Pre-analysis Plan: Affecting public support for economic policies

Evidence from a survey experiment about rent control in Germany

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1 Introduction

This pre-analysis plan describes a follow-up survey experiment to a study registered as AEARCTR-0007596 (Dolls et al., 2021). In Dolls et al. (2021), we pre-registered a randomized survey experiment among a representative sample of 18,000 German respondents conducted in May 2021. The survey experiment was designed to answer two important questions frequently asked in the context of rent control policies: "Which aspects about rent control motivate its high support in the public?" and "Can information provision alter the support for the policy?".

Based on the above survey experiment, Dolls et al. (2022) study how people reason about regulation in the housing market. They confront participants with different aspects of the housing market in Berlin, rent control and its consequences and subsequently elicit their attitudes towards the Berlin rent cap (*Berliner Mietendeckel*).[1] By comparing the effect of five different information treatments, they

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[1]The Berlin rent cap was a drastic form of rent control enacted by the state of Berlin in February 2020. For existing rental contracts, the policy froze rents at their June 2019 level. For newly signed rental contracts, the policy stipulated upper limits for rents, which were not allowed to exceed by more than 20%. The Berlin rent cap pertained to all apartments in Berlin, with only few exceptions. Most importantly, newly constructed apartments which became ready for occupancy after January 2014 were excluded from the regulation. In 2021, the Federal Constitutional Court declared the Berlin rent cap unconstitutional, since the federal government had already made a law regulating rents and a state government could not impose its own law that infringed upon that.

infer which aspects of rent control drive respondents' support for the Berlin rent cap. Dolls et al. (2022) show that compared to the control group, respondents react most strongly to information about negative effects of the rent cap on the quantity of housing and on rents in the unregulated market segment ("Efficiency treatment" which lowers support) and to information that a rent cap can help against displacement of existing tenants ("Displacement treatment" which increases support). Another key results of Dolls et al. (2022) is that the provided information affects predominantly those respondents whose prior beliefs do not deviate too strongly from the provided information. Individuals with strong misperceptions about the policy barely change their support for the policy.

In this pre-analysis plan, we describe a new survey experiment that builds on the findings presented by Dolls et al. (2022). The new survey will be rolled out in September/October 2022. It will cover 12,000 German respondents and include the "Efficiency" and the "Displacement" treatments, the two information treatments with the strongest treatment effects in the survey experiment conducted in May 2021. In addition, the new survey experiment will include a composite treatment combining the two information treatments (cf. section 2.2). As these two treatments have shifted attitudes towards the Berlin rent cap in opposite directions in the previous survey experiment, we will be able to study the net effect of the combined treatment. Moreover, in addition to the main outcome question used in the 2021 survey to elicit attitudes towards the Berlin rent cap, the new survey will include an incentivized donation question and an open-ended question (cf. section 4.1).

2   Experimental Design

The experimental component of our research design consists of the randomized provision of information treatments. The experiment is conducted as part of an online survey in cooperation with immowelt.de, a large German online property portal.

2.1 Timeline of the Survey

The questionnaire is structured as follows. At the beginning of the survey, respondents are asked to provide socio-demographic characteristics such as age, gender, occupation and region of residence which are used for the quotas. Next, there are questions designed by immowelt.de on the housing situation of respondents and on how the coronavirus pandemic might affect their future housing preferences.

Thereafter, our part of the survey begins. In the first part of our survey, we ask for attitudinal variables that will be used for heterogeneity analyses, in particular political preferences, the frequency of economic news consumption, trust in science, and whether the state should intervene in market processes.

In the second part of our survey, respondents will be randomly allocated into one control and three treatment groups. Both respondents in the control and the treatment groups will be provided with basic information about the Berlin rent cap. Respondents in the treatment group will additionally receive an information treatment. Information treatments include two different aspects of Berlin's housing market and the Berlin rent cap, and a composite treatment combining both pieces of information (see Section 2.2 for more details). Before the information treatment, we elicit respondents' beliefs regarding the provided information and ask them how certain they are about their beliefs.

In the final part of our survey, we ask respondents whether they generally support the Berlin rent cap or not. This is the main outcome question in the 2021 survey. This survey additionally includes an incentivized donation question as well as an open-ended question eliciting respondents' views in favor of and/or against the Berlin rent cap. Furthermore, we elicit beliefs on all issues that were presented in the information treatments except the one that was already elicited (if a respondent was in one of the three treatment groups). For the respective information treatment that a given treatment group has already received in the beginning, we elicit posterior beliefs. Finally, we ask several questions to address potential experimenter demand effects.

The following enumeration provides an overview of the questionnaire structure:

1. Socio-demographic characteristics.

2. Questions designed by immowelt.de.

3. Pre-Treatment questions: attitudinal questions.

4. Basic information about the Berlin rent cap.

5. Random allocation of respondents into control and treatment groups.

6. Elicitation of prior beliefs (only respondents who are in one of the treatment groups).

7. Information Treatment (only respondents who are in one of the treatment groups).

8. Post-Treatment questions: Non-incentivized outcome question, incentivized donation question, open-ended question.

9. Elicitation of beliefs.

10. Sanity checks/attention questions.

2.2   Treatment Groups

Respondents are randomly assigned to a control and three treatment groups.[2] All respondents are informed about the Berlin rent cap in a neutral way.

Control group.   No beliefs are elicited and no additional information about Berlin's housing market, the rent cap and its effects is provided.

Treatment 1 ("Efficiency").   We first elicit respondents' beliefs about the effect of the Berlin rent cap on the supply of rental apartments and on rents not subject to the Berlin rent cap. Then we inform them that, according to scientific studies, rent control tends to reduce the supply of rental apartments, while non-regulated rents increase due to the rent control.

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[2]The below numbering of information treatments follows Dolls et al. (2021). The survey experiment conducted in May 2021 contained 5 information treatments in total.

Treatment 5 ("Displacement").   We first elicit respondents' beliefs about whether the rent cap will help to avoid displacement of low-income tenants from the city. We then inform respondents that, according to scientific studies, rent control measures such as the Berlin rent cap help to prevent displacement of low-income tenants, similar to an insurance against rising rents.

Treatment 1+5 ("Composite Treatment").   This treatment combines Treatment 1 and Treatment 5. The order of the two treatments – consisting of prior belief elicitation and information provision, respectively – will be randomized.

2.3   Sample and Sample Size

The online survey will be conducted in Germany. It will include 12,000 individuals from a representative sample of the country's population (representative with respect to gender and age), stratified by the place of residence being in an urban, suburban or rural environment. This implies that each sub-group (treatment groups and control group) will consist of roughly 3,000 individuals, respectively. The panel, the programming of the survey, the distribution of the survey and the payments are administered by the survey company Bilendi&respondi.

3   Hypotheses

This section briefly sketches our hypotheses on how the information treatments might affect respondents' opinion about the Berlin rent cap. Our treatments are expected to have both a priming effect (making people think about a certain aspect) and an information effect (correcting people's prior beliefs). Our treatment effects will depend on a) whether the presented aspect matters for respondents' views on the rent cap, b) whether the priming or the information effect is stronger and c) in which direction people's prior beliefs are corrected.

We first formulate two hypotheses that apply to all treatments and correspond to points a) and b):

Hypothesis A. The presented aspect does not matter for respondents' views on the rent cap.

We reject this hypothesis if we find a treatment effect (either on average, or depending on people's prior beliefs).

Hypothesis B. The information provided does not matter for respondents' views on the rent cap.

We reject this hypothesis if treatment effects differ according to prior beliefs.

In addition, we formulate separate hypotheses for each information treatment, conditional on prior beliefs.

Hypothesis Treatment 1. Informing respondents that rent control policies like the Berlin rent cap reduce the supply of rental apartments and increase unregulated rents

   a) lowers agreement with the Berlin rent cap for respondents who were wrong about both of these effects.

   b) lowers agreement with the Berlin rent cap for respondents who were wrong about one of the two (but the effect is potentially smaller than in case a).

   c) does not affect agreement for respondents whose beliefs are correct.

Hypothesis Treatment 5. Informing respondents that rent control policies like the Berlin rent cap can help avoid displacement of low-income tenants

   a) increases agreement with the rent cap for respondents who think the rent cap cannot help avoid displacement of low-income tenants.

   b) does not affect agreement for respondents who are correct.

Hypothesis Treatment 1+5. Informing respondents that rent control policies like the Berlin rent cap reduce the supply of rental apartments and increase unregulated rents, and that the rent cap can help avoid displacement of low-income tenants can increase or decrease support for the Berlin rent cap, depending on prior beliefs and the importance respondents assign to the efficiency and displacement effects.

4   Empirical Analysis

4.1   Variables

4.1.1   Outcome questions

We will study to what extent the information treatments affect respondents' support of the Berlin rent cap (non-incentivized outcome question) and whether the information treatments affect respondents' willingness to donate to a civil-society initiative campaigning for a nationwide limiting of rent increases (incentivized donation question).

Non-incentivized outcome question. Respondents' assessment of the Berlin rent cap is elicited on a 0-10 scale, ranging from very negative to very positive.

Incentivized donation question. Respondents are told that they have a chance of winning 50 EUR after they complete the survey. They are then asked to decide how much of the 50 EUR they would keep for themselves and how much they would donate to the *Kampagne Mietenstopp*[3], a civil society, non-partisan alliance working for a nationwide rent freeze. Respondents don't know the odds to win as they are not informed about the total number of respondents participating in the survey experiment.

In addition, we ask respondents about their views – in favor and and against – the Berlin rent cap in an open-ended question.

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[3]`https://mietenstopp.de/`

4.1.2 Covariates

We elicit respondents' prior beliefs about the information provided in each information treatment. This will allow us to classify respondents into different groups, depending on whether their beliefs have been shifted upwards or downwards by the information treatment they have received. In addition, we elicit respondents' posterior beliefs about the provided information, at the very end of the survey. This will enable us to test how well our information treatments have worked in shifting/focusing respondents' beliefs. We also elicit respondents' beliefs about each of the information provided in each treatment at the end of the survey. Furthermore, we elicit in which region respondents live, education, age, gender, marital status, household income, household size, frequency of economic news consumption, further socio-demographic characteristics (in particular whether they rent or own the apartment they currently live in; since when they live in their current apartment; the share of income they spend on housing; whether they consider their housing expenditure as a financial burden), and a set of attitudinal questions (in particular political orientation, views on the role of the government in intervening in market processes, trust in science). We may merge additional county-level data to obtain an even wider set of covariates at the county level.

4.2 Specifications and Analysis

We aim to test our hypotheses by treatment effects according to prior beliefs. In addition, we also estimate the average treatment effect (ATE) for each treatment. We state no explicit hypotheses with respect to the ATE, as the ATE directly follows from our hypotheses with respect to prior beliefs.

To examine average treatment effects, we estimate the following regression:

$$Y_i = \alpha + \beta T_i + \gamma X_i + \varepsilon_i \tag{1}$$

where Y_i depicts our incentivized and non-incentivized outcome questions, T_i is a treatment dummy and X_i is a vector of individual (and regional) controls. In this

regression, β provides an estimate of the ATE.

To test for treatment effects with respect to prior beliefs we estimate an extended model:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 M_i + \beta_3 T_i \times M_i + \beta_4 X_i + \varepsilon_i \tag{2}$$

where M_i measures respondents' misperceptions. In this regression, β_3 provides an estimate of the treatment effect with respect to prior beliefs.

Heterogeneity   Apart from analyzing heterogeneity with respect to prior beliefs, we will study heterogeneity in treatment effects based on the background information on our respondents collected in the survey. Specifically, we will test whether there are differences between (1) renters/owners (2) landlords/no landlords (3) East/West Germany (4) urban/suburban/rural (5) living in Berlin/not living in Berlin. Furthermore, we will investigate if treatment effects differ by gender, age, income, education, political orientation, trust in science, the consumption of news on economic affairs, and preferences regarding the role of the government in the economy.

Obfuscated follow-up survey   We will elicit posterior beliefs, analyze the persistence of treatment effects w.r.t. our non-incentivized outcome question, and study potential spill-over effects of our information treatments on attitudes towards and beliefs about the effects of government interventions in markets other than the housing market in an obfuscated follow-up survey 2-4 weeks after the main survey.

References

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