

Pre-analysis Plan: What determines public support for rent control?

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1 Introduction

Individuals hold strongly diverging views where and to what extent the government should intervene in the economy. In many countries, one area of the economy in which the government is particularly active is the housing market (Gyourko and Molloy, 2015). A common regulatory tool aimed at ensuring affordable housing is rent control. Supporters of rent control argue that it acts as an insurance against unaffordable housing and displacement. However, economic research has shown that rent control can adversely affect the quantity and quality of housing if landlords respond by selling apartments to owner-occupiers or refrain from required maintenance. Furthermore, it may lead to misallocation and overconsumption of housing (Glaeser and Luttmer, 2003; Autor et al., 2014; Diamond et al., 2019).

In Germany, the state of Berlin introduced a new and drastic form of rent control in February 2020, the so-called ‘Berlin rent cap’ (‘Berliner Mietendeckel’). The Berlin rent cap froze rents at their June 2019 level. The law stipulated upper limits for rents from newly signed rental contracts. If existing rental contracts exceeded the upper limit by more than 20%, the rent had to be reduced to the upper limit.¹ The Berlin rent cap pertained to all apartments in Berlin with only few exceptions. Most

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¹The upper limit was based on the rent index from 2013 which itself reflects the evolution of rents from 2008–2012. It further depended on the residential area (poor, middle, high), the year of construction and the equipment of the apartment. There were limits to rent increases after modernization (1 EUR per square meter).

importantly, newly constructed apartments which became ready for occupancy after January 2014 were excluded from the Berlin rent cap. The rent cap was initially introduced for a period of 5 years. On April 15 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, and thus rendered the Berlin rent cap null and void.

The rent cap constituted a particularly restrictive form of rent control. In line with what one would have expected from prior literature, first empirical evidence suggests that it might have lead to a two-tier rental market in Berlin (Hahn et al., 2020; Dolls et al., 2021). Based on rental offers advertised by immowelt.de, a large German online property portal, Dolls et al. (2021) show that one year after the introduction of the Berlin rent cap, the number of rental offers of regulated apartments had dropped, while no such effect was observed for unregulated apartments. As intended by the law, rents of regulated apartments had plummeted significantly. At the same time, rents of unregulated apartments had continued their upward trend and even risen faster than in other major German cities.

According to a representative opinion poll from Infratest dimap conducted in the month the law became effective, there was large majority support for the Berlin rent cap among voters in Germany. 71% of respondents were in favor of the rent cap. Support among tenants was even higher and amounted to 81%.² In this research project, we want to ask a simple question: Why is support for rent control so high? By means of a randomized survey experiment among a representative sample of 18,000 eligible voters in Germany, we aim at getting a better understanding of how people reason about regulation in the housing market. In the survey experiment, we will 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. By comparing the effect of various information treatments, we will be able to infer which aspects of rent control drive respondents' support for the Berlin

²Cf. <https://www.tagesschau.de/inland/deutschlandtrend-2085.html>.

rent cap.

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, 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 five 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 various aspects of Berlin's housing market and the Berlin rent cap (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 our main outcome question. We ask some additional questions which are meant to shed light on the underlying motives. In addition, we elicit beliefs on all the issues that were presented in the information

treatments except the one that was already elicited (if a respondent was in one of the five treatment groups). For the respective information treatment that a given treatment group has already received in the beginning, we elicit how well respondents are able to recall the information we provided earlier. 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: Main Outcome question and additional questions aimed at shedding light on the underlying mechanisms.
9. Elicitation of beliefs.
10. Sanity checks/attention questions.

2.2 Treatment Groups

Respondents are randomly assigned to a control and five treatment groups. 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.

Treatment 2 (“Distribution”). We first ask respondents which group, landlords or renters, they believe has a higher income on average. Next, we elicit respondents’ beliefs by how much the average income of renters (landlords) is higher (in percent) compared to landlords (renters). Then we inform them that landlords earn on average 54% more than renters.

Treatment 3 (“Landlords”). We first tell respondents that there are different types of landlords in Berlin (professional commercial, private individuals, public authorities, housing cooperatives) and then elicit their beliefs as to which of those constitutes the largest group in Berlin, and what percentage of rental flats they own. Then we inform them that professional landlords are the largest group and that they make up 29% of all landlords in Berlin.

Treatment 4 (“Affordable Housing”). We first elicit respondents’ beliefs about how the income share spent on housing has developed for tenants in Berlin from 2006-2018. We then inform respondents that the income share spent on housing has been largely unchanged during this period.

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 rent cap help to prevent displacement of low-income tenants, similar to an insurance against rising rents.

2.3 Sample and Sample Size

The online survey will be conducted in Germany. We aim at targeting 18,000 individuals from a representative sample of the country's population (representative with respect to gender, age and occupational status), 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 INNOFACT AG.

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 1. Informing respondents that rent control reduces the supply of rental apartments and increases 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 2a. Informing respondents about the incomes of renters compared to landlords

- a) increases agreement with the Berlin rent cap for respondents who think renters earn more than landlords.
- b) increases agreement with the Berlin rent cap for respondents who think renters and landlords earn the same (but the effect is potentially smaller than in case a).

Hypothesis 2b. For respondents who think landlords earn more, informing respondents about the incomes of landlords compared to renters

- a) lowers agreement with the Berlin rent cap for respondents who overestimate landlords' incomes compared to renters.
- b) increases agreement with the Berlin rent cap for respondents who underestimate landlords' incomes compared to renters.
- c) does not affect agreement for respondents who are approximately correct.

Hypothesis 3a. Informing respondents that professional landlords are the largest group among the landlords in Berlin

- a) increases agreement with the Berlin rent cap for respondents who think that professional landlords are not the largest group among landlords in Berlin.
- b) does not affect agreement for respondents who are correct.

Hypothesis 3b. For respondents who think professional landlords are the largest group, informing respondents about the percentage of professional landlords among landlords in Berlin

- a) lowers agreement with the Berlin rent cap for respondents who overestimate this percentage.
- b) increases agreement with the Berlin rent cap for respondents who underestimate this percentage.
- c) does not affect agreement for respondents who are approximately correct.

Hypothesis 4. Informing respondents that the income share spent on housing has not increased in the past for tenants in Berlin

- a) lowers agreement with the rent cap for respondents who think the income share spent on housing has increased.
- b) increases agreement with the rent cap for respondents who think the income share spent on housing has declined.
- c) does not affect agreement for respondents who are correct.

Hypothesis 5. Informing respondents that the 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.

4 Empirical Analysis

4.1 Variables

Main outcome variable We will study to what extent the information treatments affect respondents' support of the Berlin rent cap. Our key outcome variable is the overall assessment of the Berlin rent cap. This variable is elicited on a 0-10 scale, ranging from very negative to very positive.

Additional outcome variables On top of that, we also ask respondents to evaluate certain aspects of the Berlin rent cap. We will only use these additional outcome questions to investigate underlying mechanisms that explain respondents' assessment of the rent cap. More precisely, we ask respondents

- whether the federal government should introduce a policy like the rent cap in German cities with tight housing markets.
- how they think a rent cap would affect themselves if it were introduced in their hometown. In addition, we ask respondents in suburban and rural areas how they think they would be affected if a measure like the Berlin rent cap would be introduced in the nearest large city.
- about their assessment of a policy like the rent cap for
 - landlords.
 - current renters.
 - renters who will be looking for a flat in the future.
 - homeowners.
- whether they perceive the rent cap policy to be fair.
- which policies they consider as adequate to ensure affordable housing.
 - more social housing.
 - rent control (such as the Berlin rent cap).

- faster approval procedures for new construction and redensification.
- real estate purchase subsidies.

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). 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 measures the respondents' views about the Berlin rent cap, 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:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 M_i + \beta_3 T_i \times M_i + \beta_4 X_i + \varepsilon_i \quad (2)$$

where Y_i measures the respondents' views about the Berlin rent cap, T_i is a treatment dummy, M_i measures respondents' misperceptions and X_i is a vector of individual (and regional) controls. 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, the consumption of news on economic affairs, and preferences regarding the role of the government in the economy.

References

- Autor, D. H., Palmer, C. J., and Pathak, P. A. (2014). Housing market spillovers: Evidence from the end of rent control in cambridge, massachusetts. *Journal of Political Economy*, 122(3):661–717.
- Diamond, R., McQuade, T., and Qian, F. (2019). The effects of rent control expansion on tenants, landlords, and inequality: Evidence from san francisco. *American Economic Review*, 109(9):3365–94.

- Dolls, M., Fuest, C., Neumeier, F., and Stoehlker, D. (2021). Ein Jahr Mietendeckel – Wie hat sich der Berliner Immobilienmarkt entwickelt? ifo Schnelldienst 3 2021.
- Glaeser, E. L. and Luttmer, E. F. (2003). The misallocation of housing under rent control. *American Economic Review*, 93(4):1027–1046.
- Gyourko, J. and Molloy, R. (2015). Regulation and housing supply. In *Handbook of regional and urban economics*, volume 5, pages 1289–1337. Elsevier.
- Hahn, A., Kholodilin, K., and Walzl, S. (2020). Forward to the Past: Short-term effects of the rent freeze in Berlin. Vienna University of Economics and Business, Department of Economics Working Paper No. 308.