLE 6: LOCAL TAXES – REVENUE IN 2020

Tax	Amount	Share	Per invoice
Property tax (IBI)	3.980.348.26 €	39,50 %	829,58 €
Road tax (IVTM)	560.837,61 €	5,57 %	78,85 €
Construction tax (ICIO)	246.146,91 €	2,44 %	-
Capital gain tax (IIVTNU)	552.768,38 €	5,49 %	-
Waste management fee	727.726,81 €	7,22 %	218,00 €
Sewage management fee	0,00 €	0,00 %	-

Notes: Monetary figures of the revenue collected for the exposed taxes in table 4 in 2020.
Source: Treasury department of the city hall of l'Ametlla del Vallès.

TABLE 7: PUBLIC SERVICES UNDER STUDY – COST IN 2020

Local service	Amount	Share	Per citizen
Local administration	4.226.003,77 €	42,50 %	491,17 €
Streets maintenance	641.043,40 €	6,45 %	75,42 €
Local gym	378.551,06 €	3,81 %	44,54 €
Waste management	1.093.636,33 €	11,00 %	128,66 €
Music school	211.103,23 €	2,12 %	24,84 €
Summer pool	65.535,75 €	0,66 %	7,71 €
Sewage maintenance	158.212,81 €	2,64 %	18,61 €

Notes: Monetary figures of the costs of public spending for the exposed services in table 5 in 2020.
Source: Treasury department of the city hall of l'Ametlla del Vallès.

TABLE 8: LOCAL BUDGET

Revenue	Amount	Share
Local taxes	5.831.751,95 €	57,88 %
Local fees	1.140.196,62 €	11,32 %
Current transfers	2.438.293,29 €	24,20 %
Property income	327.155,27 €	3,25 %
Capital transfers	65.277,02 €	0,65 %
Financial asset	7.200,00 €	0,07 %
Financial liability	266.000,00 €	2,64 %
Overall quantity	**10.075.874,15 €**	**100 %**

Public spending	Amount	Share
Public servants	4.226.003,77 €	42,50 %
Current spending	4.012.263,58 €	40,35 %
Financial expense	31.156,99 €	0,31 %
Current transfers	664.907,84 €	6,69 %
Investment	579.925,19 €	5,83 %
Financial asset	7.200,00 €	0,07 %
Financial liability	423.134,89 €	4,25 %
Overall quantity	**9.944.592,26 €**	**100 %**

Notes: Monetary figures of the budget settlement for revenue in 2020[7].
Source: Treasury department of the city hall of l'Ametlla del Vallès.

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[7][Website] Local budget settlement for 2020.

3. Literature review

In accordance with the particular reciprocity between social behaviour and public taxation the introduction section has described, we find much literature from both regional and local perspective. As a first approach, most of them stress the importance of the role of the government when it comes to assess the consistency and the efficiency of tax policymaking (Ridge and Smith, 1991; Abbiati et al., 2020) and the way information is provided to reduce the bias of the popular beliefs (Cruces et al., 2013; Karadja et al., 2014). Both concepts make way to the following discussion.

In order to direct the existing literature towards our research purposes, we looked for works whose purpose of research or methodology also consisted of finding a relationship between taxation and social behaviour. Stancheva's work (2021) stood out among them. As we have exposed in the introduction, the efficiency a particular tax policy might bring to the welfare of population is nowadays clouded by fairness views and personal connotations. Stancheva documents this effect by showing how social preferences, social fairness perception and the views of the government are, in reality, the largest drivers when it comes to support a policy.

The outcomes of that research matched the purposes of this research except for the possible government implications, which might bias the outcomes for our research. Timing is important for our context, as the frenetic political activity in a municipality is always a thread for such experiments. Nevertheless, given that the equator of the current incumbent local government mandate has just passed, the timing could not be better, as the possible incidence of political factors is strongly reduced due to a lack of activity.

Following with the literature review, at first, analysing the work of Spahn (1995), it was considered to extend the scope of the survey by displaying and surveying new potential tax policies citizens could assess and comment on. Spahn explains how the most interesting tax policies for municipalities consist of the personal income tax and the local business tax, while he claims the property tax limitations are merely political. Having the last limitation solved for the motives above-mentioned, such idea was finally not implemented due to (1) the difficulties a town as l'Ametlla has to perform this type of taxes (resources, regulations and a weak business network) and (2) because of the possible consequences, found by Lamberton (2018), of a general survey rejection, which will be explained further on.

For future local tax policymaking, however, it is worth highlighting the findings and reflections of Ridge and Smith (1991), who convey the limitation of the property tax in a municipality. This clearly applies to a municipality as l'Ametlla, dependent on the property tax, which holds for more than the 40 % of its revenue, as we saw in the last section.

Setting the spotlight on the first assessment of the project, taxation and public spending, the possibility of a political bias was something to avoid. At the very end, most people do not see the local taxation as something affable (Mascagni, 2018) and giving the wrong approach to the process could have had influenced the outcomes. In this sense, Abbiat, Antinyan and Corazzini (2020) found that the behaviour of the taxpayers and their attitude towards taxes – that is, their will to contribute more too – is influenced by the extent they perceive to be involved in government decisions. Thus, to make sure "political independence", the survey had to be designed in a way which combined both benefits: (1) a non-tax evaders persecution and (2) as something people saw as partaking for real on transcendental matters. Abbiat et al. also stress, however, the possibility that such behaviour not only being influenced by such extent but also how much do they support the current local government administration (Lamberton, 2018). Here is where we added to the local treasury the general satisfaction assessment.

The role of information with regard to these two potential determinants, tax burden and public expenditure, is not clear according to the literature. As a matter of fact, Lamberton (2013) documented empirical evidence which suggested no relation whatsoever between providing information of the public spending to

the citizen and their satisfaction levels. On the other hand, Cruces et al. (2019) and Karadja (2014) found that proportioning information can provide a reduction of the bias of the respondents. Giving this unmatching outcomes in the literature, the possibility of designing a vignette treatment experiment – difference-in-difference strategy – to assess the role information might be playing in the determination of a fair tax contribution was decided. Furthermore, unlike what this research had in mind first, not only has the effect of information been analysed for its implications towards a fairness local tax contribution, but also the general satisfaction among the local services. About this last one, Lergetporter et al. (2016) found that providing information could reduce the support for public spending. In this work it is not documented a reduction of the support of the spending per se, but it is reported a reduction on its satisfaction, which could be acknowledged as quite similar.

With regard to social position and redistribution, we had in mind how people tend to give importance not only to their current social position but also to the one others have (Easterlin, 1974, 1995; Blanchflower and Oswald, 2004). In this sense, following the reflections from the work of Hvidberg, Kreiner and Stantcheva (2021), it made sense to include as a potential determinant for a fair local tax contribution the perceived social positions – both from oneself and of the others – and the views regarding redistribution. Given some of the existent literature, they seem to be likely to explain the possible changes in what a citizen considers a fair local tax contribution.

Norton and Ariely (2011) claim that taxpayers tend to bias their wealth distribution. This research considered, and actually included, wealth perception as an interesting indicator for the survey. Nevertheless, due to the fact that this research does not work with disposable income trustworthy information, it did not quite make sense to compare the wealth perception of the respondents with their local tax burden. Regardless of how much a citizen might contribute to the local finances, this does not necessarily imply their wealth position is higher. That is why it seemed more practical to compare the perceived tax position with the actual one, information we could easily relate and that left no further room for speculation.

As per redistribution purposes, it is also worth mentioning the work of Page and Goldstein (2016), who find that the use one gives to information might, in fact, affect the attitudes of the citizens towards redistribution. In this case, with the same logic but for different purposes, another difference-in-difference design was decided to be implemented to analyse the possible deviations and changes that could had an impact on the redistribution assessment. As a matter of fact, even though this work performs a different approach, we took into account widely known literature when it comes to see how the use of information affects the views towards redistribution (Kuziemko et al.,2015). As said, given that this work does not develop a complex redistribution assessment, and that its scope of work does not focus on its outcomes but on its possible causal relationship with the perception of a fair local tax contribution, the creation of a second treatment group appeared to be enough for the purposes of this research.

This work contributes to the current literature by providing further research on the survey experiments' study area and the extend of social views towards the perceived fair local taxation perceptions. Furthermore, we add the possible determinant of the local tax burden, not as common as the others in the existing literature, which might give way further research and assessment in other contexts given the limitations found in the one for this work. Furthermore, the collaboration of the city hall gives us the possibility of merging the obtained dataset with the tax and administrative records of the participants, assessing some of the results with more tools and information.

This research also provides further literature on information treatment survey, which seem to find different outcomes and unmatching conclusions.

Last but not least, given the difficulties to perform research as such on the local or regional level, which this writer had to face personally, this study intents to contribute on encouraging further research of this kind in the near future.

4. Empirical strategy

4.1. Dataset

The dataset with which this research works is the result from mixing three clearly distinguished data-sources. The data is property and has been always manipulated with sensitive information by the city hall, as it will be exposed further down.

Census registry

We use the census registry from the city hall on July 27th, 2021, to obtain trustworthy data of the target respondents in terms of control variables such as age, education, employment or nationality, among others.

This database has some limitations in terms of education, as the information might be out of date for some of the citizens. Such information is updated yearly, meaning that if someone changed their education condition through the first 7 months of the year, it will not figure to the database as it is.
Furthermore, if someone registers to the local census after the mentioned date, they will not be considered for the experiment either.
Another limitation accounts for those citizens who live in the town but are not registered or those who moved out but still figure in their birth household. This is a remarkable limitation for the survey, as people are asked to answer the questions according to their current official household. People might not remember where they actually are registered on paper.

Tax records

The tax records are provided by the Diputació de Barcelona. It contains the real tax contribution information of every local citizen who pays local taxes.
This database is exported from a Spanish old-fashioned software. The language the software uses is notable in terms of database managing, as it wrongly transmits the Catalan tilde for certain letters wrongly.
Another limitation of the database consists of the way payments are shown[8]. It does not allow to automatically disaggregate the tax burden per household or citizen, but for every payment of every tax instead.
As per another issue, not related to the database itself but the taxation procedure, the waste management tax is under the name of the owner of the dwelling. Should this person be renting the house, the waste management tax, which has to be paid by the tenant, sometimes is not linked to them in the records. This adds further research timing into linking data.

Some other minor limitations appear when controlling by the vehicle ownership, as some of the citizens will not appear in the records if the vehicle is officially owned by the companies at which they work.

Survey experiment

The third database consists of the outcomes we obtain through the survey experiment. As this procedure has been tailor-made for this research, its design will be explained extensively in the section 5.2.

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[8] It also shows tax evasion, non-compliances, deposits or debt,

Data protection

An essential and ineluctable issue a three-way database strategy holds is the proper treatment of the information. With such purpose, the legal department of the city hall, together with the responsible for the treatment of sensitive data, duly detailed the right procedure for this information to be used exclusively for academic purposes and ensuring the current regulation.

In this sense, in the survey, every citizen is given an ID number when they completed the poll. This new made-up number for every participant is the one we receive, which substitutes their fiscal ID, Name, Surname, Address and any personal information which might make a person identifiable.[9]

5.2. Survey experiment

Through a survey experiment strategy this research intends to create a thorough database which allows to fulfil the purpose of this research.

Target

We conduct a survey experiment at the local level to the citizens of l'Ametlla del Vallès. Every villager born from 2005 onwards is welcomed to partake to the survey during the months of August and September 2021. According to the census, 7.510 people fulfil the requirements to participate. We aim at a sample of at least 10 % of the population.

Method

The University of Barcelona, with the collaboration of the Treasury Department of the city hall of l'Ametlla del Vallès, designs an online survey implemented through the software application Gorilla[10].
The citizens are asked to report their fiscal identifier, which will be used afterwards by the city hall to link their answers with their tax administrative records.
The average time to complete the survey experiment is expected to be 12 minutes.

Survey outline

The survey consists of three blocks (see Appendix B) and is entirely conducted in Catalan. At the beginning of the questionnaire, a brief explanation of the survey and a consent page for the compliance with the Data Protection Regulation of the European Union is shown to all respondents[11].

Personal background

In this first block, participants are asked for their age, their gender, marital status, education and their current employment situation. These answers will be used afterwards to analyse heterogenous effects or to control for those personal characteristics.

Socioeconomic background

This second block contains five questions. The objective of the first three is to create a variable which grades the local life of the citizen. This is assumed given the important share of the population who resides in l'Ametlla but has a job or their social circle outside the village. Such control variable could be important,

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[9] The dataset given to the research team consists of data unlinked to an identifiable person. The city hall has taken care of linking the respondents of the server with their control variables, and then deliver the database without sensible information according to that states the *Llei Orgànica de Protecció de Dades Personals i garanties de Drets Digitals* (LOPDPD).

[10] [Website] Gorilla experiment platform.

[11] See Appendix B.6.

as there might be remarkable differences in the outcomes from those who are more likely to be uninformed with those who might be conditioned by local factors.

Question 2.4. asks for the wealth perception of the respondent among the other households. In question 2.5. they are asked to choose between lack of effort or bad luck as reasons behind poorer households. Finally, in question 2.6., people are asked to rank themselves into their perceived social class.

Difference-in-difference design
As exposed above, the role of information and local factors are constraints this research wants to assess. That is why the survey experiment includes a difference-in-difference design in order to document the reaction of people through the two following treatments.

- **Vignette experiment:** All respondents will be asked to watch a 3-minute video. People who are randomly assigned to the treatment group is provided information about the annual average contribution for every tax and the overall and per capita cost of the local public expenditures. The control group is only shown the main description of every local tax in town which might apply to an individual and the allocation of the major local public expenditures. Additionally, the treatment group is given real figures by sharing with them the yearly average contribution for every task and the overall cost of the same major local public expenditures.
- **Lottery experiment:** All participants are offered entering into a lottery for completing the survey. At the last stages of the same, people are asked if they want to donate, should they result the winners. Participants are randomly assigned into two groups, one which suggests a donation of the lottery profits to a set of local NGOs[12], and another group which refers to an international one[13].

Local finances - Outcomes
Through this five-question section we will receive the main inputs of the knowledge and perception of the local tax burden of participants. We first ask participants about their total local tax contribution in 2020. At the second question, we ask the citizens for their tax contribution ranking position in the municipality in 2020. In question 3.3., citizens are asked to adjust the tax contribution they guessed according to what they believe it would be a fair contribution whereas in question 3.6. they are directly asked to grade the major municipal services.
At the question 3.5 we raise a tax collection exercise. By introducing two hypothetical households with the same characteristics but with different annual disposable incomes, we ask the participants to decide the amount that should be contributed by each of them in order to sum the average amount the city hall collects for two households in a year.
Through question 3.4. not only are we capable of obtaining the general knowledge of the main taxes, but we also test how much attention did the respondent pay to both treatment and control groups.

Survey promotion and communication campaign
Together with the city hall, there has been a communication campaign to promote the survey among the residents of l'Ametlla del Vallès. In the appendix the different ads and post formats are outlined.
The scope of such campaign has been based on an A3 poster, which has been shared through the local newspaper and the local social network.
Regardless of the anticipated slow pace of responses for the month of August, people are responding positively to the ads and are expected to offer the desired pace of responses during September.
Furthermore, an A5 flyer with a QR code (Appendix B.5.) is also going to be sent to every household of the municipality.

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[12] The local NGO's are municipal cooperative entities named "L'Ametlla Rebel", "Xarxa Solidària" and "Càrites".
[13] The international NGO is Unicef.

5.3. Research objects

In this section the different research objects specifically assigned to fulfil the research purposes are exposed. For each one of them the impact of the controls[14] is key. Nevertheless, there was no need to speculate about the possible impact of every control for every research object. All controls will be assessed for all ten research objects and exposed should the results be significant or worth documenting.

To properly understand and foresee the purpose and outcomes of such research, it has been decided to disaggregate the same to the following four different approaches.

5.2.1. Local tax burden

The first research group focuses on local tax burden and public spending. The main purpose is to analyse the perception and knowledge in terms of public taxation and its implications when it comes to grade the main local services. The group includes three research objects, summarized in table 9.

TB1. The first research object consists of looking for the bias between the given tax contribution by the citizen in the survey and its actual real contribution. This way, we will be able to analyse the actual knowledge of people when it comes to guess their local tax burden.
Expected findings. In this case, the expectation is to find a significant bias between the real tax payments and the answer given in the survey due to the lack of popular knowledge of tax burden at a municipal level. Not only for the general disregard on this topic but also because of the local particular fixed effects of l'Ametlla, which suggests the local population do not worry about such issues.
The ones contributing the most to the local economy are the ones most likely to be biased when guessing their annual contribution. This suggests the bias should be higher for those with a higher tax contribution.

TB2. After analysing the possible bias between the real tax contribution and the one given in the survey, the study of the effect of the vignette experiment on them goes next. By doing so we will document what effect did the treatment have in the respondents when giving their household's tax contribution.
Expected findings. It is foreseen to obtain a more biased response for those respondents who did not go through the treatment.

TB3. At the third research object we document the bias between the perceived ranking position of the respondents in the overall local tax contribution scheme (in %) with their actual one.
Expected findings. People tend to think there are many more people paying more than they do. Should people be aware of their local tax burden and local position, the bias should be small. The expectation is, however, to find a significant positive bias. That is, that people think they have a higher-ranking tax position than they actually do.

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[14] See table 13.

5.3.2. Public expenditure

PE1. In this object the different <u>public expenditures</u> according to how the respondents graded them are documented.

<u>Expected findings</u>. In this case, the expectation is to have higher marks for those public services which are trouble-free in the municipality, such as the <u>music school</u>, the <u>summer pool</u> or the <u>sewage management</u>. Services which are popularly known as costly, even though not with accuracy, and that are currently not working at its best in town (<u>waste management</u> or <u>streets maintenance</u>) are the ones most likely to receive a worst grading.

Regarding the <u>local gym</u>, as it has been explained in the background section, its higher than the standard costs for the city hall suggests some people, depending on if they are aware of it, are expected to grade poorly.

<u>Local administration</u> should receive a discrete but positive grading with a lot of fluctuation, as in a municipality there are always people mad at the city hall or blaming them for everything.

PE2. Last but not least, in this section the effects of the <u>vignette treatment</u> to PE1 are analysed.

<u>Expected findings</u>. When giving people its exact cost information, the main expectation is to find little differences for public services whose local cost is not excessive or whose amount is not subject to be popularly rejected due to high figures (services as the <u>waste management</u> are costly and, as much as some administration can achieve a cost-effective solution, high figures are always suitable for public rejection).

In this sense, less difference is expected to be found in the ratings for the services which cost the least (<u>music school</u> and <u>summer pool</u>) and the unquestionable and not extremely high expenses such as the <u>sewage maintenance</u>.

On the other hand, the unsatisfaction trend a municipality with such a big surface normally has towards the <u>street maintenance</u> and the <u>waste management</u>, and that also applies to l'Ametlla, is likely to be increased when people happen to know its annual cost. For the same reason, the price every citizen has to face indirectly for the maintenance of the <u>local municipal gym</u> might also create a rejection effect for those citizens who find out its cost regardless of their views towards the centre.

The same applies for the <u>local administration</u>, with the highest cost, as there might be also a typical, maybe populist rejection towards public servants and local politicians.

5.3.3. Social position

SP1. We document the correlation between the <u>reasons behind poorer households</u> and the <u>real tax contribution</u>.

<u>Expected findings.</u> The expectation is to find a lower percentage of "bad luck" answers for those who contribute the most to the local finances. Also, it is also expected to find a relationship between these outcomes and the <u>perceived fair contribution</u>, as social views tend to have an effect on determining a fair tax contribution.

SP2. In this object we document the correlation between the <u>class group perception</u> and the <u>real tax contribution</u>.

<u>Expected findings.</u> The expectation is to find few observations which allocated themselves into either the "Poverty" or "Elite" social class groups. Furthermore, it is also foreseen that group of people allocating themselves in the "High-class" group will show the highest tax contribution range, as people do not tend to consider themselves as the most available highest social class group.

TABLE 9: TAX BURDEN RESEARCH OBJECTS

	Research object	Expected findings
TB1	Document the bias between <u>real local tax payments</u> and <u>answer in survey</u>.	Significant bias, especially for those contributing the most.
TB2	Document the effect of the <u>vignette treatment</u> for TB1.	People who belong to the treatment group are to give a less biased response.
TB3	Document the bias between the <u>perceived tax contribution ranking position</u> and the <u>real one</u>.	Significant positive bias.

TABLE 10: PUBLIC EXPENDITURE RESEARCH OBJECTS

	Research object	Expected findings
PE1	Document the satisfaction of <u>the public expenditures</u>.	Higher grades for those public services which are trouble-free in the municipality. Services which are popularly known as costly and that are currently not working at its best are likely to have lower grades.
PE2	Document the effect of the <u>vignette treatment</u> for PE1.	Lower grades for the most expensive services, especially those which might come as a surprise.

TABLE 11: SOCIAL POSITION RESEARCH OBJECTS

	Research object	Expected findings
SP1	Document the correlation between the <u>poorer households</u> and the <u>real tax contribution</u>.	Those contributing the most should be the ones rating the least the "bad luck" option.
SP2	Document the correlation between the <u>class group perception</u> and the <u>real tax contribution</u>.	The number of people choosing either the "poverty" and "elite" options should be low. Furthermore, the real tax contribution of those selecting the "high class" option should be really high.

5.3.4. Redistribution

R1. The first object of the redistribution section consists of documenting the results of the lottery.
<u>Expected findings.</u> The expectation is to find rather considerably high donation figures, even though some control groups might be less prone or can afford less the donation.

R2. In this object we document the effect of the <u>lottery treatment</u>.
<u>Expected findings.</u> It is expected to find significant difference among both groups, as the assumption is that local effects matter when allocating a donation.

R3. The third and last research object consists of documenting the relation between the <u>two hypothetical households</u> exercise with the <u>real tax contribution</u>.
<u>Expected findings.</u> Those contributing the most are expected to show a lower percentage of tax contribution for the second household.

TABLE 12: REDISTRIBUTION RESEARCH OBJECTS

	Research object	Expected findings
R1	Document the <u>lottery</u>.	A considerably high average donation with some control groups such as age or employment with clear differences amount groups.
R2	Document the effect of the <u>lottery treatment</u>.	The existence of a local bias due to prioritisation or more empathy toward locally-based charity groups.
R3	Document the two <u>hypothetical households</u> and the <u>real tax contribution</u>.	Those contributing the most are expected to show a lower percentage of tax contribution for the second household.

TABLE 13: CONTROLS FOR THE RESEARCH OBJECTS

	Control	Scope
C1	Age	Different age groups might have different views, knowledge or interests on local matters such as taxation.
C2	Gender	The differences in gender might influence the views or interest on local matters.
C3	Education	The distinct levels and scope of education of each respondent might have an effect on their answers.
C4	Employment	Belonging to the active population or not might condition the views or interests of the respondents.
C5	Landlord	The ones who own property might have different views, knowledge or interests than those who do not, especially on local taxation.
C6	Years in town	The years over which a citizen has been living in a town can have an important effect in the views, knowledge or interests on local matters.
C7	Local life	Through some of the questions in the survey, we create an indicator which evaluates the implication of the individual for the municipality.
C8	Main taxes	The popularity or figures of some of the taxes might cause a different knowledge or interest among population between them.
C9	Family	Living in family, having children or the composition of the household might influence the views of an individual towards local matters.

TABLE 14: OBTAINED SAMPLE COMPARED TO TARGET POPULATION

	Sample from survey	Target population	Local census
Demographics			
Female	0.55	0.50	0.50
Average age	41	48	41
Born in Spain (not Catalonia)	0.05	0.13	0.11
Immigrant	0.06	0.07	0.06
Education			
No education	0.01	0.02	-
Elementary education	0.02	0.09	-
Secondary education	0.05	0.20	-
Upper secondary-vocational education	0.31	0.33	-
Bachelor – undergraduate programmes	0.28	0.16	-
Master – postgraduate – PhD programs	0.33	0.20	-
Employment			
Full-time employment	0.53	0.39	0-38
Part-time employment	0.09	0.07	-
Student	0.11	0.21	-
Self-employed	0.15	0.14	-
Unemployed	0.05	0.04	-
Retired	0.07	0.15	-
Household			
Landlord	0.86	0.83	-
Local treasury			
Average tax contribution IBI	1.003,85	829,58	-
Average tax contribution IVTM	123,49	78,85	-
Average tax contribution Waste mgmnt.	179,60	218,00	-
Observations	**141**	**7510**	**8983**

TABLE 15: OBSERVATIONS OF THE CONTROL VARIABLES[15]

Variable	Obs.	Variable	Obs.
Age		**Years in town**	
16 – 29 years	36	>1 year	9
30 – 44 years	56	1 – 3 years	8
45 – 59 years	31	3 – 5 years	13
60+ years	18	5 – 10 years	5
Gender		>10 years	68
Male	63	Since birth	38
Female	78	**Local life**	
Non-binary	0	Very poor local life	30
Education		Poor local life	38
No education	1	Strong local life	54
Elementary education	3	Very strong local life	19
Secondary education	7	**Main taxes**	
Upper secondary-voc. education	44	IBI household payers	121
Bachelor – undergraduate programs	40	IVTM household payers	112
Master – postgraduate prog. – PhD	46	Waste management hh payers	136
Employment		**Family - Children**	
Full-time employment	75	No children	61
Part-time employment	12	Children	80
Student	16	**Family – Marital status**	
Self-employed	21	Bachelor	49
Unemployed	7	Steady couple	15
Retired	10	Married	63
Landlord		Widowed	4
Homeowners	121	Divorced	10
Non-homeowners	20		

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[15] Due to the reduced number of observations for some of the subgroups, in certain regressions some of them have been unified.

5. Results

5.1. Main results

TB1 – Bias between tax real tax contribution and the reported in survey. This first object documents the bias between the real tax contribution obtained through the municipal tax records and the figure people reported through the survey.

As one can observe through the figure 1, for the observations obtained so far, people seem to be aware of their tax burden in a more accurate way than expected. Even though it is still too soon to tell, there seems to be a slight trend which suggests people think they contribute more than they actually do. That is, there could be a general sentiment of a higher and a more costly local tax burden.

By controlling for some of the variables[16] one can understand which groups might be guessing better or worse their local tax burden.

As per age, C1, even though there are no significant differences among age subgroups, the young respondents seem to have a higher bias and wider spectrum of responses in comparison with the others. This could suggest, as expected, that the younger people, who normally do not have a substantial tax burden, are the ones most likely to be biased the most.

C6 l'Ametlla seem to have an effect too when it comes to guess the local tax contribution right. Those who lived here the most seem to have a negative bias – paying more than they thought – whereas the ones who came recently expected they would be paying more.

According to C9, those who rated a lower local activity would not have an obvious bigger bias than those who consider themselves active.

C3 or C4 do not seem to play a significant role regarding the accuracy of the respondents, even though the ones with a higher level of education are clearly giving more biased responses than those with lower educational levels.

The so-far most obvious control outcome is C5, in which we find a clear difference between those who own a place in the municipality and the ones who do not. The non-property owners have a clear trend to overestimate their local tax burden whether the owners, more accurately, underestimate it. This could be explained by the fact that the property tax is the most typical and known local tax, often also the one with the highest figures, which might imply a better awareness under landlords than the ones paying far less costly taxes. Further analysis is required when the observations grow.

The curious detail goes for the gender controls, as women are underestimating their local tax burden and men overestimating.

TB2 – Effect of the vignette treatment for TB1. As a first analysis, the vignette treatment, at least for now, does not seem to provide an obvious or extremely noticeable effect on the accuracy of the respondents. Nevertheless, as one can observe in figure 2, the bias in the response of the treatment group is nearly inexistent weather those who did not go under the experiment have a bias of nearly 200 €. This actually suggests that the vignette experiment is reducing the bias of the respondents and their answer's spectrum. In this sense, the treatment seems to have an effect and to be workable, but the general accuracy of all the participants is clearly diluting its effects. Some of the following results will help depict a bit more these events.

When going over some control variables to assess the existence of a pattern, figures C-8 and C-9, are obtained.

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[16] See Appendix, from figures C-1 to C-7.

FIGURE 1: REPORTED AND ACTUAL TAX CONTRIBUTION – TB1
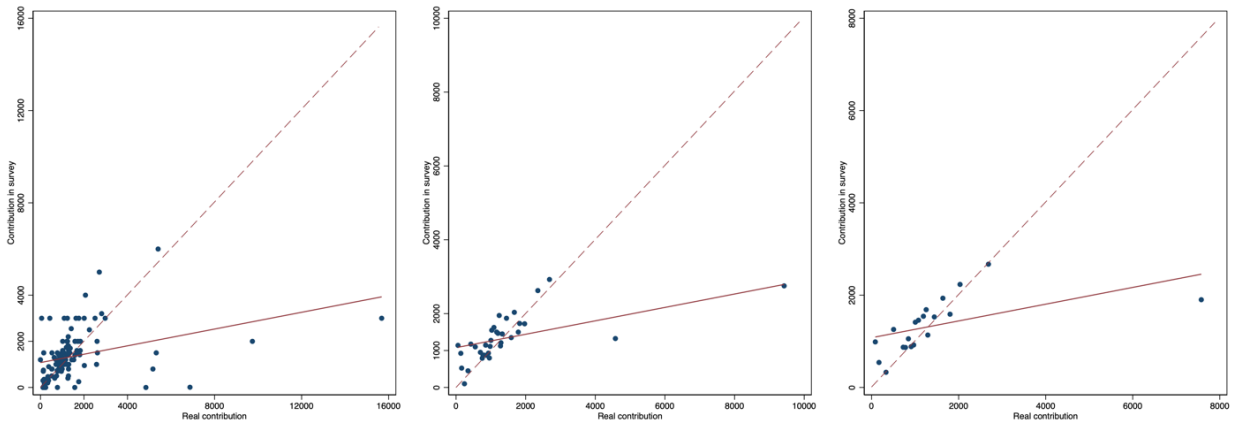
Notes: The graphs above show a binned scatter which plots the given monetary local tax contribution given in the survey by the citizen against its actual one. The 45-degree line defines the segment through which the response of the participant matches the real one. That is, the points in which the respondent would be right. All three graphs are the same with a different scale to obtain a clearer perspective.

FIGURE 2: EFFECT OF THE VIGNETTE TREATMENT ON TB1 – TB2
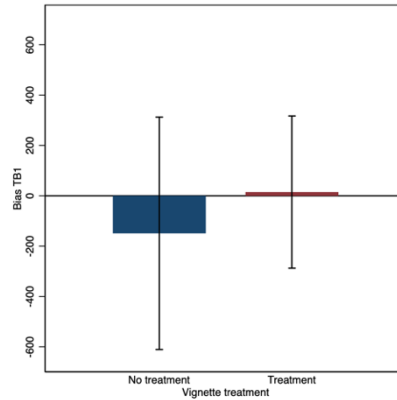
Notes: This graph shows the bias between the reported local tax contribution in the survey and their actual one discriminating for participation into the vignette treatment. The first bar reports the accuracy in the answers of the respondents who did not go under the treatment whether the second bar represents the ones who did.

FIGURE 3: REPORTED AND ACTUAL LOCAL TAX RANKING POSITION – TB3
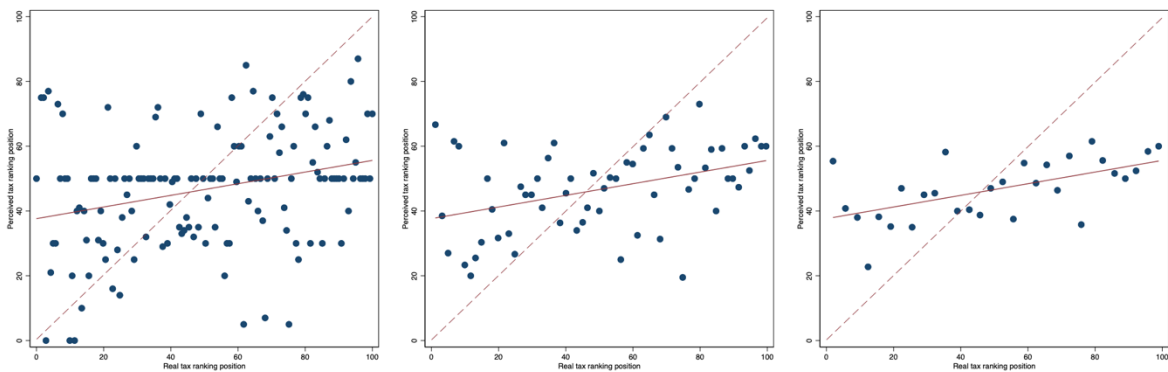
Notes: The graphs above show a binned scatter which plots the given local tax ranking position given in the survey by the citizen against its actual one. The 45-degree line defines the segment through which the response of the participant matches the real one. That is, the points in which the respondent would be right. All three graphs are the same with a different scale to obtain a clearer perspective.

With the observations collected so far, the vignette experiment seems to work a bit better among those who belong to the active population, that is, people with a job or self-employed.

Regarding C1, one could do the following reflection. For the 30 to 49-years-group the treatment has no effect whatsoever, as this group is the one which ascertains the best their tax burden. Nevertheless, for age ranges which tend to have a higher lack of knowledge on the matter, such as the one from 16 to 29, the vignette experiment seems to have a better response.

As per C3, the group which refers to undergraduates or bachelor degree's graduates are the ones which show a higher bias outside the treatment experiment. Nevertheless, those profiles clearly respond when going under it, as their bias shrinks for the treatment groups.

TB3 – Bias between the perceived local tax ranking position and the real one. Following the results obtained in TB1, people are showing themselves to be quite accurate when it comes to assign their local tax position. Nevertheless, by observing the figure 3, one can observe another possible trend worth analysing. First, with the observations so far, those who pay less taxes in the municipality seem to be overestimating their position in the local tax ranking whether those who belong in the higher tax ranking positions tend to underestimate their position. It does not come as a surprise that people normalize their tax or social position. But this graph might also suggest that, regardless on the accuracy of your own ranking position, people know the ranking distance with their neighbours.

Second, by adding some control variables, none of them seem to have a remarkable impact except for C5 (Landlord). In figure 4 it is found a clear difference in the rank position perception between the property owners and the ones that do not. Regardless their overestimation, the property owners show a better accuracy when it comes guessing their tax rank position.
Such outcome reinforces the possibility raised previously, which suggests that the current configuration of the local taxes burden in l'Ametlla, with the property tax as its principal one, simplifies the matter down to one tax. That is, owning a house or not, and hence paying property tax, will be the main constraint when it comes being aware of your entire local tax burden.

FIGURE 4: BIAS IN THE LOCAL TAX RANKING POSITITON CONTROLLING FOR C5 – TB3
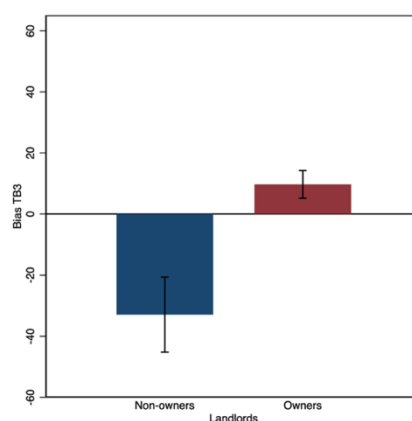
Notes: This graph shows the bias between the reported local tax ranking position in the survey and their actual one discriminating for property owners. The first bar reports the accuracy in the answers of the respondents who do not own a house in l'Ametlla whether the second bar represents the ones who do.

Nevertheless, this outcome applies on a merely quantified framework. Property owners will not be more aware of their waste management or vehicle taxes simply by properly acquainting their property tax. One has to keep in mind that, given the high figures of the property tax in comparison with the other taxes in the municipality, correctly guessing the first one might misleadingly show a global more accurate knowledge of their tax burden.

In order to truly assess that in a survey, the experiment should ask the participant for their taxes by disaggregating each one. This was not possible in this survey experiment due to the research object purposes with the vignette experiment.

PE1 – Satisfaction with the public expenditures. At the figure 6 one can find summarized the grading received for the seven exposed local services with the observations collected so far. The results match quite well the expectations: the music school, the summer pool and the sewage management public services hold the higher average grades due to their trouble-free condition. On the other hand, streets maintenance and the local gym have the lowest average grades, which also complies with the predictions. Both partially because of their particular condition in the town as a currently non-efficiently working infrastructure[17] and, in the case of the streets management, because of its inevitable high-cost figures.

The waste management and the local administration average grades are slightly higher than expected, even though they cover a low-grading spectrum which suggest some of the assumptions still apply too.

PE2 – Effect of the vignette treatment for PE1. Among the seven local services, one can see in figure C-10 how only the outcomes for streets maintenance, local administration and especially the local gym give rise to further study.

For streets maintenance there seems to be a slightly higher average satisfaction of the service for those who went through the vignette treatment. As there is no apparent explanation for this, as the expectation after viewing such big figures suggested that the grades might be even lower, some controls are applied to assess these outcomes.

As one can see in figure C-11, controlling first for age, the difference in the grading is found mainly in the $30-49$ year-range section. Regarding education, those with higher studies who went through the treatment also experience a slight non-significant increase in the grading of the service. A further analysis is required to keep assessing these outcomes. In such a context, a spatial analysis would also be interesting.

The most interesting assessment for this section, nevertheless, is the one which was already introduced: the delicate situation of the local gym. Indeed, participants who went through the information treatment responded negatively to the grading of such service. Furthermore, being a local gym a typically well-received public service, its average grading does not equal other similar public expenditures such as summer pool or the music school. This suggests some of the population is already aware of the problematic regardless of their participation to the treatment.

When controlling for age, the extremes are the ones reacting the most: those between 16 and 29, and especially those older than 60 years show the higher decrease in the grading after treatment. See figure C-12. It is quite surprising that the age-range in which there are more people in l'Ametlla is not reacting to the treatment.

As per education, those with a higher educational level who go under the treatment seem to be reacting more with the information provided than those with a lower education.

In the future it would be also interesting to control for local gym users.

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[17] See Background.

FIGURE 5: EFFECT OF THE VIGNETTE TREATMENT – TB4
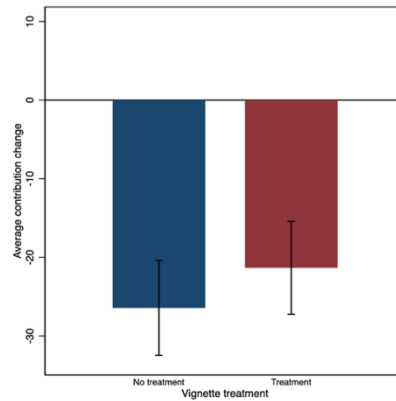
Notes: This graph shows the differences between the local tax contribution change percentages given in the survey discriminating for participation into the vignette treatment. Both bars report the percentage of the local tax burden the participant would change in favour of a fair local tax contribution. The first, however, did not go under the treatment whether the second did.

FIGURE 6: GRADING OF THE LOCAL SERVICES – PE1
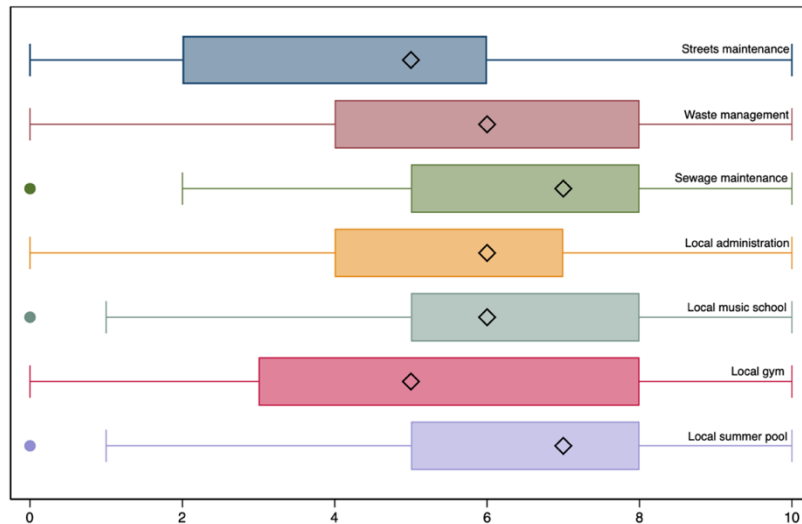
Notes: The graph above shows the grades assigned to the different local services in the survey by the participants.

FIGURE 7: CORRELATION BETWEEN POVERTY REASONS AND LOCAL TAX CONTRIBUTION – SP1
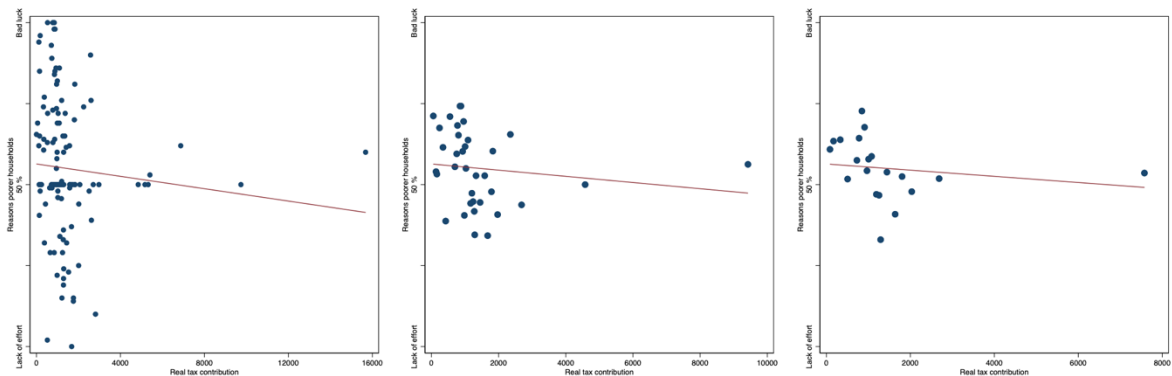
Notes: The graphs above show a binned scatter which plots the views of participants on the reasons for poorer households against their local tax contribution. All three graphs are the same with a different scale to obtain a clearer perspective.

SP1 – The poorer households. By associating this exercise[18] and the local real tax contribution of the participants the figure 7 is obtained. Despite the lack of observations, there seems to be a trend which suggests the following. The participants contributing the most to the local treasury would be the ones who take into account the most the "lack of effort" option as a reason to justify local households poorer than theirs.

In order to assess these outcomes easily through control variables, a sub-group is created[19] by allocating the answers of the citizens into three categories. "Lack of effort", "Balanced" and "Bad luck". The results of such sub-group can be seen through figure 8.

To begin with, regardless of the observations per subgroup, those who are between 18 and 29 years old are the only ones who have as a first clear option the "bad luck" one. The other groups, though "bad luck-leaning", are not that determined. In a smaller proportion the same applies with women, who seemed a bit more determined towards the bad luck category than men.

Without a noticeable difference for education, those who are currently employed are less determined for the bad luck option than those who are currently studying, unemployed or retired.

As per homeowners, they lean more towards the balanced option than the non-owners.

Last but not least, local life seems not to have any effect whatsoever on the matter.

SP2 – The class groups. Following most of the expectations, and in accordance with the findings in TB3, people have a clear trend to allocate themselves into the mid-low social class categories. Precisely for that matter the exercise[20] was designed to promote, at least, certain acknowledgement of the "high class" option. That is why the extreme options have fewer appealing designations such as "Poverty" or "Elite". In spite of that, as one can see in figure 9, most of the respondents acknowledge themselves at either working class or middle class.

Due to the scope of the survey and the local administrative information, it is not possible to go further into the conclusions the figure provides. It is clear the sample does not have such densities off working class in a disposable-income top-10 municipality. Nevertheless, one has to stress, the local tax burden a citizen has should be related by no means with their income.

A huge local tax burden does not imply that person is rich. That is why, even though this study has many social interesting implications, without the income information its threshold is achieved.

Sadly, to find binding and worth documenting possible linkages between these outcomes and the contribution change, there would be required a more varied set of choices.

R1 – The lottery. The different amounts every respondent has decided to donate in case they result winners of the lottery is quite wide. In the figure C-13, they are shown for the control variables, having most of them a quite obvious explanation.

Firstly, as the age range grows, so does the amount which people are willing to donate. The assumption, however, has more to do with capacity rather than will.

Regarding employment, it does also make sense than unemployed people or students are willing to donate less than those with fixed wages.

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[18] This exercise corresponds to the question 2.5. in tithe survey. See Apenndix B.1.
[19] Such a sub-group can be found in the TABLE X "*observations of the control variables and created subgroups*".
[20] Exercise 2.6. of the survey. See Appendix B.1.

FIGURE 8: VIEWS ON REASONS FOR POORER HOUSEHOLDS – SP1
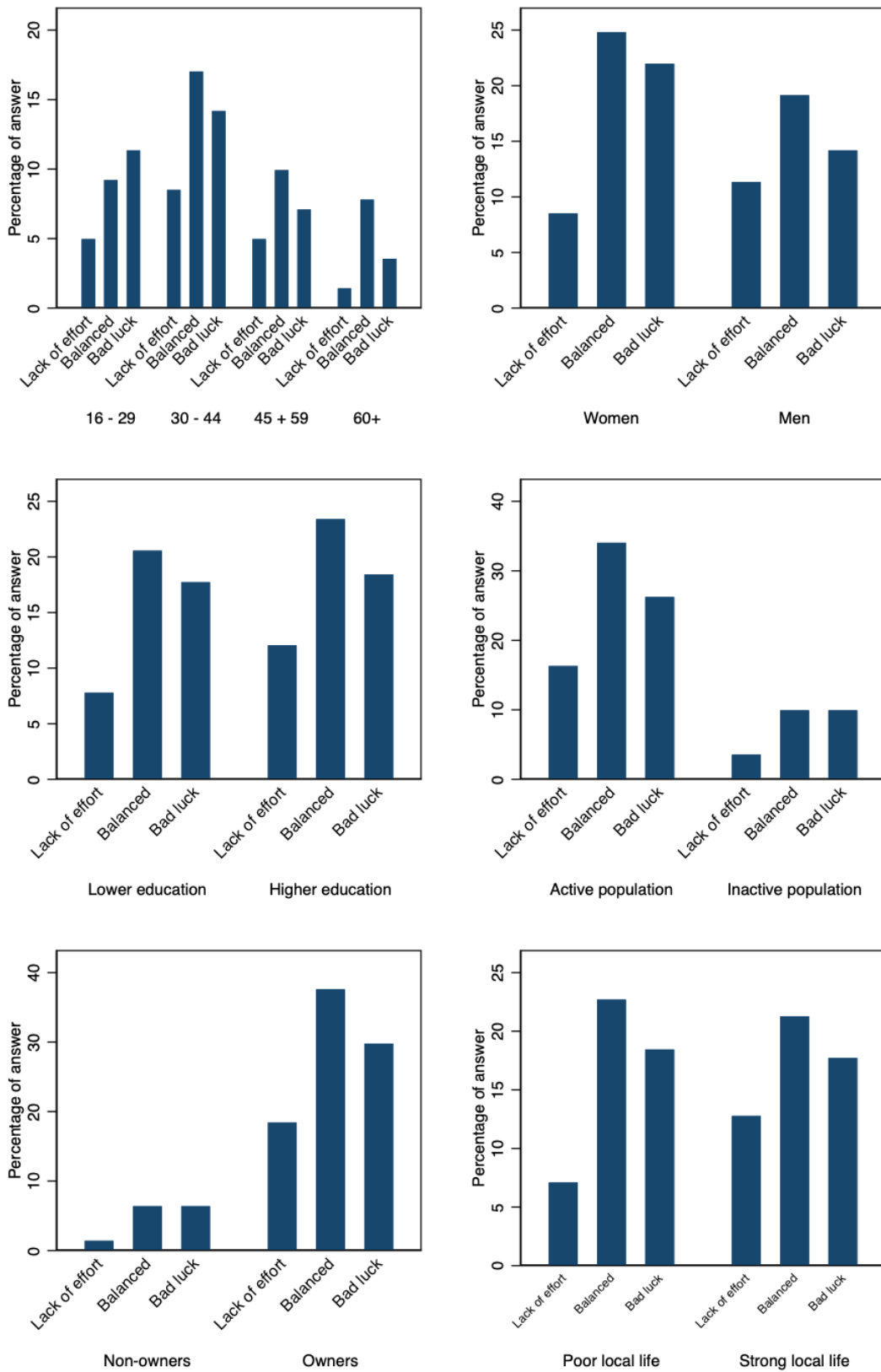
Notes: The graph above shows the answers participants gave in terms of views on reasons for poorer households categorised into three possible groups and exposed for six control variables.

Noy by far, but people married or in a committed relationship are donating less on average than the singles or widowed.

Regarding house owners, there is a remarkable difference in the donating average figure in favour of the landlords. Then again, even though sometimes it applies, there is no basis to suggest landlords are necessarily richer.

Last but not least, and as a final anecdote, men contribute more on average than women.

R2 – Effect of the lottery treatment for R1. For every survey experiment it is unavoidable to face many unexpected results and behaviours towards the questions and the treatments. In this project, so far, the biggest surprise has been in the outcomes of the lottery treatment. No difference or noticeable effect whatsoever has been identified for the lottery treatment.

Back to survey experiment research, it happens quite often that the first results are misleading and change as the survey goes, suggesting something different every time, and making the researcher consider many possibilities. In such a case, however, there has always been null implications of the treatment observations and not a single remarkable outcome through control variable analysis.

One shall not forget, nevertheless, that such event is, in fact, an outcome which, as any other one, it is worth studying.

To begin with, an important factor to take into account is the importance people have given to the charity perspective. As one can see in the TABLE X, nearly 40 % of the respondents chose to donate the quantity of zero euros.

As another possible explanation, it is true the NGO Unicef has a quite good reputation, which is not seen as something far or more distant than any other local entity. Under such context, it does actually make sense that this option was more supported. This would suggest the local population give importance to how the money they donate is used, as the capacity of operation of the local charity entities, more than limited, is especially unknown.

R3 – The two households' exercise. As the last research object with the focus on redistribution, this exercise[21] has been used to analyse how the local population feel a hypothetical weighted local tax burden should operate. To address the results, the quantified (in %) amount allocated to the second household, the one with the highest disposable income, is used.

As one can see in the figure 11, this variable has been related to the real tax contribution for every citizen. There seems to be a slight correlation which could suggest that the citizens who have a higher local tax burden are the ones allocating a lower tax burden to the household with more disposable income.

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[21] Exercise 3.5. in the survey. See Appendix B.1.

FIGURE 9: DENSITY OF THE DIFFERENT SOCIAL CLASS OPTIONS IN THE SURVEY – SP2
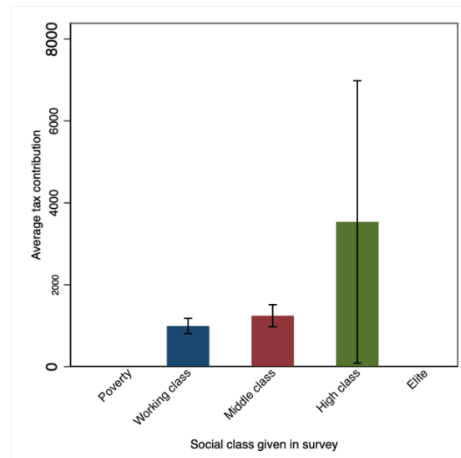
Notes: The graph above shows in bars the density of every social class option respondents of the survey could choose.

FIGURE 10: EFFECT OF THE LOTTERY TREATMENT – R1
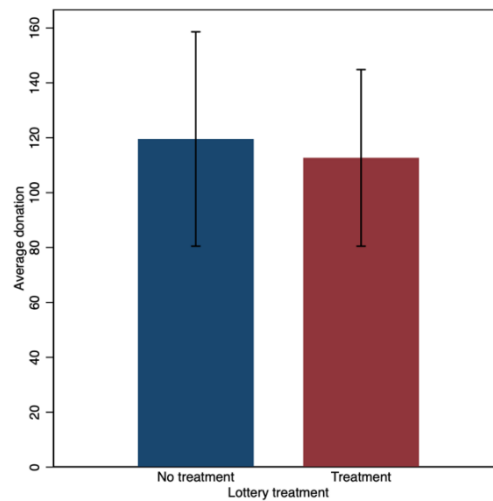
Notes: This graph shows the differences between donation average quantities in the survey discriminating for participation into the vignette treatment. Both bars report the amount of money the participant chose to donate. The first, however, did not go under the treatment whether the second did.

FIGURE 11: CORRELATION BETWEEN LOCAL TAXES WEIGHTING RATIO GUESSING WITH THE REAL TAX CONTRIBUTION – R3
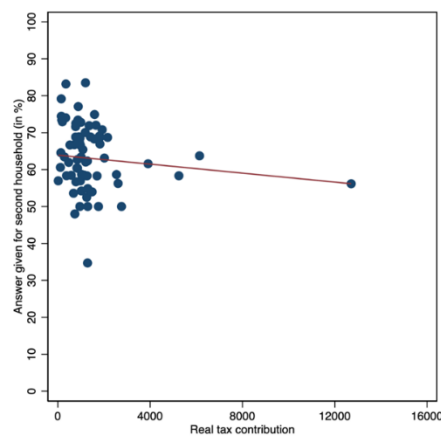
Notes: The graphs above show a binned scatter which plots the local taxes weighting ratio of the respondents against their local tax contribution.

5.2. The fair contribution

After duly assessing all the research objects according to the outcomes from the survey experiment, it is time to relate the information obtained with the purpose of this research: to find the determinants of the perceived local tax fair contribution.

5.2.1. Local tax burden

The scope of the local tax burden of a household seems not to have a relationship with the conception of a fair local contribution. By taking a look at the first graph of figure 12, at the upper-left corner, we can see how there is not a clear pattern. This suggests the amount a citizen contributes to the local finances does not affect or determine the desired fair local tax distribution. That is, the amount of the local tax burden does not play a role when determining one's idea of a fair contribution. Further assessing this issue through TB3, with the perceived ranking position, the same intuition is found.

As the visual analysis sometimes can also trick one's judgment, at the table 16 one can see how the real tax contribution is also proved not to be statistically significant in the regression.

Moving to the second graph, at the top centre, we observe an easier to in interpret regression. The bias found in TB1, that is, the general knowledge of the local tax burden, also does not seem to affect by no means the respondents' will of changing their current tax contribution, in the same way the first graph suggested.

In short, the amount people pay to the municipality and how they rank it is not related and does not influence one's perception of a fair contribution.

As per the public expenditures, the situation is quite different. We found how the average satisfaction of the public services, as one can see in the upper-right corner, plays a role when adjusting their local tax burden to a fairer one. By taking a look at table 16 we can see how, indeed, this indicator is statistically significant at the 0.1 % level. In this sense, the general satisfaction regarding public expenditures is proved to be related with the individual's views of a fair contribution.

As per the role of information, for both the potential differences in the bias for TB1 and in the satisfaction grades for PE1, it does not seem to constrain or suggest any other particular trend than the results exposed so far. In the first case, we assume the main explanation is that people are more aware of their local tax burden than expected, hence the role of information loses its value. As per the public expenditures, a fair contribution seems to be way more linked to the popular satisfaction towards the same than to the general knowledge of the main local expenses and their cost. People care about how much things cost, but they care and remember much more an unsatisfactory local service-related experience, which did not fulfil their expectations.

In such a case, however, unlike for TB1, we do not know if that is because (1) people already know the amount of the expenses (2) people only care about the good services and not about how much they cost. For the steets' maintenance satisfaction grade and the local gym's some interesting results were found which call for further study. Nevertheless, in terms of the general role of information as a possible constrain of the allocation of a fair local contribution, there does not seem to be an effect.

5.2.2. Social position

The views citizens have about social aspects also seems to be quite related with the allocation of a far local contribution. The views respondents had in terms of the households which were poorer than them, SP1, and how this data is relatable to their contribution modification exercise is statistically significant at the 10 % level. We can then affirm that some of the social position perceptions surely play a role in one's assessment of a fair contribution.

It would have been even better if the social class object, SP2, could have been included with some binding results, as it would have supported what SP1 finds. The research purpose for that object was to relate how the different social groups to which people were assigning themselves had a relationship with their contribution change rate. Nevertheless, due to the fact that most participants allocated themselves into only two social group classes, no significant evidence could be found. In this sense, this question could have been clearly designed in another way which would have been more profitable.

In short, regardless of this drawback, through the graph at the lower-left corner for figure 12, one can distinguish a clear pattern between social position views and the allocation of a fair local tax contribution.

5.2.3. Redistribution

The outcomes for the redistribution exercises also raise quite an interesting conclusion. To begin with, the lottery treatment shows how the solidarity shown in the donation exercise was not constrained by proximity or local-preference effects. This helps us better allocate and rank people's solidarity and potential redistribution purposes. For that matter, as the bottom-centre graph shows, there is a relationship between the amount people chose to donate and their perceived fair local tax contribution, with statistical significance at the 10 % scale.

As per the two households' exercise, depicted in the lower-right corner, we find a real clear relationship with the allocation of a fair tax contribution with statistical significance at 5 %. As the graph shows, there is a clear trend which suggests redistribution views play a role in the determination of the idea of a fair contribution.

TAULA 16: REGRESSION FOR CONTRIBUTION CHANGE

contribution_change	Coef..	Std. Err.	t	P>|t|	[95 % Coef. Interval]	
total_hh	-.0000375	.0022866	-0.02	**0.987**	-.004562	.004487
bias_q	-.0004908	.0026381	-0.19	**0.853**	-.0057106	.0047291
satisfaction_total	.6368148	.1960192	3.25	**0.001**	.2489573	1.024672
poorer_hh_reason	.1705771	.0983681	1.73	**0.085**	-.0240609	.3652152
donation	.0243363	.0135395	1.80	**0.075**	-.0024538	.0511265
hh2_q	.3764243	.1743128	2.16	**0.033**	.0315167	.7213319

Notes: "contribution_change" refers to the perceived local fair contribution, *"total_hh"* to the real tax contribution, *"bias_q"* to the bias between the real tax contribution and the one given in the survey, *"satisfaction_total"* is the average satisfaction grading for the public services, *"poorer_hh_reason"* stands for the views of respondents for poorer households, *"donation"* refers to the amount people donated in the survey and *"hh2_q"* stands for the percentage the respondents allocated to the second household in the 2-households case exercise.

FIGURE 12: POSSIBLE DETERMINANTS OF A FAIR LOCAL TAX CONTRIBUTION
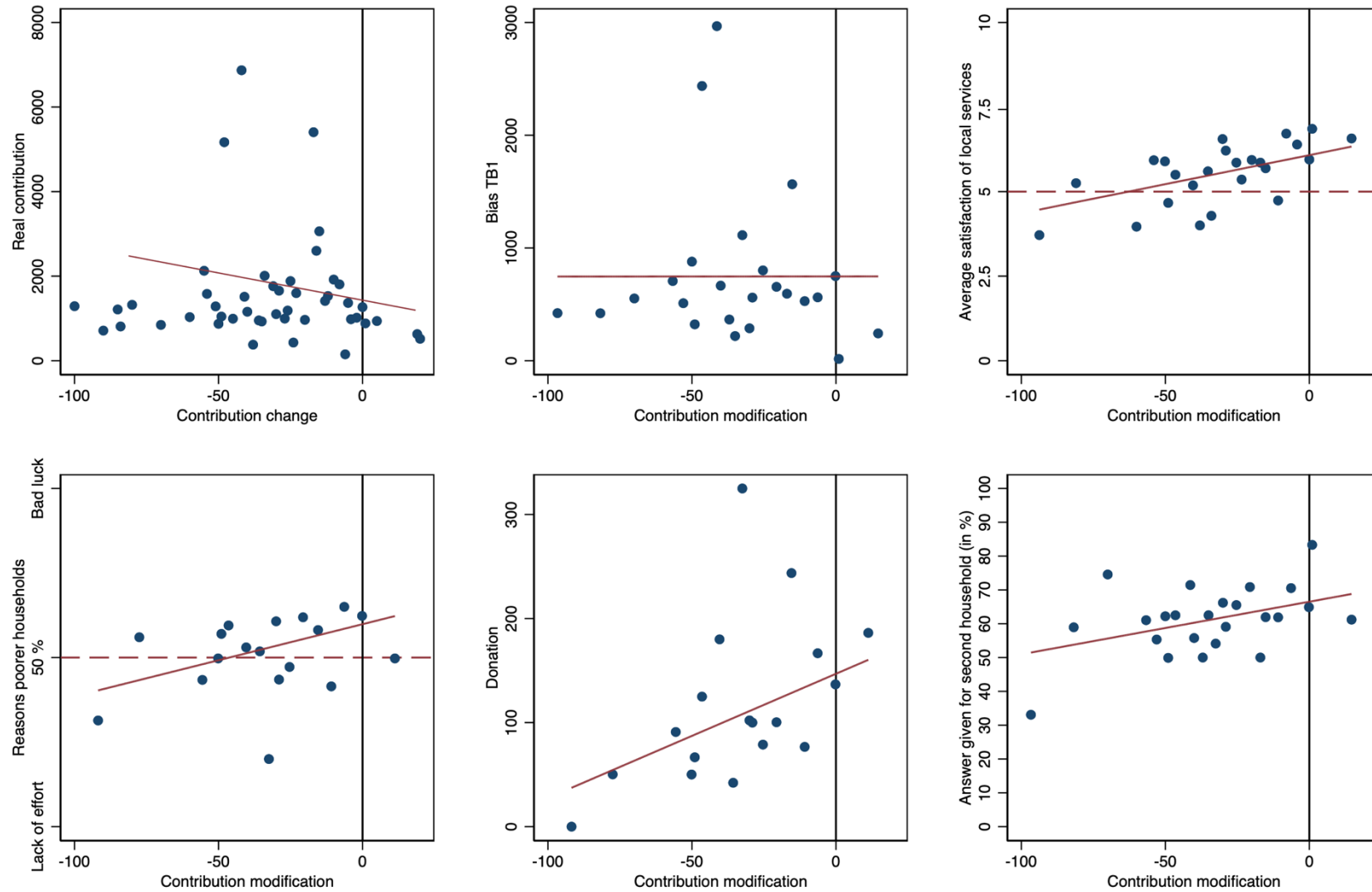
Notes: The graphs above show a binned scatter which plots the relationship between a fair contribution and the local tax burden (real contribution and biases responses of the survey), public services satisfaction, social views (reasons people see for poorer households) and redistribution (how much money people donate and the redistribution exercise)

6. Conclusions

The current socioeconomic paradigm of most modern societies clearly constraints the citizen's capacity to conceive alternative economic models and their viability. Under this context, the importance of the efficiency of an economic model is clouded by the popular support and its changing fairness connotations of a particular society.

We set the spotlight on the municipality of l'Ametlla del Vallès to study the possible determinants behind what citizens perceive as a fair local tax contribution. Through a survey experiment and local administrative and tax records, we assess the possible relationships between a fair tax contribution and (1) the local tax burden, (2) public expenditures, (3) social position and (4) redistribution. We also control for the effect of information and some possible locally-based biases through a difference-in-difference experiment design.

This project has considered the importance much literature gives to the role of the government (Ridge and Smith, 1991; Abbiati et al., 2020) when defining its empirical strategy. In a way, as they suggest, the government should work as a nexus between the economy and society. Nevertheless, and especially under the current political context in a small municipality, it was rather difficult to convey an impartial and scientific participation process. That is why, among other reasons, the survey included a 500 € lottery, so people would be encouraged to participate. In a way, the fact that you have to offer a reward for people to partake in the definition of their own tax burden preferences is, in a way, the best proof of the failure of our current socioeconomic model. Thus, even without empirical evidence, the procedure has felt as true the findings of Spahn (1995) with regard to the merely political limitations when it comes to implement tax policymaking into a municipality.

The results of the empirical strategy do not find a relation between the local tax burden and the perceived fair contribution but do for general satisfaction of public services and for social position and redistribution views. It comes as quite a surprise that the local tax burden of citizens has not been found to be related whatsoever with the determinants of a fair contribution. This means that the reasons that guide the citizen's choice in terms of what they consider to be a fair amount is not constrained by the actual price they annually contribute. Furthermore, the general knowledge of local taxation or the role of information are also shown to be irrelevant for the allocation of a desired contribution.

This opens room for further discussion beyond the scope of this research. A local society that is not constrained by their current tax burden when allocating a fair contribution could also be, then, a wealthy society that do not see local taxes as worrying. Nevertheless, participants choose to drastically reduce their tax burden, which shows rejection. It is worth recalling, however, that the tax burden does not necessarily relate to the disposable income of the same household. Therefore, an interesting improvement would be to add to the database such information and look again for a causal relation. In our case, given the importance to cross the survey outcomes with the administrative database (by asking the ID to the participants), it was not possible. As income-asking surveys tend to be anonymous.

On the other side, it is important to stress the fact that the low bias found between the given tax contribution and the real one do not fully represent a society that knows their tax burden. As it was found in TB1 and TB3, the much higher values the property tax tends to have in comparison with the other local taxes dilutes the possible bias among the non-homeowners. In short, the configuration of the survey and the fact that nearly 88 % of the citizens own a house make it actually rather complex to assure that people are aware of their local tax burden. In reality, landlords know how much they pay for their house, which is something rather different. Ridge and Smith (1991) spoke about the limitations of the property tax of a municipality in terms of its viability. In this research we contribute to such finding by the simple fact of proving its dependence, both from an economic and social behaviour way. Therefore, further research should keep in mind the weight of every local tax and the share of landlords in the configuration of a local survey experiment.

As per the satisfaction towards local services, the relationship is clear. We find statistical significance at the 0.1 % level which confirms the opinion on a municipal service has an effect on the perceived fair contribution. Nevertheless, the role of information when showing to the treatment group the actual cost of such services did not show to play any role on a generic level.

As per the role of information when reducing the bias of popular beliefs, our findings differ from the ones found by Cruces et al, (2013) and Karadja et al. (2014), probably because of the strength of the property tax in the municipality and the high share of homeowners. On the other hand, in line with the findings of Lamberton (2013) and Lergetporter et al. (2016), we do not find remarkable evidence which suggests a relation between providing information of the public spending and their satisfaction levels. For future research, it will be also interesting to keep in mind new ways of providing the information, as duly explaining something to the respondent seems to work better than simply showing facts (Stancheva, 2020).

As per social views, we find some evidence of statistical significance at the 10 % level by relating the views of the respondents in terms of poorer households and their perception of a fair contribution.
We also obtain compliant findings with Stancheva's work (2021). The definition of a fair local tax burden by a citizen defines, in a way, their support towards such policy. In line with Stancheva's outcomes, we find proof of a relationship between a fair contribution and social position. And even though her work goes farther into the views of citizens towards the government, the general satisfaction of the public expenditures could be a linkable outcome.
Furthermore, our findings in social position views also complied with the statements of Easterlin (1974, 1995) and Blanchflower and Oswald (2004), who insisted in the importance of the role that plays the individual's social position and the one from the others. The results we find also go in line with the work of Hvidberg, Kreiner and Stantcheva (2021), as in our case the perceived social position, especially the one from others, has been found to be a determinant of a fair local tax contribution.

Last but not least, views for redistribution are also found to be related with the desired local contribution adjustment. We prove the donation figures given are not biased for local purposes and find them to be statistically significant at the 10 % level. The outcomes of the redistribution exercise show an even clearer relation with the allocation of a fair distribution, as we find statistical significance at the 5 % level.
Our findings in terms of redistribution views do not suggest the use one gives to information affects the attitudes of the citizens towards redistribution, as Page and Goldstein (2016), who found that. Nevertheless, the scope of such information treatment was to cancel out any particular local effect and, therefore, should not be acknowledged as proof of a non-existing relation between information treatment and redistribution views. As a matter of fact, there is much research on such approach of redistribution, with a clear example the work of Kuziemko et al. (2015). In short, we can assess the results for redistribution merely in terms of local fair contribution, which was what this research intended to do.

As per possible improvements, the extent of the survey could use some improvement, as a proper social behavioural study includes a previous assessment of interest groups to better direct the questions to the right audience. It would have also been interesting to control for the actual users of the local gym, swimming pool and music school to distinguish between the general opinion and the ones biased by its usage.
The most obvious and logical next step with regard to this research is to strengthen the econometrics branch. Nevertheless, such projects take time, and it could not be possible to perform a thorough econometric analysis. For that matter, and under this same context, I believe conducing spatial econometrics on the research would be really interesting. After all, as claimed Fiva and Rattso (2007), the importance given to some of the local services at issue surely changes depending on the neighbourhood or its spatial context.

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APPENDIX

Contents

A. Background

FIGURE A-1: PICTURE OF L'AMETLLA FROM THE MOUNTAIN OF PUIGGRACIÓS

Source: Wikipedia.

FIGURE A-2: SHIELD OF THE MUNICIPALITY

Source: City Hall.

FIGURE A-3: GEOGRAFICAL POSITION AT THE REGIONAL LEVEL
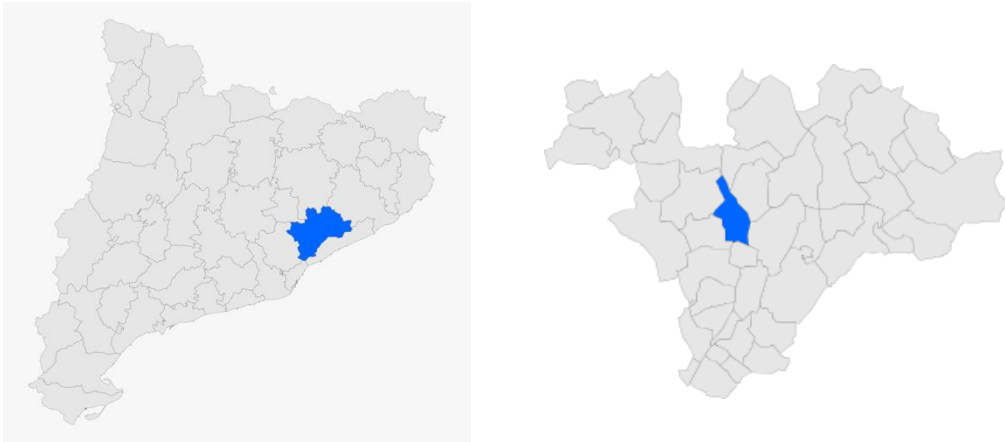
Notes: On the left side, the position of the "Vallès Oriental" in the country of Catalonia. On the right side, the position of l'Ametlla the first.
Source: Wikipedia.

FIGURE A-4: POPULATION FROWTH FROM 1975 to 2021
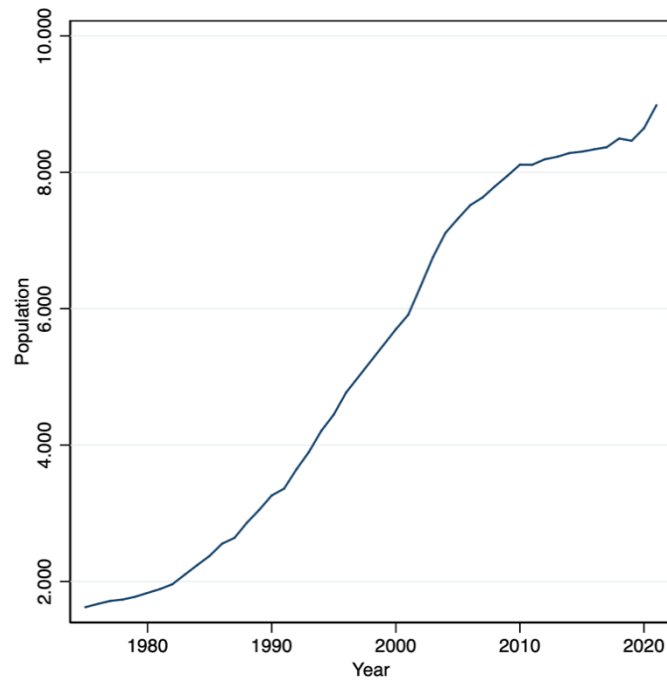
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

FIGURE A-5: EVOLUTION OF MIGRATION AT THE MUNICIPAL AND REGIONAL LEVEL
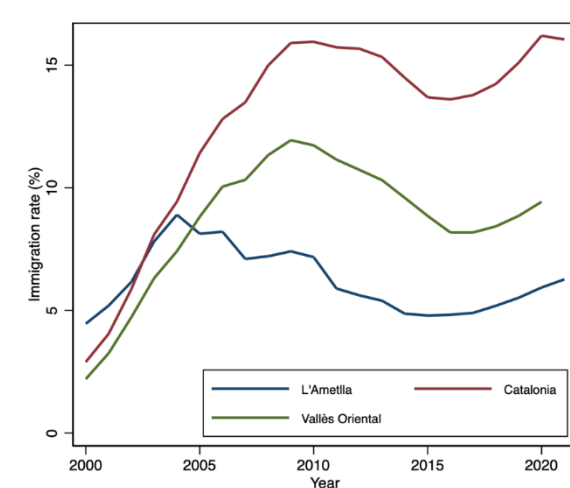
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

FIGURE A-6: AGE RANGE DISTRIBUTION FOR 2020 AND GENDER
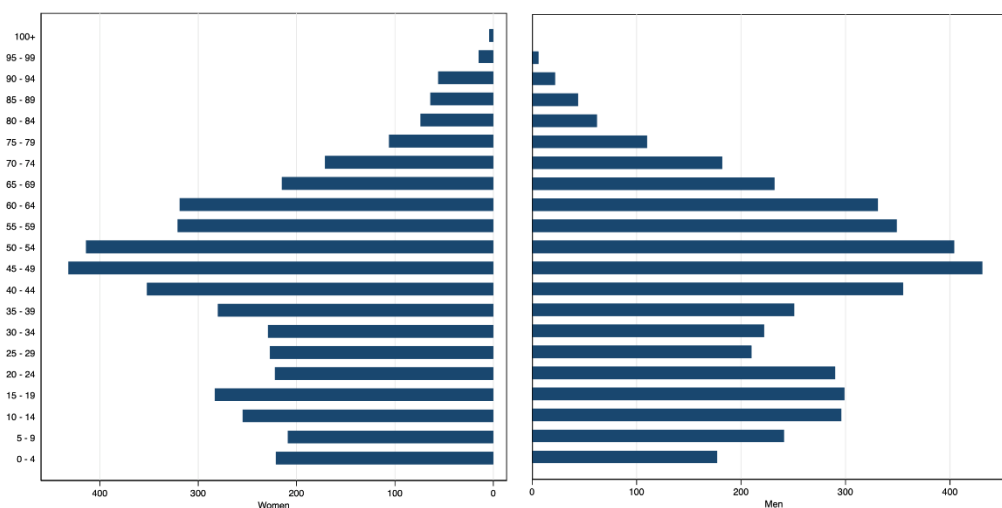
Notes: Age range distribution of the local population, discriminating by gender.
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-1: AVERAGE AGE OF POPULATION FOR 2020

	L'Ametlla	Vallès Oriental
Average males	41,0 years	40,8 years
Average females	42,3 years	43,0 years
Total average	41,6 years	41,9 years

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-2: GENDER DISTRIBUTION AT THE LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
Males	4.358 **(50,4 %)**	206.831 **(49,89 %)**	3.816.747 **(49,98 %)**
Females	4.288 **(49,6 %)**	207.739 **(50,11 %)**	3.940.181 **(50,02 %)**

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-3: EDUCATION AT THE LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
No studies	165	34.409	623.324
Elementary	485	38.876	837.313
ESO – graduat escolar	1.728	102.313	1.762.340
Batxillerat	1.034	41.806	843.227
FP grau mig	494	25.752	437.978
FP grau superior	571	28.028	454.519
Diplomatura	568	19.109	418.988
Grau universitari	291	5.541	146.704
Llicenciatura i doctorat	1.093	26.954	699.055

Notes: ESO stands for high school education, *Batcillerat, FP grau mig* and *FE grau superior* stand for upper vocational education, *Diplomatura* and *Grau universitari* refer to undergraduate programmes whereas *Llicenciatura i doctorat* stand for postgraduate and PhD programmes.
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-4: HOUSEHOLD'S HOUSE SURFACE AT THE LOCAL
AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
61 to 90 m²	468	90.089	2.015.153
91 to 120 m²	670	31.098	560.379
121 m² or more	1.465	27.394	369.412

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-5: INDIVIDUAL'S HOUSEHOLD COMPOSITION AT THE LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
One individual	375	27.895	686.810
Multiple individual	0	3.330	100.637

Notes: Distribution between the households comprised of individuals.
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-6: FAMILIES' HOUSEHOLD COMPOSITION AT THE LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
Couple – no children	487	36.506	725.737
Couple with children	1.487	62.476	1.059.975
Parent with children	294	14.929	308.995
Multiple families	0	3.574	62.789

Notes: Distribution between the households comprised of families.
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-7: AVERAGE DISPOSABLE INCOME AT THE LOCAL AND REGIONAL LEVEL

	L'Ametlla	Vallès Oriental	Catalunya
Aggregate	196.146 k€	7.054.101 k€	133.679.103 k€
Per Household	23.200 €	17.300 €	17.600 €

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-8: TOP-10 CATALAN MUNICIPALITIES AVERAGE DISPOSABLE INCOME

Municipality	Per Household
1. Peralada	30.900 €
2. Riudarenes	30.500 €
3. Sant Just Desvern	29.600 €
4. Alella	27.400 €
5. Sant Cugat del Vallès	24.800 €
6. Cabrils	24.700 €
7. Teià	24,700 €
8. Tiana	23.600 €
9. Ametlla del Vallès, l'	**23.200 €**
10. Vallromanes	23.000 €

Notes: Data for 2018. L'Ametlla and Vallromanes are two municipalities which belong to the Vallès Oriental.
Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-9: EMPLOYMENT AT THE LOCAL AND REGIONAL LEVEL
ACTIVE POPULATION

	L'Ametlla	Vallès Oriental	Catalunya
Full-time employed	3.091	140.408	2.557.161
Part-time employed	462	25.041	476.755
Unemployed	1.000	60.539	1.052.138
Total active population	4.553	255.989	4.086.055

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

TABLE A-10: EMPLOYMENT AT THE LOCAL AND REGIONAL LEVEL
INACTIVE POPULATION

	L'Ametlla	Vallès Oriental	Catalunya
Students	1.094	79.631	1.384.475
Retired	996	63.102	1.402.704
Total inactive population	3.556	172.837	3.386.882

Source: Institut d'Estadística de Catalunya (IDESCAT) and City Hall.

B. Survey experiment

B.1. Survey link and questions in English

Link: https://research.sc/participant/login/dynamic/4D781054-9D68-4F22-BCCF-AC75A2035D78

B.1. Questions in English

1. Personal background

1.1. What is your birth year?
Dropdown menu with years. Years 2005 onwards accepted.

1.2. What is your gender?
Female; Male; Non-binary

1.3. What is your current marital status?
Bachelor; Married; In a registered partnership; Divorced or legally separated; Widowed

1.4. Do you have children?
No; Yes – 1; Yes – 2; Yes – 3 or more

1.5. Which of the following categories best describes your highest educational level? Ongoing studies included.
No studies; Educació primària, ESO – EGB – Certificar escolar; Batxillerat - BUP - COU – PREU; FP grau mig - FP I o equivalent; FP grau superior - FP II o equivalent; Diplomatura universitaria - Arquitectura tècnica - Enginyeria tècnica o equivalent; Bachelor program or equivalent; Llicenciatura - Arquitectura superior - Enginyeria superior o equivalent; Master program (since 2006) or equivalent; PhD

1.6. Which of the following categories best describes your current employment status?
Full-time employment; Part-time employment; Student; Student and employed; Self-employed; Unemployed and currently looking for a job; Unemployed and currently not looking for a job; Retired

2. Socioeconomic background

2.1. For how long have you been living in l'Ametlla?
Less than a year; Between 1 and 3 years; Between 3 and 5 years; Between 5 and 10 years; More than 10 years; Ever since I was born

2.2. Choose for every of the following questions the option which best applies to your case.
- Have you spent your childhood in l'Ametlla?
  No; Partially; Yes
- Could you guess the name and surname of your closest neighbours?
  No – None; Few; Many; All
- Do you partake in local events? Such as the festa major, concerts, carnival, fairs, cavalgata de reis, etc.
  Never; Rarely; Often; Always
- Do you follow the day-to-day activity of the town through city hall's social media, plenary sessions, local newspaper or some other source?
  Never; Rarely; Often; Always
- How many people of your social circle are from l'Ametlla?
  None; Few; Many; All
- *Which do you think are the main current three issues, deficiencies or matters that should be improved in town?*
  Text box entry.

2.3. Could you tell us the name of the current mayor of l'Ametlla? Please write it if known, if not leave blank.
Text box entry.

The following questions will be not necessarily only addressed to you but to your household. By household we refer to the people with whom you live in same dwelling and share the expenses. It may consist of a family, with or without children, another group of people such as friends or co-workers/classmates or a person who lives alone.
Either if you live alone or with your family or friends, you have your own home economy. Please take this into consideration when you answer the following questions.

2.4. What percentage of households living in l'Ametlla do you think are richer than you? Slide the following bar according to the share of households in the village (in %) that you consider to have more material and patrimonial wealth than you.
Clarification: The 0% would be the value to choose for those who believe they belong to the richest household in the village and 100% the value to choose for those who believe they belong to the poorest.
Sliding bar from 0 % to 100 %.

2.5. Which one do you think explains the best the reason why there are households in town poorer than yours? Slide the following bar towards "lack of effort" or "bad luck" according to the ratio you think corresponds to both factors.
Clarification: Should you think the reason strictly corresponds to a lack of effort, the bar should be slid to the left edge. If it is bad luck, to the right edge. Should you think there is a combination of both, set the bar according to the ratio you think corresponds to both factors.
Sliding bar from "Lack of effort" to "Bad luck", with "Equally important" in the middle.

2.6. Which of the next commonly used denominations to classify social classes do you think fits the one from your household the best?
Poverty; Working class; Middle class; High class; Elite

3. Local finances

Treatment group

The respondents are randomized in half to either the treatment group or the control group. The second one is showed a video with basic definitions of the existing local taxes and most common public expenditure allocation whereas the treatment group is given numeric real examples of the average contribution for certain taxes and the total amount of public expenditure allocated per topic.

The content of both groups can be seen in appendix B.

Outcomes

3.1. You just learned about the main local taxes. How much money would you think your household contributed to the local finances the year 2020?
Clarification: That is, write down in euros the amount you think your household paid to the city hall for all taxes last year.
Text box entry.

3.2. How many households in town do you think paid more taxes than you in 2020? Slide the next bar from left to right according to what you think would be your position according to what your household pays in taxes to the City Council.
Clarification: Imagine that we rank in percentage the households of l'Ametlla according to their contribution to the local finances, being 0 % the household which contributes the least and 100 %

the household which contributes the most. What do you think the position of your household would be for the year 2020?
Sliding bar from 0 to 100 %.

3.3. If you were given the chance, how would you modify (in %) for this year the contribution to the local finances of your household that you guessed previously considering the cost and quality of the main public local services? Slide the amount you answered earlier to adjust it to what you consider a fair contribution.
Clarification: If you are satisfied with your current contribution, you can leave it as is.
Sliding bar with the given contribution by the respondent, allowing the participant to add or reduce its contribution between - 100 % and +100 %.

3.4. Sort the following taxes from "paid more" to "paid less" according to what you think was the contribution of your household for each of them in 2020:
Clarification: That is, according to what you remember, classify the following concepts from top to bottom according to the payments your household made last year.
Small application to rank from "paid the most" to "paid the least" the exposed taxes.
Waste management tax; Vehicles tax (IVTM); Surplus value tax (IVTNU); Sewage management tax; Property tax (IBI); Construction tax (ICIO).

3.5. Let's think now about two hypothetical households of l'Ametlla. Both of them consist of three members: two adults and one child. The only difference between these two households is in the income: the first has a monthly disposable income of 2.000,00 € whereas the second has a one of 5.000,00 €.
The city hall needs to collect 1.200,00 € from both of them for the year 2022. Please assign what the payments for each household should be according to what you consider to be a fair split. Remember the sum of the two payments have to equal 1.200,00 €.

Clarification: Slide de amount for every household in order to set what you consider a fair distribution for each of them. The sum of both figures must equal 1.200,00 €.

First household with 2.000,00 € monthly disposable income (24.000,00 € per year) should pay:
Second household with 5.000,00 monthly disposable income (60.000,00 € per year) should pay:
Annual tax collection by the city hall: 1.200,00 €

3.6. On a scale of 0 to 10, what is your personal level of satisfaction with the following municipal services according to the service provided and its cost?
Clarification: "0" would be the value corresponding to not at all satisfied and "10" the value corresponding to very satisfied.
Streets maintenance; Waste management service; Sewage management service; Local administration; Local music school; ILLA Activa local gym; Summer swimming pool of Can Camp and Ca l'Arenys

4. Lottery participation

Each respondent can participate to a lottery of 500 € if they properly answer to the survey. In this section, the citizen is asked for their ID number to partake to the lottery and the following question randomized in half according to the following groups:

Treatment group

4.1. T. If you win the lottery, you will be given the opportunity to either share partially or entirely your earnings with the local cooperation entities (l'Ametlla Rebel, Caritas i la Xarxa Solidària) or keep all the money for you. Slide the following bar to set the amount that you would like to allocate to these entities.
Sliding bar from 0 € to 500 €.

Control group

4.2. C. If you win the lottery, you will be given the either opportunity to share partially or entirely your earnings with the NGO Unicef or keep all the money for you. Slide the following bar to set the amount that you would like to allocate to the NGO.
Sliding bar from 0 € to 500 €.

B.2. Questions in Catalan

1. Personal

1.1. A quin any vas néixer?
Dropdown menu with years. Years 2005 onwards accepted.

1.2. Amb quin dels següents gèneres t'identifiques?
Dona; Home; No-binari

1.3. Quina de les següents opcions defineix millor el teu estat civil?
Solter/a; Casat/da; Parella estable registrada; Legalment separat o divorciat/da; Vidu o Vídua.

1.4. Tens fills?
No; Sí – 1; Sí – 2; Sí – 3 or més

1.5. Quin és el teu nivell d'estudis obtingut més alt? S'admeten estudis actualment en curs.
Sense estudis; Educació primària, ESO – EGB – Certificat escolar; Batxillerat - BUP - COU – PREU; FP grau mig - FP I o equivalent; FP grau superior - FP II o equivalent; Diplomatura universitària - Arquitectura tècnica - Enginyeria tècnica o equivalent; Grau universitari o equivalent; Llicenciatura - Arquitectura superior - Enginyeria superior o equivalent; Màster universitari (since 2006) o equivalent; Estudis de doctorat

1.6. Quina de les següents opcions s'ajusta millor a la teva actual situació laboral?
Empleat/da a temps complet; Empleat/da a temps parcial; Estudiant; Estudiant i treballant; Empresari/ària o Autònom/a; A l'atur i buscant feina; A l'atur i no buscant feina; Jubilat/da – Prejubilat/da o Pensionista

2. Economia i societat

2.1. Quant fa que vius a l'Ametlla?
Menys d'un any; Entre 1 i 3 anys; Entre 3 i 5 anys; Entre 5 i 10 anys; Més de 10 anys; Hi he viscut des que vaig néixer

2.2. Escull per a cadascuna de les preguntes següents l'opció que millor s'adeqüi al teu cas:
- Has passat la teva infantesa a l'Ametlla?
  No; Parcialment; Sí
- Podries anomenar els noms i cognoms dels veïns més pròxims a casa teva?
  No – cap; Pocs; Bastants; Sí – Tots
- Participes a activitats del poble? Exemples en serien la festa major, concerts, les fires, el carnaval, la cavalcada de reis, etc.
  Mai; Rarament; Sovint; Sempre
- Segueixes l'actualitat del poble, sigui mitjançant les xarxes socials de l'Ajuntament, seguint els plens municipals, llegint el diari del poble o qualsevol altre mitjà?
  Mai; Rarament; Sovint; Sempre
- Quantes persones del teu cercle social són de l'Ametlla?
  Cap; Poques; Bastantes; Totes
- Quins creus que són els tres (3) principals problemes, deficiències o qüestions en les que actualment el poble necessita millorar?
  Text box entry.

2.3. Sabries dir el nom de l'actual alcalde del poble? En cas afirmatiu, escriu-lo a continuació. En cas negatiu, deixa el quadre en blanc.
Text box entry.

Les següents preguntes no aniran necessàriament adreçades a tu sinó al teu nucli familiar. Per nucli familiar entenem aquell grup de persones que viuen en el mateix habitatge i comparteixen despeses. Aquest grup pot estar format o bé per una família, amb fills o sense, un altre grup de persones format per amics o companys de feina/estudis o una persona que viu sola.

Tant si vius sol, amb la teva família o amics, en un nucli familiar hi ha una economia domèstica pròpia. Tingues-ho present a l'hora de contestar les següents preguntes.

2.4. Quin percentatge dels nuclis familiars que viuen a l'Ametlla creus que són més rics que el teu? Llisca la següent barra d'acord amb la proporció de nuclis familiars del poble (en %) que consideres que disposen de més riquesa material i patrimonial que tu.
Aclariment: El 0 % serà el valor a escollir pels qui creguin que pertanyen al nucli familiar més ric del poble i el 100 % el valor a escollir pels qui creguin que pertanyen al més pobre.
Sliding bar from 0 % to 100 %.

2.5. Quin creus que és el principal motiu pel qual hi ha nuclis familiars al poble que són més pobres que el teu? Llisca la següent barra cap a "s'han esforçat menys" o "han tingut mala sort" segons la proporció que creus que li correspon a ambdós factors.
Aclariment: Si creus que el motiu rau exclusivament en la falta d'esforç, has de lliscar la barra fins al seu límit esquerre. Si creus que rau exclusivament en la mala sort, fins al seu límit dret. Si creus que és una combinació entre tots dos, ajusta la barra d'acord a la proporció que creus que correspon a ambdós factors.
Sliding bar from "S'han esforçat menys" to "Han tingut mala sort", with "Ambdos factors per igual" in the middle.

2.6. Quina de les següents denominacions habitualment utilitzades per a classificar les diferents classes socials creus que s'ajusta més al teu nucli familiar?
Precarietat; Classe treballadora; Classe mitjana; Classe alta; Elit

3. Finances locals

Treatment group

The respondents are randomized in half to either the treatment group or the control group. The second one is showed a video with basic definitions of the existing local taxes and most common public expenditure allocation whereas the treatment group is given numeric real examples of the average contribution for certain taxes and the total amount of public expenditure allocated per topic.

The content of both groups can be seen in appendix B.

Outcomes

3.1. Tot just acabes de veure definits els principals impostos municipals. Quants diners diries que va contribuir el teu nucli familiar en total a les finances de l'Ajuntament l'any 2020?
Aclariment: És a dir, escriu en euros l'import que creus que va pagar el teu nucli familiar en impostos i taxes a l'Ajuntament l'any passat.
Text box entry.

3.2. Quants nuclis familiars del poble creus que van pagar menys impostos que tu l'any 2020? Llisca la següent barra d'esquerra a dreta segons la que creus que seria la teva posició d'acord amb el que paga el teu nucli familiar en impostos a l'Ajuntament.
Aclariment: Imagina que classifiquem percentualment els nuclis familiars de l'Ametlla segons la seva contribució a la hisenda pública municipal, essent el 0 % el nucli familiar que menys contribueix i el 100 % el que més. Quina creus que va ser la posició del teu nucli familiar l'any 2020?
Sliding bar from 0 % to 100 %.

3.3. Si tinguessis l'oportunitat, com modificaries (en %) per aquest any la contribució del teu nucli familiar a la hisenda local que has respost anteriorment tenint el compte la qualitat i el cost dels serveis públics municipals? Llisca l'import que has respost anteriorment per tal d'ajustar-lo al que consideris una contribució justa.
Aclariment: Si estàs conforme amb la teva contribució actual, pots deixar-ho tal i com està.
Sliding bar with the given contribution by the respondent, allowing the participant to add or reduce its contribution between - 100 % and +100 %.

3.4. Ordena els següents impostos i taxes de més a menys import segons creguis que fou la contribució del teu nucli familiar per a cadascun d'ells l'any 2020.
Aclariment: És a dir, d'acord amb el que recordis, classifica de més a menys import els següents conceptes d'acord amb els pagaments que el teu nucli familiar fes l'any passat.
Small application to rank from "paid the most" to "paid the least" the exposed taxes.
Taxa d'escombraries; Impost sobre Vehicles de Tracció Mecànica (IVTM); Impost sobre la plusvàlua (IVTNU); Taxa de clavegueram; Impost de Béns Immobles (IBI); Impost sobre Construccions - Instal·lacions i Obres (ICIO).

3.5. Per a la següent pregunta suposarem dos nuclis familiars hipotètics de l'Ametlla. Tots dos estan formats per dos adults i un nen o una nena al seu càrrec. L'única diferència entre ambdós rau en els seus ingressos: el primer nucli familiar disposa d'uns ingressos nets mensuals de 2.000,00 € mentre que el segon disposa d'uns de 5.000,00 €.

L'Ajuntament necessita recaptar per a l'any 2022 un total de 1.200,00 € en impostos entre ambdós nuclis familiars. D'acord amb el que consideris ser un repartiment just, assigna a cada nucli familiar l'import anual corresponent a pagar per tal de recaptar entre tots dos la xifra fixada per l'administració local.
Aclariment: Llisca la barra corresponent a cada nucli familiar per tal de fixar la xifra anual que consideris justa a pagar en impostos per a cadascun d'ells. El sumatori de les dues xifres que assignis a cada nucli familiar ha de ser igual a 1.200,00 €.

Primer nucli familiar amb 2.000,00 € en ingressos disponibles mensuals (24.000,00 € anuals) hauria de pagar:
Segon nucli familiar amb 5.000,00 € en ingressos disponibles mensuals (60.000,00 € anuals) hauria de pagar:
Recaptació anual a assolir per l'Ajuntament: 1.200,00 €

3.6. En una escala de 0 a 10, quin és el teu nivell de satisfacció personal amb els següents serveis municipals d'acord amb el servei prestat i el seu cost?
Aclariment: El "0" seria el valor corresponent a gens satisfet i "10" el valor corresponent a molt satisfet.
Manteniment dels carrers del poble; Servei d'escombraries i gestió de deixalles; Manteniment i funcionament del clavegueram; Administració Local – Ajuntament; Escola de música; Gimnàs ILLA Activa; Piscines de Can Camp i Ca l'Arenys.

4. Lottery participation

Each respondent can participate to a lottery of 500 € if they properly answer to the survey. In this section, the citizen is asked for their ID number to partake to the lottery and the following question randomized in half according to the following groups:

Treatment group
4.1. T. En cas que guanyis el sorteig, podràs o bé donar part o la totalitat dels teus guanys a les entitats de cooperació del poble (l'Ametlla Rebel, Caritas i la Xarxa Solidària) o bé endur-te l'import sencer per a tu. Llisca la següent barra per tal de determinar l'import que t'agradaria donar a aquestes entitats.
Sliding bar from 0 € to 500 €.

Control group

4.2. C. En cas que guanyis el sorteig, podràs o bé donar part o la totalitat dels teus guanys a l'ONG Unicef o bé endur-te l'import sencer per a tu. Llisca la següent barra per tal de l'import que t'agradaria donar a aquesta ONG.
Sliding bar from 0 € to 500 €.

B.3. Vignette treatment experiment

- Treatment video: https://youtu.be/Qh58ifhULb8

- Control group video: https://youtu.be/_YDqrwtMe64

B.4. Survey design

Welcoming page.

Explanation survey – page 1 of 2.

Explanation survey – page 2 of 2.

1. Persona

Respon les preguntes que trobaràs a continuació:

Pàgina 1 de 1

1.1. A quin <u>any</u> vas néixer?

Selecciona... ⌄

1.2. Amb quin dels següents <u>gèneres</u> t'identifiques?

◯ Dona.
◯ Home.
◯ No-binari.

1.3. Quina de les següents opcions defineix millor el teu <u>estat civil?</u>

◯ Solter/a.
◯ Casat/da.
◯ Parella estable registrada.
◯ Legalment separat/da o divorciat/da.
◯ Vidu o vídua.

1.4. Tens fills?

◯ No.
◯ Sí – 1.
◯ Sí – 2.
◯ Sí – 3 o més.

1.5. Quin és el teu <u>rang educatiu</u> obtingut més alt? S'admeten estudis actualment en curs.

Seleccionar... ⌄

1.6. Quina de les següents opcions s'ajusta millor a la teva actual <u>situació laboral</u>?

Seleccionar... ⌄

Persona - Pàgina 1 de 1

Ja estic!

Personal background – page 1 of 1.

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2. Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 1 de 6

2.1. Quant fa que vius a l'Ametlla?

○ Menys d'un any.
○ Entre 1 i 3 anys.
○ Entre 3 i 5 anys.
○ Entre 5 i 10 anys.
○ Més de 10 anys.
○ Hi he viscut des que vaig néixer.

Economia i societat - Pàgina 1 de 6

Següent

Socioeconomic background – page 1 of 6.

2. Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 2 de 6

2.2. Escull per a cadascuna de les preguntes següents l'opció que millor s'adeqüi al teu cas:

Has passat la teva infantesa a l'Ametlla?

No	Parcialment	Sí

Podries anomenar els noms i cognoms dels veïns més pròxims a casa teva?

No – cap	Pocs	Bastants	Sí – tots

Participes a activitats del poble? Exemples en serien la festa major, concerts, les fires, el carnaval, la cavalcada de reis, etc.

Mai	Rarament	Sovint	Sempre

Segueixes l'actualitat del poble, sigui mitjançant les xarxes socials de l'Ajuntament, seguint els plens municipals, llegint el diari del poble o qualsevol altre mitjà?

Mai	Rarament	Sovint	Sempre

Quantes persones del teu cercle social són de l'Ametlla?

Cap	Poques	Bastantes	Totes

Quins creus que són els tres (3) principals problemes, deficiències o qüestions en les que actualment el poble necessita millorar?

Economia i societat - Pàgina 2 de 6

Següent

Socioeconomic background – page 2 of 6.

2. Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 3 de 6

2.3. Sabries dir el nom de l'actual alcalde del poble?

En cas afirmatiu, escriu-lo a continuació. En cas negatiu, deixa el quadre en blanc.

Economia i societat - Pàgina 3 de 6

Següent

Socioeconomic background – page 3 of 6.

2. Economia i societat

Respon les preguntes que trobaràs a continuació:

Les següents preguntes no aniran necessàriament adreçades a tu sinó al teu **nucli familiar**. Per nucli familiar entenem aquell grup de persones que viuen en el mateix habitatge i comparteixen despeses. Aquest grup pot estar format o bé per una **família**, amb fills o sense, un altre grup de persones format per **amics o companys de feina/estudis** o una **persona** que viu sola.

Tant si vius sol, amb la teva família o amics, en un nucli familiar hi ha una economia domèstica pròpia. Tingues-ho present a l'hora de contestar les següents preguntes.

Següent

Socioeconomic background — household introduction.

2. Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 4 de 6

2.4. Quin percentatge dels nuclis familiars que viuen a l'Ametlla creus que són més rics que el teu? Llisca la següent barra d'acord amb la proporció de nuclis familiars del poble (en %) que consideris que disposen de més riquesa material i patrimonial que tu.

Aclariment: *El 0 % serà el valor a escollir pels qui creguin que pertanyen al nucli familiar més ric del poble i el 100 % el valor a escollir pels qui creguin que pertanyen al més pobre.*

50

0% ⬤ 100%

Economia i societat - Pàgina 4 de 6

Següent

Socioeconomic background — page 4 of 6.

2. Economia i societat

Persona Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 5 de 6

2.5. Quin creus que és el principal motiu pel qual hi ha nuclis familiars al poble que són <u>més pobres</u> que el teu? Llisca la següent barra cap a "s'han esforçat menys" o "han tingut mala sort" segons la proporció que creus que li correspon a ambdós factors.

<u>**Aclariment:**</u> *Si creus que el motiu rau exclusivament en la falta d'esforç, has de lliscar la barra fins al seu límit esquerre. Si creus que rau exclusivament en la mala sort, fins al seu límit dret. Si creus que és una combinació entre tots dos, ajusta la barra d'acord a la proporció que creus que correspon a ambdós factors.*

S'han esforçat menys ⸺⸺⸺⸺⸺◯⸺⸺⸺⸺⸺ Han tingut mala sort

Economia i societat - Pàgina 5 de 6

Següent

Socioeconomic background – page 5 of 6.

2. Economia i societat

Persona Economia i societat

Respon les preguntes que trobaràs a continuació:

Pàgina 6 de 6

2.6. Quina de les següents denominacions habitualment utilizades per a classificar les diferents <u>classes socials</u> creus que s'ajusta més al teu nucli familiar?

◯ Precarietat.
◯ Classe treballadora.
◯ Classe mitjana.
◯ Classe alta.
◯ Elit.

Economia i societat - Pàgina 6 de 6

Següent

Socioeconomic background – page 6 of 6.

Local finances – video introduction.

Local finances – video playback.

Local finances – page 1 of 6.

Local finances – page 2 of 6.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

Pàgina 3 de 6

3.3. Si tinguessis l'oportunitat, com modificaries (en %) per aquest any la contribució del teu nucli familiar a la hisenda local que has respost a anteriorment tenint el compte <u>la qualitat i el cost dels serveis públics municipals?</u>

<u>Aclariment:</u> *Llisca l'import que has respost anteriorment per tal d'ajustar-lo al que consideris una <u>contribució justa</u>. Si estàs conforme amb la teva contribució actual, pots deixar-ho tal i com està.*

<u>Contribució l'any 2020 resposta per tu:</u>

0,00 €

<u>Modificació per aquest any:</u>
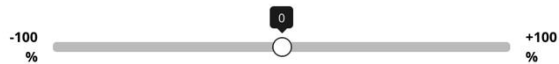
| 0 |

-100 %   +100 %

Finances locals - Pàgina 3 de 6

Modifica   Següent

Local finances – page 3 of 6 – contribution change entry.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

Pàgina 3 de 6

<u>**Aquesta seria la teva nova contribució d'acord amb el que has respost**</u>:

Contribució 2020	Modificació en %	Nova contribució
0,00 €	0 %	**0,00 €**

Si vols confirmar la teva assignació, clica a "<u>següent</u>", si t'agradaria editar-ho, clica a "<u>modifica</u>".

Finances locals - Pàgina 3 de 6

Modifica   Següent

Local finances – page 3 of 6 – contribution change submission.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

3.4. Ordena els següents impostos i taxes <u>de més a menys import</u> segons creguis que fou la contribució del teu nucli familiar per a cadascun d'ells l'any 2020.

<u>**Aclariment:**</u> *És a dir, d'acord amb el que recordis, classifica de més a menys import els següents conceptes d'acord amb els pagaments que el teu nucli familiar fes l'any passat.*

He pagat més

⁞⁞ Taxa d'escombraries.
⁞⁞ Impost sobre Vehicles de Tracció Mecànica (IVTM).
⁞⁞ Impost sobre la plusvàlua (IVTNU).
⁞⁞ Taxa de clavegueram.
⁞⁞ Impost de Béns Immobles (IBI).
⁞⁞ Impost sobre Construccions - Instal·lacions i Obres (ICIO).

He pagat menys

Finances locals - Pàgina 4 de 6

Següent

Local finances – page 4 of 6.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

Pàgina 5 de 6

Per a la següent pregunta suposarem **dos nuclis familiars** hipotètics de l'Ametlla. Tots dos estan formats per <u>dos adults i un nen o una nena</u> al seu càrrec.

L'única diferència entre ambdós rau en els seus **ingressos**: el <u>primer</u> nucli familiar disposa d'uns **ingressos nets mensuals de 2.000,00 €** mentre que el <u>segon</u> disposa d'uns de **5.000,00 €**.

L'Ajuntament necessita recaptar per a l'any 2022 un total de **1.200,00 € en impostos i taxes** entre <u>ambdós nuclis familiars.</u>

3.5. D'acord amb el que consideris ser un <u>repartiment just</u>, assigna a <u>cada nucli familiar</u> l'import anual corresponent a pagar per tal de recaptar entre tots dos la xifra fixada per l'administració local.

Aclariment: *Llisca la barra corresponent a cada nucli familiar per tal de fixar la xifra anual que consideris justa a pagar en impostos per a cadascun d'ells. El sumatori de les dues xifres que assignis a cada nucli familiar ha de ser igual a 1.200,00 €.*

Nucli familiar 1
Ingressos nets mensuals: 2.000,00 € (24.000,00 € anuals)

Quantitat a pagar anualment:

| 600 |

0,00€   ⬤   1.200,00€

Nucli familiar 2
Ingressos nets mensuals: 5.000,00 € (60.000,00 € anuals)

Quantitat a pagar anualment:

| 600 |

0,00€   ⬤   1.200,00€

Finances locals - Pàgina 5 de 6

[Modifica] [Següent]

Local finances – page 5 of 6 – household distribution entry.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

___

Pàgina 5 de 6

Així quedarien repartits els 1.200,00 € d'acord amb la teva assignació:

Nucli familiar 1	Nucli familiar 2	Suma ambdós
600,00 €	600,00 €	**1200,00 €**

Si vols confirmar la teva assignació, clica a "<u>següent</u>", si t'agradaria editar-ho, clica a "<u>modifica</u>".

Recorda que és necessari que la suma d'ambdós nuclis familiars equivali a 1.200,00 € per tal de poder continuar.

___

<div align="center">

Modifica   Següent

</div>

Local finances – page 5 of 6 – household distribution submission.

3. Finances locals

Respon les preguntes que trobaràs a continuació:

3.6. En una escala de 0 a 10, quin és el teu nivell de satisfacció personal amb els següents serveis municipals <u>d'acord amb el servei prestat i el seu cost</u>?

<u>Aclariment:</u> *El "0" seria el valor corresponent a* **gens satisfet** *i "10" el valor corresponent a* **molt satisfet**.

Manteniment dels carrers del poble.

0	1	2	3	4	5	6	7	8	9	10

Servei d'escombraries i gestió de deixalles.

0	1	2	3	4	5	6	7	8	9	10

Manteniment i funcionament del clavegueram.

0	1	2	3	4	5	6	7	8	9	10

Administració Local - Ajuntament.

0	1	2	3	4	5	6	7	8	9	10

Escola de música.

0	1	2	3	4	5	6	7	8	9	10

Gimnàs ILLA Activa

0	1	2	3	4	5	6	7	8	9	10

Piscines de Can Camp i Ca l'Arenys.

0	1	2	3	4	5	6	7	8	9	10

Finances Locals - Pàgina 6 de 6

Envia i acaba

Local finances – page 6 of 6.

Lottery participation – personal data entry.

Inscripció al sorteig

Omple la teves dades personals i entra en el sorteig de 500 €.

Enquesta local sobre l'economia Ametllatana

Estudi econòmic municipal

Se sortejaran 500 euros entre tots els participants.

En cas que guanyis el sorteig, podràs o bé donar <u>part</u> o la <u>totalitat</u> dels teus guanys a les <u>entitats de cooperació del poble</u> o bé <u>endur-te l'import sencer per a tu</u>. Llisca la següent barra per tal de determinar l'import que t'agradaria donar a aquestes entitats.

<u>Aclariment:</u> *L'import que seleccionis se't descomptarà dels 500 € en cas que resultis guanyador/a del sorteig.*

0

0€ ⬡―――――――――――――― 500€

Xarxa de Solidaritat

L'AR L'Ametlla rebel

L'Ametlla del Vallès

Càritas SANT GENÍS

Moltes gràcies per participar!

Regidoria d'Hisenda, Ajuntament de l'Ametlla del Vallès. Estiu 2021.

Envia i acaba l'enquesta

Lottery participation – treatment group.

Lottery participation — control group.

Ajuntament de l'Ametlla del Vallès
Publicado por Joan Comunicació L'Ametlla del Vallès ☑ ·
21 de agosto a las 12:00 · 🌐

ℹ️ Aquest estiu tots els veïns i veïnes empadronats a l'#AmetlladelVallès que tinguin més de 16 anys o els facin enguany estan convidats a participar a l'enquesta local sobre l'economia ametllatana, que organitza la regidoria d'Hisenda en col·laboració amb la Universitat de Barcelona.

👉 Aquest estudi econòmic municipal forma part del procés participatiu dels Pressupostos 2022, i té com a objectiu millorar la hisenda local mitjançant una política tributària renovada i una gestió més acurada de la despesa pública. Se sortejaran 500,00 € entre tots els participants.

🔗 Accés a l'enquesta: https://bit.ly/364p9C0

#Participació

Gefällt **pepmoret** und **weiteren Personen**

ajametlladelvalles ℹ️ Aquest estiu tots els veïns i veïnes empadronats a l'#AmetlladelVallès que tinguin més de 16 anys o els facin enguany estan convidats a participar a l'enquesta local sobre l'economia ametllatana que organitza la regidoria d'Hisenda en col·laboració amb la Universitat de Barcelona.

Ajuntament de l'Ametlla del Vallès

Publicidad · Pagado por Ajuntament de l'Ametlla... · 🌐

ℹ️ Aquest estiu tots els veïns i veïnes *empadronats a l'#AmetlladelVallès* que tinguin més de 16 anys o els facin enguany estan convidats a participar a l'enquesta local sobre l'economia ametllatana que organitza la regidoria d'Hisenda en col·laboració amb la Universitat de Barcelona.

👉 Aquest estudi econòmic municipal forma part del procés participatiu dels Pressupostos 2022, i té com a objetiu millorar la hisenda local mitjançant una política tributària renovada i una gestió més acurada de la despesa pública.

💸 Se sortejaran 500,00 € entre tots els participants.

💻 *Es recomana respondre a l'enquesta amb ordinador.*

🔗 Accedeix a l'enquesta: bit.ly/2Uwyy3e (enllaç també la bio).

#Participació

EN COL·LABORACIÓ AMB:

AMETLLA.CAT
Fes l'enquesta!
Aquest estiu tots els veïns i veï...

REGISTRARTE

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B.6. Data protection

Protecció de dades:

De conformitat amb el Reglament Europeu UE 2016/679 (RGPD) i la Llei Orgànica 3/2018 de Protecció de Dades Personals, l'informem que el responsable del tractament de les dades de caràcter personal que ens ha proporcionat és **L'Ajuntament de l'Ametlla del Vallès, amb domicili a 08480-L'Ametlla del Vallès, Plaça de l'Ajuntament, 1, amb NIF P0800500A, Tel. 93 843 25 01.

Les dades personals que ens ha proporcionat i/o han estat recopilades seran tractades per a la següent finalitat:

Estudi econòmic municipal de taxació pública.

Les dades tractades amb aquesta finalitat es conservaran fins el moment en què l'usuari retiri el seu consentiment a l'efecte.

La base jurídica per dur a terme aquest tractament de dades és el consentiment de l'usuari atorgat a l'efecte.

Les seves dades personals no seran transmeses per al seu ús per tercers, llevat que hàgim obtingut el seu consentiment o quan així ho exigeixi la llei.

Drets dels usuaris

1. En tot cas, l'usuari té dret a presentar una reclamació davant la corresponent autoritat de control (Autoritat Catalana de Protecció de Dades) si ho estima oportú.

2. L'usuari pot exercir davant de l'Ajuntament els seus drets d'accés, rectificació, supressió, limitació del tractament, portabilitat de les dades, oposició i a no ser objecte de decisions individuals automatitzades, inclosa l'elaboració de perfils.

3. De la mateixa manera, en els tractaments de dades en els que la legitimació es basi en el consentiment donat per l'usuari, aquest té el dret a retirar aquest consentiment en qualsevol moment, sense que això afecti la licitud del tractament basat en el consentiment previ a la seva retirada.

4. Per a l'exercici d'aquests drets, l'usuari pot enviar la sol·licitud per escrit a: Ajuntament de l'Ametlla del Vallès, Ref .: Protecció de Dades, Plaça de l'Ajuntament, 1, 08480 - L'Ametlla del Vallès (Barcelona), o mitjançant el correu electrònic dadespersonals@ametlla.cat.

Delegatde protecció de dades

1. El Delegat de protecció de dades (DPD) és el garant del compliment de la normativa de protecció de dades a l'ajuntament, que s'encarrega de supervisar, de manera independent, l'aplicació del compliment de la normativa de protecció de dades.

2. Hi podeu contactar mitjançant:

Correu electrònic: dpd.ajametlla@diba.cat.Telèfon: 93 472 65 00

Adreça: Servei d'Assistència Municipal i Suport Estratègic – DPD ENS LOCALS

Diputació de Barcelona. Recinte Mundet. Ed Migjorn, bloc B, 2a planta. Passeig de la Vall d'Hebron, 171. 08035 Barcelona

C. Results.

C.1. Local treasury

FIGURE C-1: REPORTED AND ACTUAL TAX CONTRIBTION FOR CONTROLS – TB1
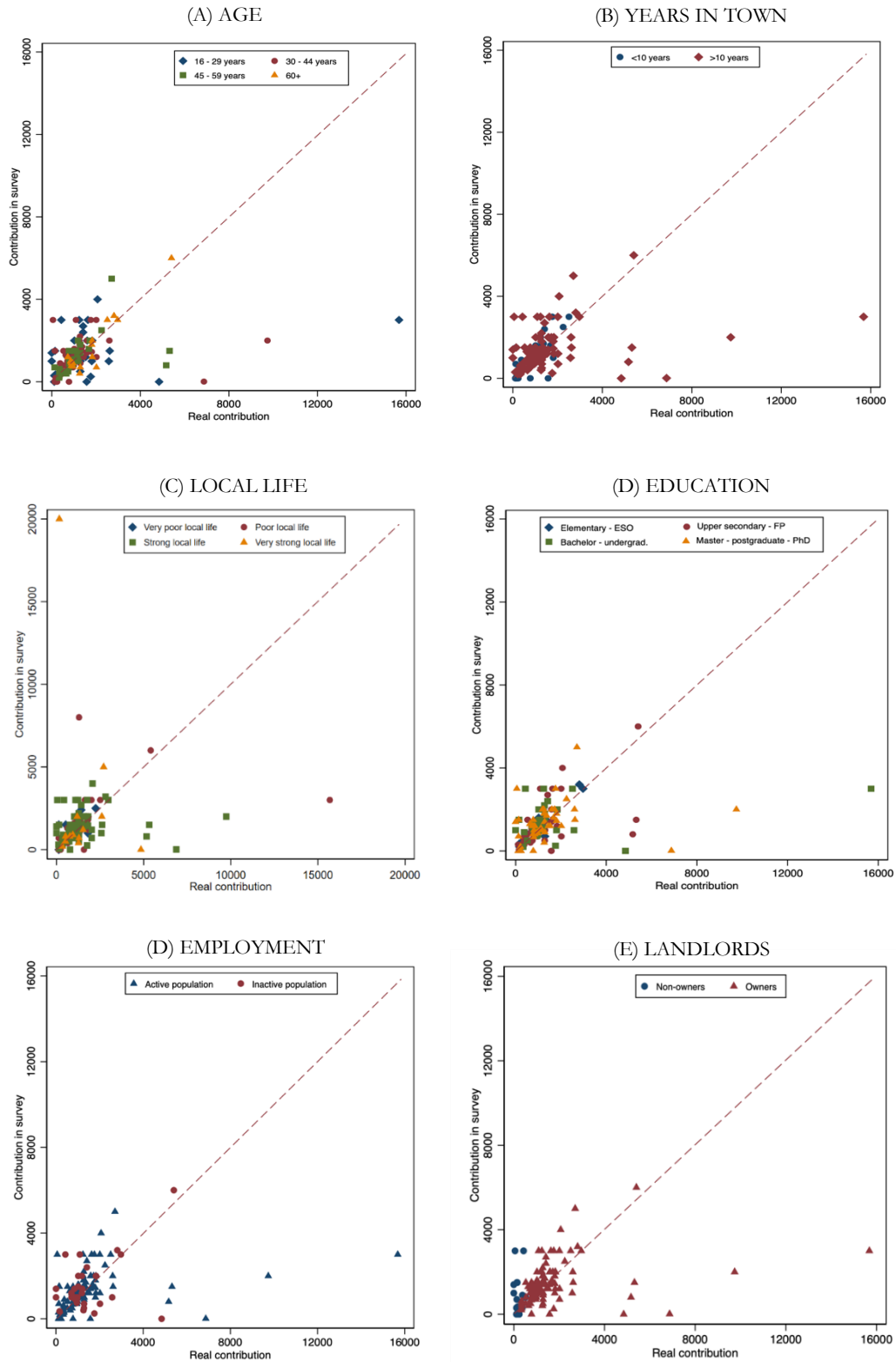
Notes: The graphs above show a binned scatter which plots the relation between the tax contribution answered in the survey and the real one. The results are disaggregated for control groups.

FIGURE C-2: REPORTED AND ACTUAL TAX CONTRIBTION FOR AGE – TB1
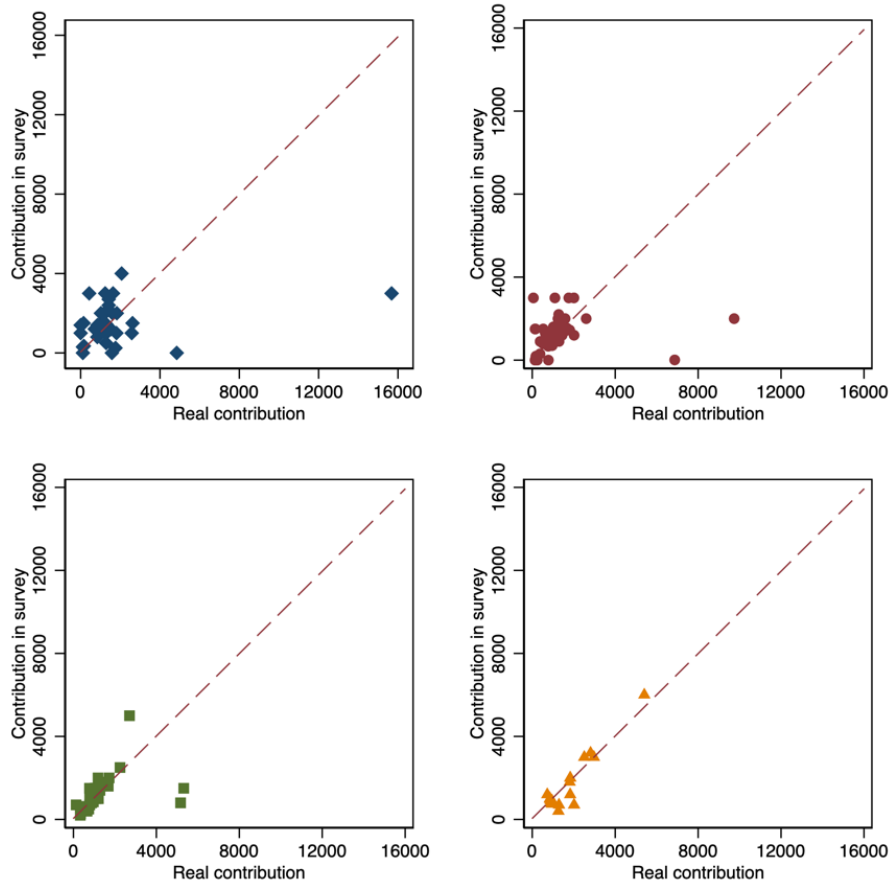
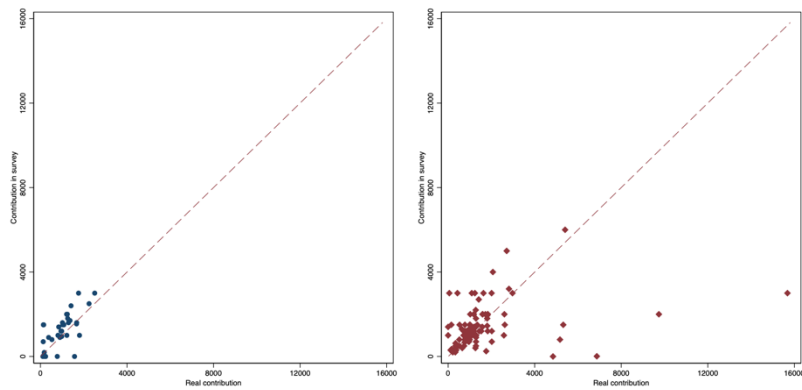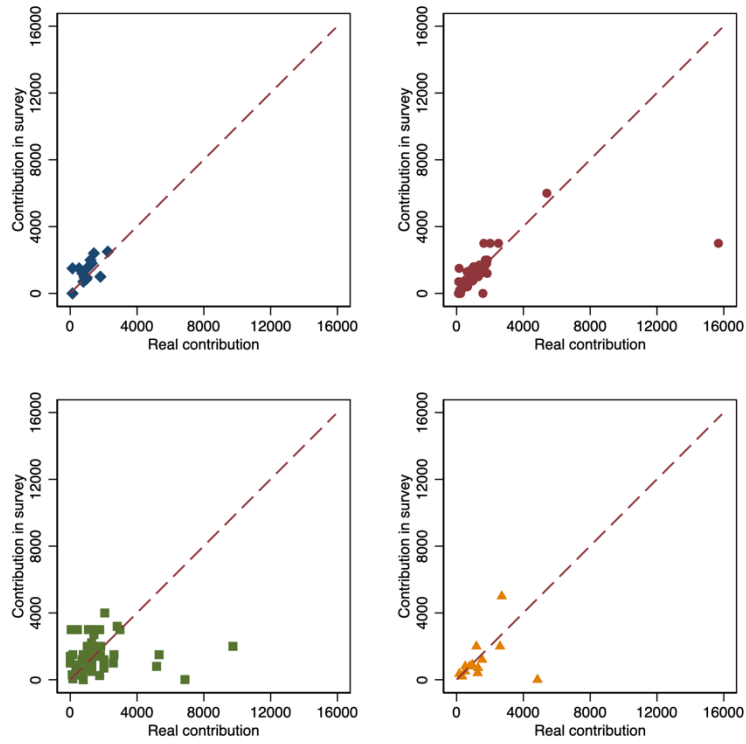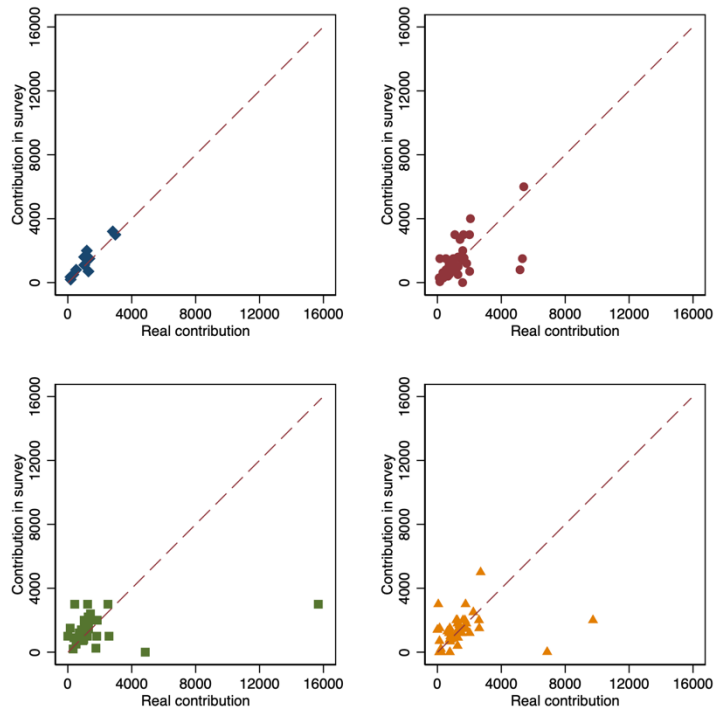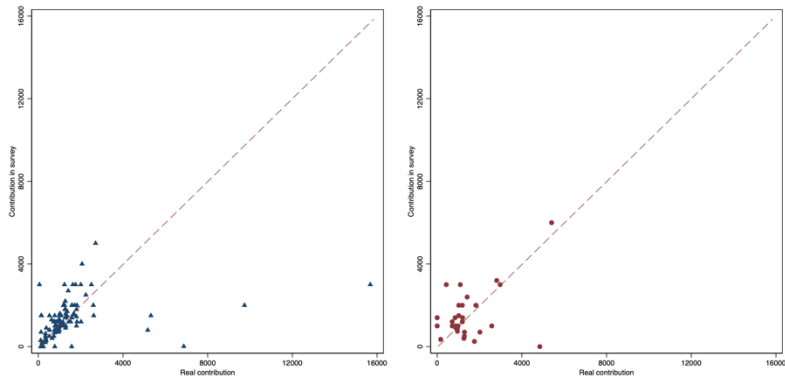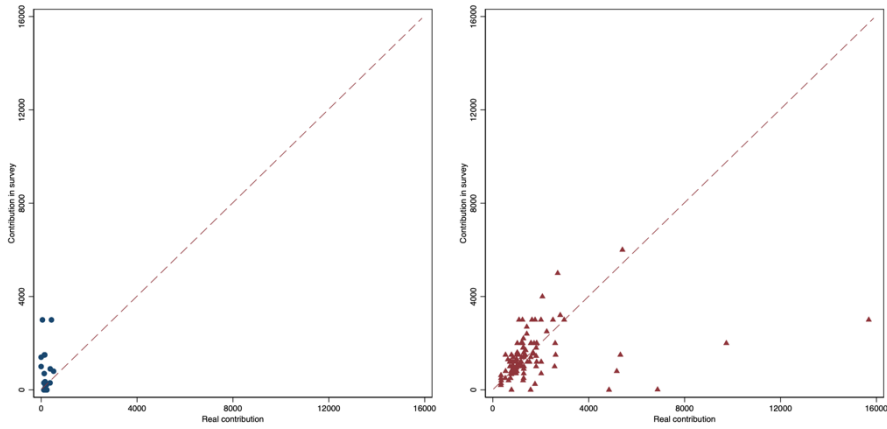FIGURE C-2: REPORTED AND ACTUAL TAX CONTRIBTION FOR YEARS IN TOWN – TB1

FIGURE C-3: REPORTED AND ACTUAL TAX CONTRIBTION FOR LOCAL LIFE – TB1

FIGURE C-4: REPORTED AND ACTUAL TAX CONTRIBTION FOR EDUCATION – TB1

FIGURE C-5: REPORTED AND ACTUAL TAX CONTRIBTION FOR EMPLOYMENT – TB1

FIGURE C-6: REPORTED AND ACTUAL TAX CONTRIBTION FOR LANDLORDS – TB1

FIGURE C-7: BIAS OF THE DIFFERENT CONTROLS – TB1

(A) AGE

(B) YEARS IN TOWN

(C) LOCAL LIFE

(D) EDUCATION

(D) EMPLOYMENT

(E) LANDLORDS
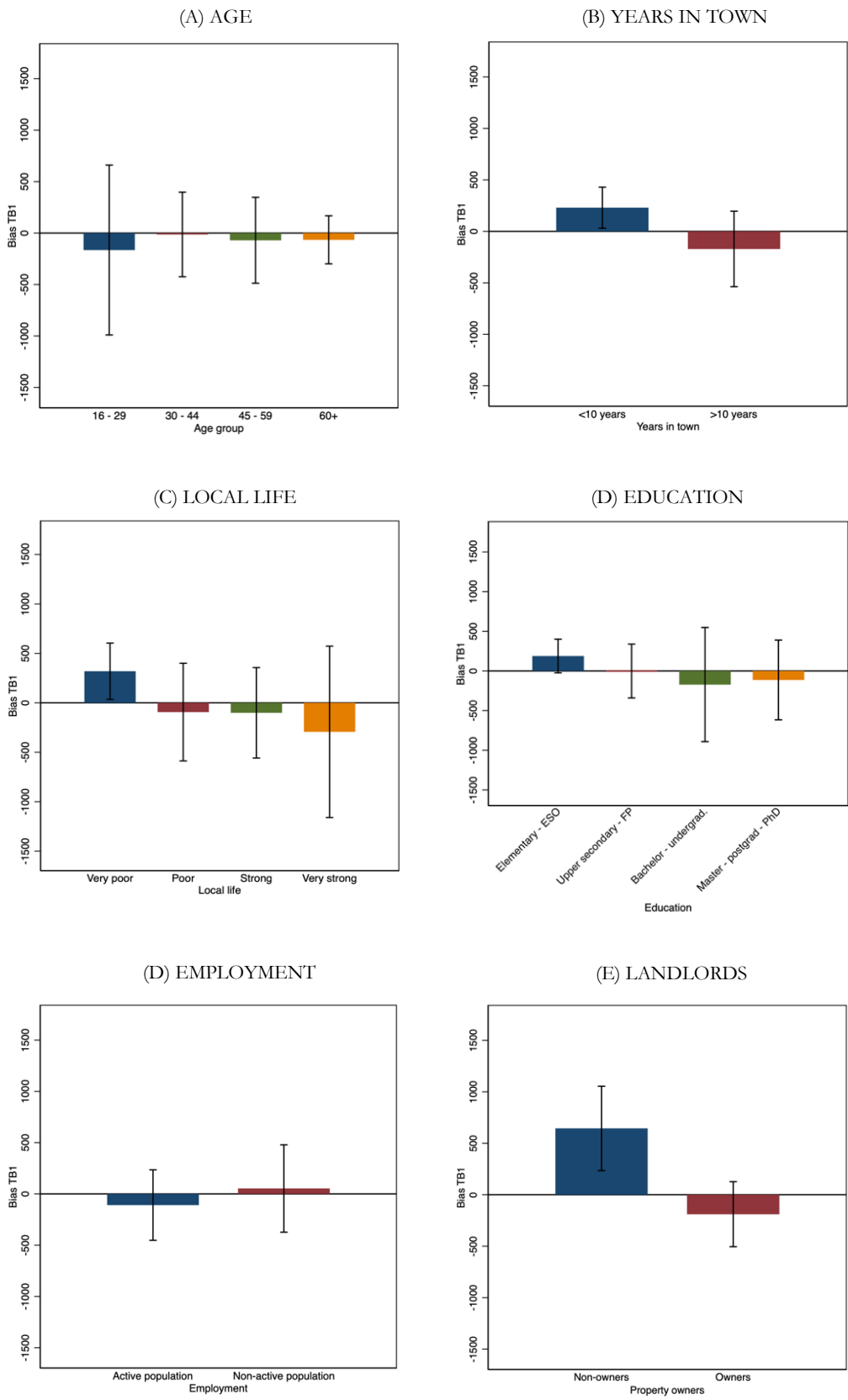
FIGURE C-8: EFFECT OF THE VIGNETTE TREATMENT
FOR GENDER AND EMPLOYMENT – TB2

(A) GENDER
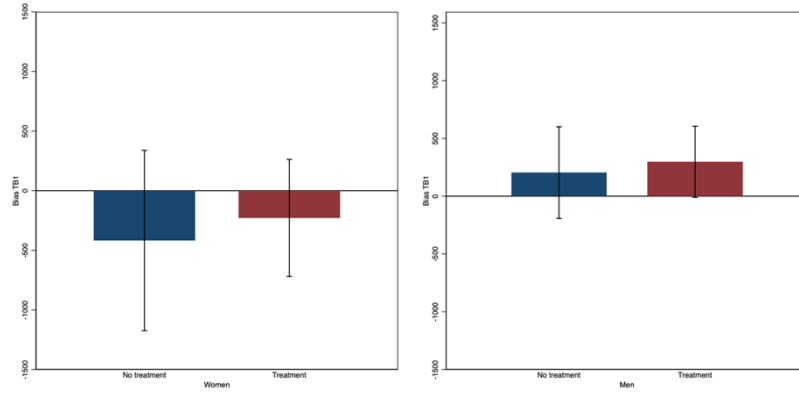
(B) EMPLOYMENT
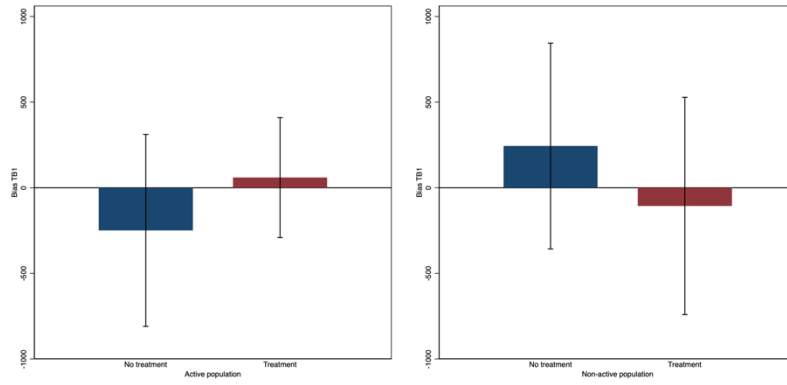
FIGURE C-9: EFFECT OF THE VIGNETTE TREATMENT FOR AGE AND EDUCATION – TB2

(C) AGE
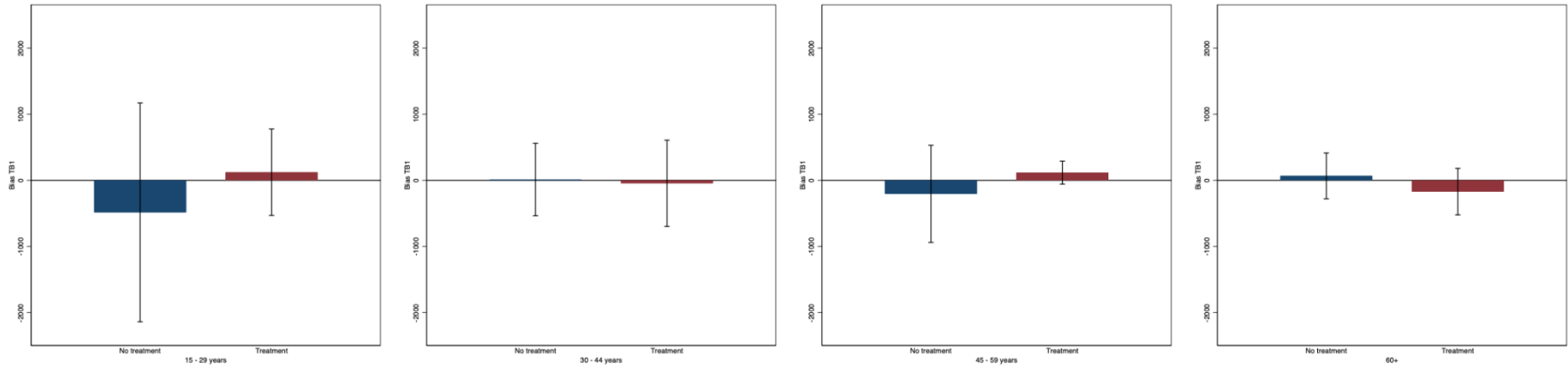
(D) EDUCATION
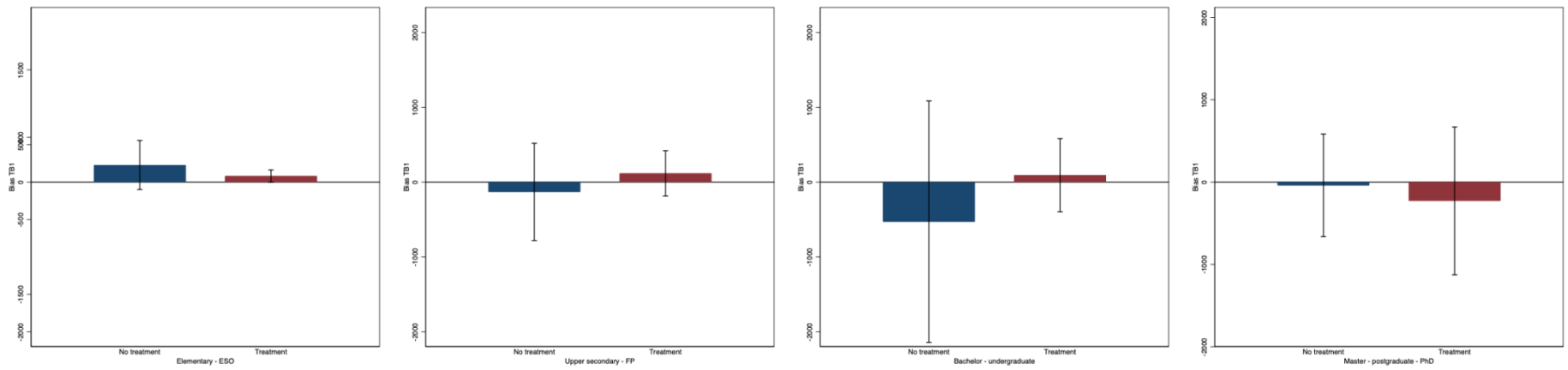
FIGURE C-10: EFFECT OF THE VIGNETTE TREATMENT – PE2
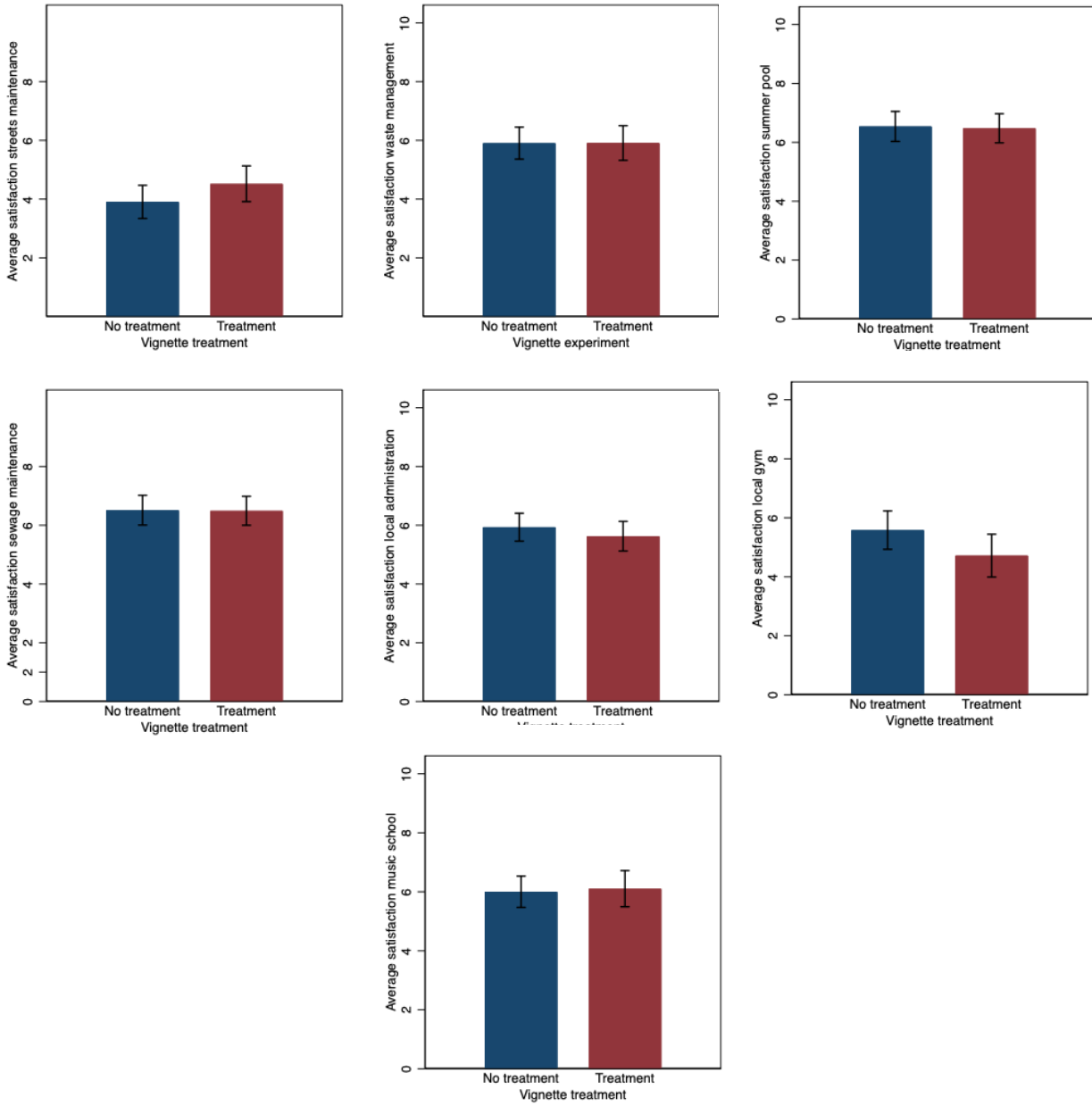
FIGURE C-11: EFFECT OF THE VIGNETTE TREATMENT ON SREETS MAINTENANCE SATISFACTION – PE2
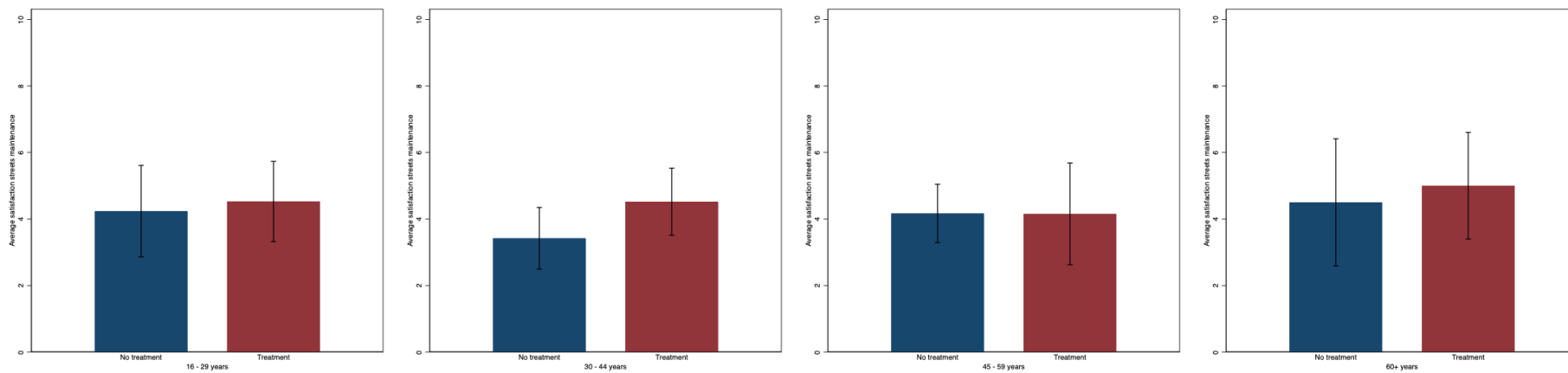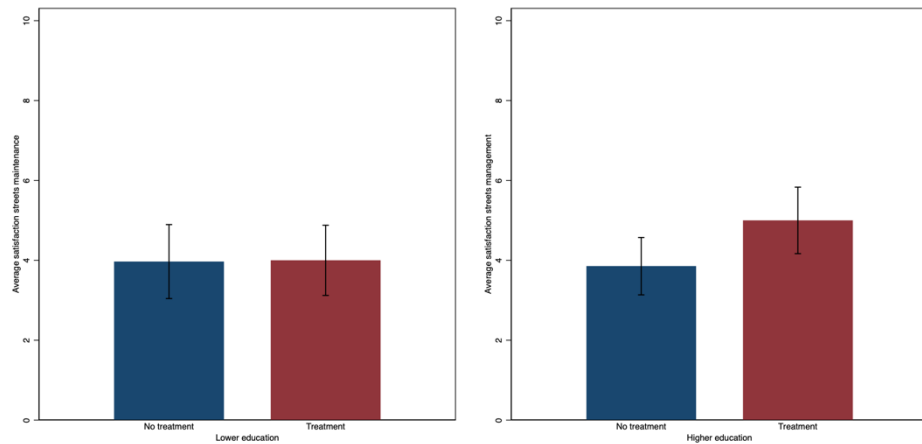
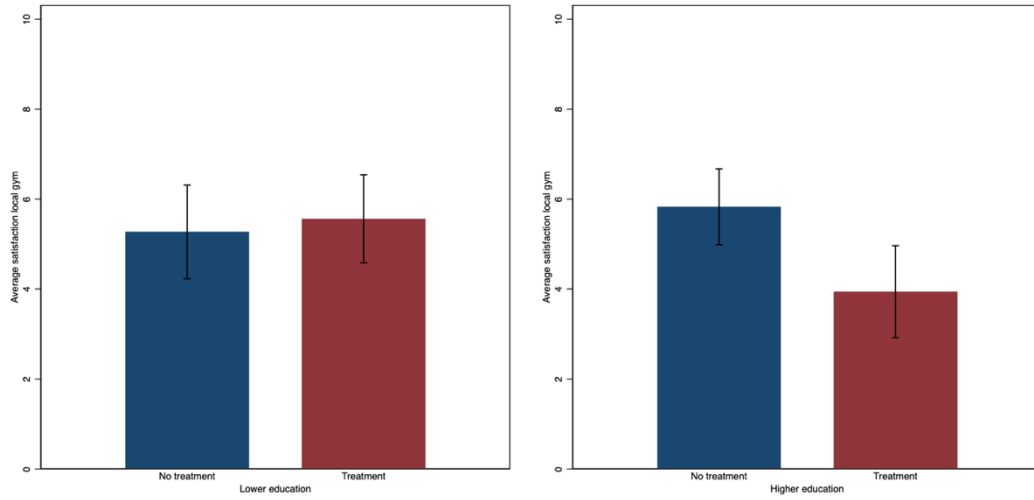(A) AGE

(B) EDUCATION
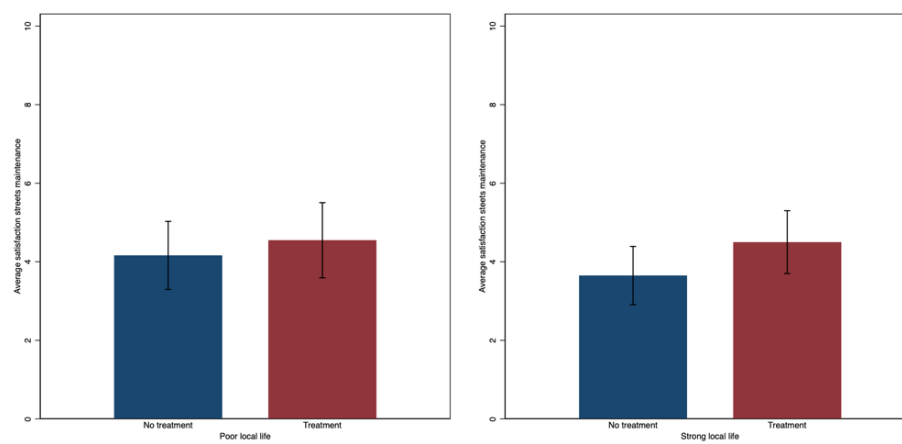
(C) LOCAL LIFE
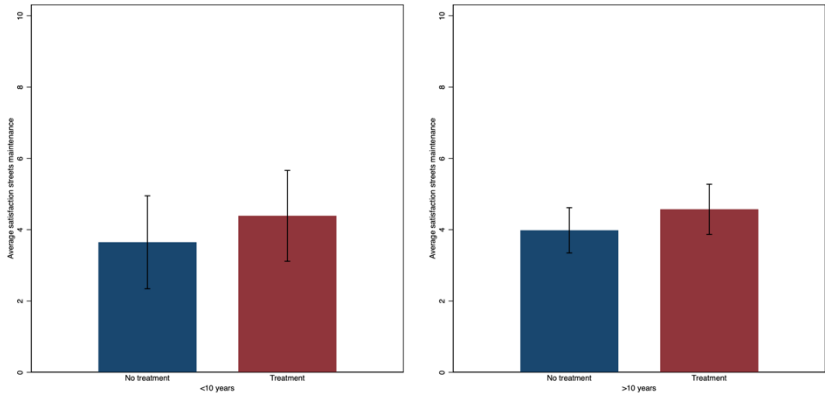
(D) YEARS IN TOWN

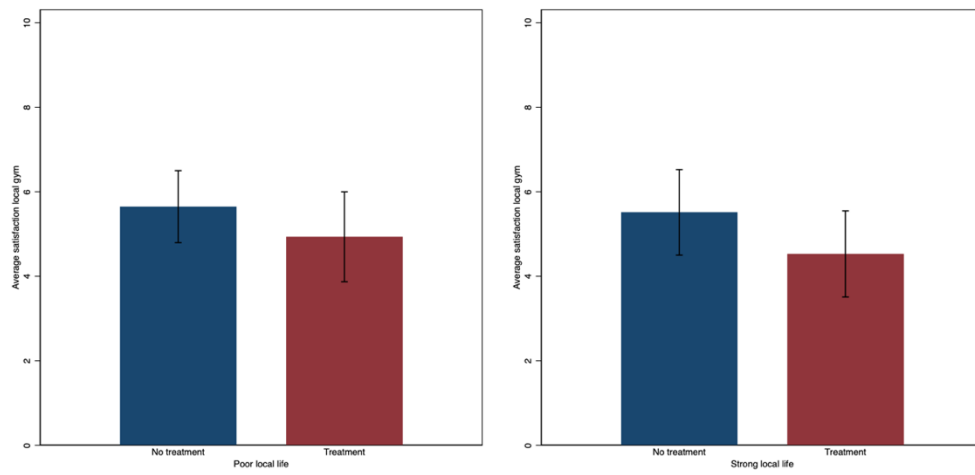FIGURE C-12: EFFECT OF THE VIGNETTE TREATMENT ON THE LOCAL GYM SATISFACTION – PE2

(A) AGE
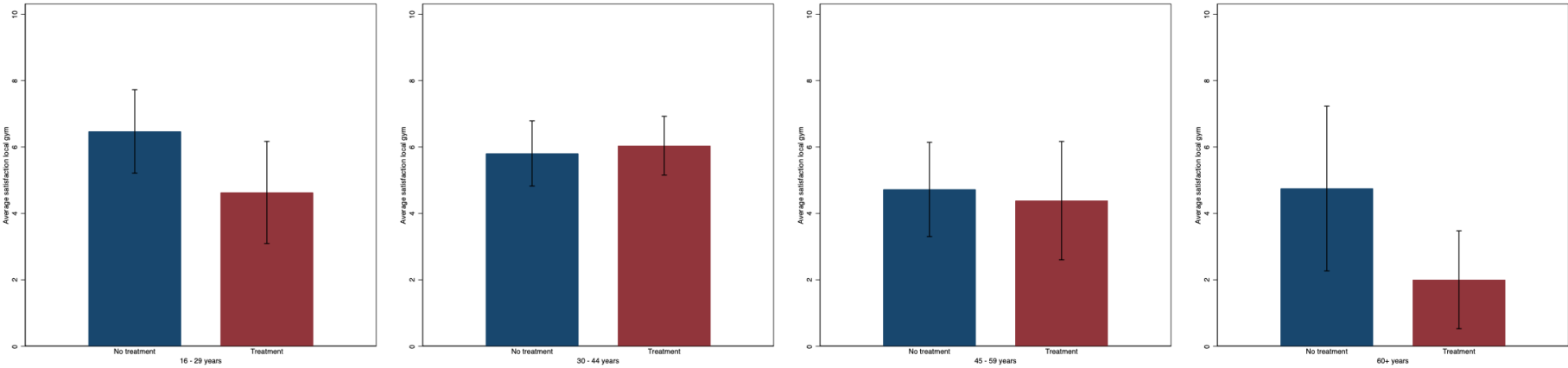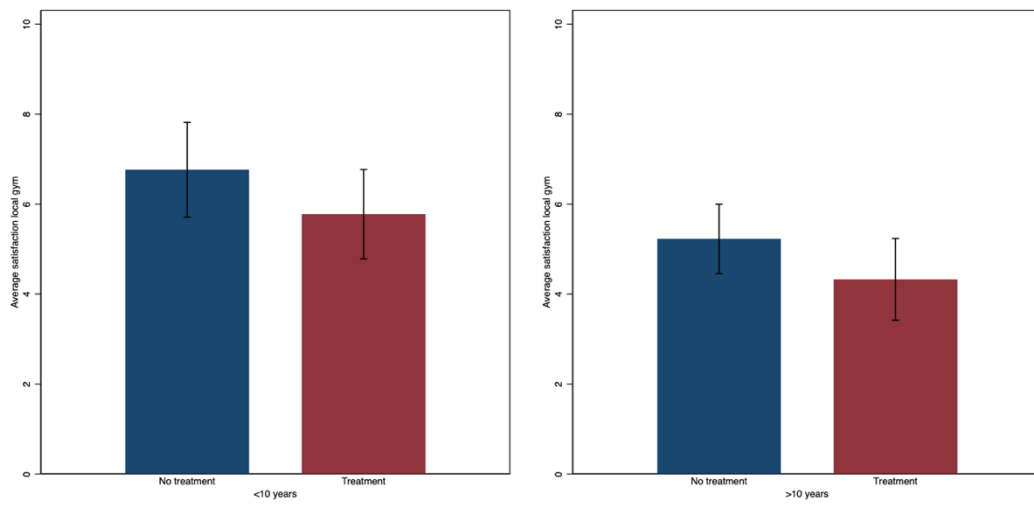
(B) EDUCATION

(C) LOCAL LIFE

(D) YEARS IN TOWN

FIGURE C-13: DONATION FIGURES FOR CONTROLS – R1