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HOMEOWNERSHIP AND ATTENTION TO INFLATION: EVIDENCE FROM INFORMATION TREATMENTS

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Homeownership and Attention to Inflation: Evidence from Information Treatments*

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Abstract

This paper examines how homeownership status shapes attention to inflation and its impact on durable consumption. Using randomized controlled trials on U.S. households (2021–2023), we document systematic heterogeneity in responses to inflation-related information. Homeowners exhibit greater baseline awareness and update their expectations less than renters. Exploiting exogenous variation in inflation expectations induced by the treatments, we find that homeowners adjust durable spending significantly, whereas renters do not. These results highlight homeownership as a key factor in the formation of inflation expectations and their influence on economic behavior.

Keywords: Homeownership, mortgages, inflation expectations, durable consumption.

JEL codes: D12 D84 E21 E31 R21 C93

1 Introduction

"Nowadays people can be divided into three classes: the haves, the have-nots, and the have-not-paid-for-what-they haves."
— Earl Wilson

"The question is whose inflation expectations matter... When I was a policy maker, I used to group respondents as high and low attention participants."
— Ben Bernanke

Understanding how households form and act upon inflation expectations - and why these beliefs differ across groups - has become a central question in macroeconomics. Indeed, it is crucial for designing macroeconomic policies that accurately reflect the role of inflation expectations at both the micro level (household choices) and the macro level (aggregate demand and policy transmission), while accounting for and responding to the distributive effects of inflation. And yet much remains unknown about how incentives to collect and process information interact with consumer choices for various population groups. For example, housing, the most important asset and liability for most households, plays a key role in determining savings, borrowing, and investment decisions (Chetty et al. (2017), Cocco (2005), Kaplan et al. (2020)) but whether and how homeownership influences the formation of inflation expectations remains largely unexplored. Does homeownership influence attention to inflation? Do homeowners, mortgagors, and renters respond differently to news about inflation, and how do these differences translate into spending behavior?

To answer these questions, we design and implement a series of randomized controlled trials (RCTs) embedded in surveys of U.S. households conducted between 2021 and 2023. In these experiments, participants are randomly assigned to receive information treatments about recent inflation rates, the Federal Reserve's inflation target, and the Federal Open Market Committee's (FOMC) inflation forecasts. The RCTs serve two key purposes. First, they allow us to study whether households revise their inflation expectations in response to new

information, shedding light on the degree of attention different groups devote to inflation. Second, we use exogenous variation in beliefs due to RCTs to credibly estimate the causal effect of inflation expectations on households' spending decisions.

A priori, it is not clear which group should exhibit higher attention to inflation. The literature presents contrasting mechanisms that may either amplify or attenuate inflation sensitivity across homeownership groups, reflecting differences in economic incentives, wealth dynamics, and informational constraints. Homeowners without mortgages may display greater attention to inflation due to the positive wealth effects associated with rising housing prices. If housing prices are seen as increasing with inflation while other prices lag (a form of money illusion (Fehr and Tyran (2001))), inflation may appear beneficial to these households. Homeownership provides protection against rent risk (Sinai and Souleles (2005)) and is widely viewed as a hedge against inflation (Han (2010), Han (2013)), with recent evidence showing that past inflation experiences encourage property ownership as a wealth-preservation strategy (Malmendier and Wellsjo (2024)). Additionally, this group appears more responsive to inflation-related sentiment (Li and Sinha (2023)). However, increased property values do not translate into immediate cash inflows for the household, and the absence of mortgage debt implies that these households do not benefit from debt erosion effects, potentially reducing the immediacy of inflation as a financial concern. Conversely, homeowners with mortgages have direct exposure to debt erosion benefit, as inflation reduces the real burden of outstanding liabilities. This mechanism provides a clear incentive to monitor inflationary trends. Yet, recent findings highlight a limited understanding of debt erosion among households (Schnorpfeil et al. (2023)), which may temper their responsiveness to inflation. For renters, inflation primarily operates through rent increases, which may heighten their sensitivity to price dynamics, particularly among prospective homebuyers. Renters may also monitor housing markets as part of their transition to ownership. For example, Chopra et al. (2023) show that the consumption of renters planning to buy a home is significantly more sensitive to home price expectations than that of homeowners. Nonetheless, their attention to current ag-

gregate inflation may be dampened by the relatively low short-term pass-through of aggregate CPI to rent-specific inflation, and by contractual rigidities that constrain rent adjustments.

Our RCT strategy provides a unique opportunity to shed light on these dynamics, offering empirical evidence on which groups are more attentive to inflation and how this attention translates into economic behavior. The degree to which individuals update their expectations in response to information treatments provides insights into their prior knowledge and learning processes regarding inflation. In particular, stronger revisions of beliefs suggest that the information is perceived as novel, reflecting prior inattentiveness, while weaker revisions indicate that expectations were already well-informed (Weber et al. (2025)). Our results reveal systematic differences across homeownership groups. Homeowners exhibit muted responses to the information treatments, implying that their prior expectations already incorporated much of the provided information. In contrast, renters display significantly larger revisions, particularly in response to forward-looking treatments such as the Fed's inflation target and the FOMC's forecasts. These findings suggest that renters were less informed about inflation dynamics prior to the intervention and, therefore, more reactive to new information.

We leverage the exogenous variation in inflation expectations induced by these treatments to estimate their causal effect on household spending decisions. The results document heterogeneity in consumption responses across homeownership groups. For homeowners, higher inflation expectations increase the probability of having purchased a durable good in the four months following the treatments. The magnitude of these effects is economically significant: one percentage point increase in inflation expectations raises the probability of durable purchases by 1.5 percentage points among homeowners, with the largest effects observed for big-ticket items such as cars and electronics. At the same time, the response of durable consumption for renters remains muted.

Our paper contributes to the extensive literature examining the relationship between inflation expectations and household spending behavior, including perceptions of whether it is a good time to purchase durable goods (e.g., R. Bach-

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mann et al. (2015); Crump et al. (2022); D'Acunto et al. (2016); Burke and Ozdagli (2023); Dräger and Nghiem (2021)). To address the challenge of endogeneity in inflation expectations, we adopt the increasingly popular approach of using randomized controlled trials (RCTs) to identify the causal effects of inflation expectations on spending decisions (e.g., Armantier et al. (2016); Cavallo et al. (2017); Armona et al. (2019); Roth and Wohlfart (2020); Binder and Rodrigue (2018); Coibion et al. (2023)). This recent strand of research demonstrates that even simple information treatments based on publicly available data can generate meaningful changes in inflation expectations, providing a source of exogenous variation to estimate causal effects on household behavior. Our work builds closely on Coibion et al. (2022), who use the same dataset employed in this paper to measure the impact of inflation and monetary policy information on inflation expectations and household spending. They find that higher inflation expectations induced by information treatments increase non-durable spending over the following six months, consistent with an intertemporal substitution motive, but lead to a decline in durable purchases. Using the same dataset, Candia (2024) leverages multiple RCTs conducted during periods of low and high inflation to show that the relationship between inflation expectations and durable consumption depends on the inflation environment. These prior studies (Candia (2024); Coibion et al. (2022)) estimate the effects of inflation expectations on consumption using the full sample of households participating to the Nielsen Homescan Panel, thus identifying average effects. However, these estimates may obscure substantial heterogeneity across groups. Our main contribution is to identify heterogeneity along the housing dimension. We show that the observed relationship between inflation expectations and consumption is primarily driven by homeowners, particularly those without mortgages, while renters exhibit limited responsiveness. In other words, it is homeowners who drive the average spending effects reported in prior studies. More broadly, we establish homeownership as a key channel of heterogeneity in how inflation expectations respond to news and influence consumption choices.

While several studies highlight how demographic characteristics influence inflation expectations (e.g., Bruine de Bruin et al. (2010)), focusing on gen-

der (D'Acunto et al. (2020); Reiche (2023)), political views (O. Bachmann et al. (2021)), cognitive abilities (D'acunto et al. (2023)), and borrower/saver status (Masolo and Monti (2024)), fewer have examined how these characteristics shape the *processing* of information to form expectations. We contribute to this literature by focusing on one of the most important factors defining household portfolios — homeownership and its associated debt, documenting differences in the way these groups react to information. Our findings build on Minima et al. (2024), who, in a non-RCT setting, compare inflation expectations of Dutch households across groups with and without information about past inflation. They find that renters have higher baseline expectations and respond more strongly to additional information than homeowners. By leveraging an RCT framework, we move beyond cross-group comparisons to measure within-individual changes, establishing a causal link between information exposure and expectation formation. This allows us to quantify differences in how homeowners and renters allocate attention to and process new information. Our findings also relate to studies exploring how updates in expectations reflect household attention to inflation (e.g., Candia (2024); Weber et al. (2025)). We show that attention to inflation — and the subsequent behavioral responses — systematically vary by housing status, with homeowners displaying significantly higher awareness about inflation than mortgagors and renters, offering insights about households' incentives to monitor inflation depending from their housing and debt situation.

These results indicate that inflation — a macroeconomic phenomenon — has uneven microeconomic consequences, both in terms of who notices it and who reacts to it. Our results are complementary to the emerging literature on inflation inequality (Hobijn and Lagakos (2005), Kaplan and Schulhofer-Wohl (2017), Argente and Lee (2021), Jaravel (2021)). We emphasize a different but related channel through which inflation can have heterogeneous effects — namely, differences in awareness and responsiveness. Households without real assets, such as renters, who tend to rank lower in the wealth distribution, appear less informed about inflation and slower to react when they become aware of it. In contrast, wealthier households, particularly homeowners, demonstrate greater base-

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line awareness and readiness to adjust their durable spending plans in response to inflation shocks. Such heterogeneity carries implications for inequality and policy design, as inattentive households, who tend to be at the lower end of the wealth spectrum, may face greater exposure to inflation's redistributive effects. These patterns underscore the need for policies that account for differences in inflation sensitivity and target vulnerable groups more effectively.

Our work also contributes to the broader literature on central bank communication and its influence on household expectations (for a review, see Blinder et al. (2024)). While much of this literature focuses on households in general, a smaller but growing body of research examines sources of individual heterogeneity in the *interpretation* and and responses to policy communication. Focusing in particular on housing status, Claus and Nguyen (2020) show that homeownership significantly shapes how households perceive macroeconomic shocks. Specifically, the same monetary policy shock leads to different expectations about household finances and durable consumption, depending on whether individuals are homeowners, mortgagors, or renters. Similarly, Ahn et al. (2024) find that households exhibit heterogeneous attention to changes in interest rates and forward guidance, resulting in differences in expectations about inflation, labor markets, and borrowing costs. Notably, homeowners with mortgages form the most accurate expectations about mortgage rates, followed by homeowners without debt, while renters lag behind in their understanding of interest rate dynamics. We extend this literature by shifting the focus from monetary policy and interest rates to inflation. In doing so, we provide new evidence on how central bank communication of inflation-related information interacts with household characteristics to influence expectations and consumption behavior. These results highlight the importance of tailoring monetary policy messaging to account for differences in baseline knowledge and attention across demographic and financial groups.

For macroeconomic modeling, our results suggest that incorporating heterogeneous agents — differentiated by homeownership and debt exposure to capture variations in inflation awareness and responsiveness — can enhance our understanding of consumption dynamics in response to inflation. Models that as-

sume uniform attention to inflation across households risk overstating the aggregate role of expectations and overlooking critical distributional channels through which inflation affects the economy.

Our paper is structured as follows. Section 2 describes the survey. Section 3 analyzes the effects of the random provision of information on inflation expectations for the three homeownership groups. Section 4 compares the effects of the exogenous variation of inflation expectations on durable consumption for homeowners, mortgagors, and renters, and discusses the possible channels underlying our results. Section 5 concludes.

2   Data and survey design

2.1   The Nielsen Homescan Panel

The data used for this analysis come from the Nielsen Homescan Panel, a quarterly survey collecting household perceptions and expectations regarding economic variables. Respondents in the Nielsen Homescan Panel are drawn from the larger Kilts-Nielsen Consumer Panel (KNCP), managed by AC Nielsen. The KNCP includes approximately 80,000 U.S. households who report demographic details and consumption behaviors. These households provide information such as household size, income, ZIP code, marital status, and dynamic purchasing data (e.g., products bought, outlets used, and prices paid). To ensure representativeness, Nielsen balances the panel across nine demographic dimensions: household size, income, age and education of household heads, presence of children, race/ethnicity, and occupation. Sample characteristics are monitored weekly, with adjustments made as needed. Recruitment occurs online, and participation is incentivized through monthly prize draws, points for data submission, and access to a Nielsen-specific gift catalog. The panel has an annual retention rate of over 80%.

Our data consist of 20 waves administered between April 2018 and December

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2023. Building on established consumer surveys such as the Michigan Survey of Consumers and the New York Federal Reserve's Survey of Consumer Expectations, the design includes custom questions on employment status, financial constraints, savings, and spending behavior, alongside inflation and unemployment expectations. Additionally, each wave features ad hoc questions on specific topics that vary across waves.

For this paper, we focus on the survey waves that gather information on respondents' housing situations, include randomized controlled trials (RCTs) focused on information treatments about inflation, and allow us to observe durable consumption choices made within six months of the treatment. Although a typical wave includes between 15,000 and 25,000 respondents, our analysis is restricted to the subsample of individuals for whom all relevant variables — homeownership status, participation in the RCT, and data on durable consumption — are available.

2.2   Survey design

A key element of our analysis is the set of five randomized controlled trials (RCTs) conducted across five waves of the Nielsen Homescan Panel: 2021Q2, 2021Q3, 2022Q3, 2022Q4, and 2023Q3. Figure 1 illustrates the time series of the Consumer Price Index (CPI), highlighting both the timing of each survey wave and the observed inflation rates at the time when each wave was distributed.

Although each questionnaire includes some variation in its content, all waves contain the key questions described here, presented in the same order.[1] First, households report their homeownership status, identifying themselves as homeowners without a mortgage, homeowners with a mortgage, or renters. Later waves of the survey asked respondents to indicate whether they have a fixed-rate or variable-rate mortgage. Because only a relatively small group of people reports having a variable rate mortgage, we combine fixed- and variable-rate mortgages into one group. The survey question also allows people to report other

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[1]The text of the survey questions is reported in Appendix B.

living arrangements (e.g., a college dormitory). Because this group of respondents is too small and diverse to have statistical power, we exclude respondents with this arrangement.

Next, participants indicate whether they purchased a durable item — defined as a house or apartment, a car or other vehicle, or a large home appliance or electronic product — within the past six months, and whether they plan to purchase such an item in the next 12 months.

We then elicit inflation expectations for the next 12 months. Specifically, we ask respondents to report their subjective probability distributions for inflation by assigning probabilities to a pre-set menu of scenarios (intervals). Using the midpoints of each bin, along with fixed values for the tails,[2] we construct the implied mean and standard deviation of the reported subjective expectations. These pre-treatment expectations serve as priors in our analysis.

Participants are then randomly assigned to either a control group, which receives no additional information, or one of several treatment groups, which are exposed to specific inflation-related information. Specifically, for the purpose of this paper, we focus on three types of information treatments: (i) past inflation over the previous 12 months,[3] (ii) the Federal Reserve's inflation target,[4] and (iii) the Federal Open Market Committee's (FOMC) short-term inflation forecast.[5] Figure 2 illustrates the relative positioning of the information provided in each wave, alongside the mean and median prior beliefs for each wave. In some of the waves, we have additional treatment groups who are provided with other information not related to inflation. To ensure consistency across survey waves, we exclude these groups from the analysis.

Following the treatment, we re-measure inflation expectations (posteriors) as point predictions. We use a different formulation for the posterior question to

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[2]We use mid-points of the bins to compute the implied mean. For the top bin (inflation will be greater than 12%) we use 14% as the mid-point. For the bottom bin (deflation will be greater than 12%), we use -14% as the mid-point.

[3]For example, information treatment in 2021 Q2 was: *"Over the last twelve months, the inflation rate in the U.S. (as measured by the Consumer Price Index) was 2.6%."*

[4]For example, information treatment in 2021 Q2 was: *"The inflation rate that the Federal Reserve tries to achieve on average is 2% per year."*

[5]For example, information treatment in 2021 Q2 was: *"The U.S. Federal Open Market Committee (which sets short-term interest rates) forecasts a 2.3% inflation rate in 2021."*

minimize survey fatigue and to ensure that the control group is not "spooked" by facing the same question twice within a short time period.

To measure durable spending behavior after the treatment, we rely on responses from a survey wave fielded in the following quarter. In particular, we focus on the answer to the yes/no question (i.e., the extensive margin) on whether the respondent purchased a durable item (house, a car, or a big home appliance) within the prior six months. This design allows us to estimate the effect of shifts in inflation expectations induced by the treatments on durable consumption behavior in the months following the intervention.

Table 1 reports the sample size for each wave. It provides a breakdown of households by homeownership categories — homeowners without a mortgage, homeowners with a mortgage, and renters — as well as by treatment groups, both for the pooled sample covering all waves and separately by wave. In addition, the table shows the share of households that reported purchasing durable goods in the subsequent wave, based on responses to the question about past durable purchases.

2.3   Weights

When analyzing expectations data, we face two practical challenges. First, housing status is clearly not random. For example, homeowners without a mortgage tend to be older and renters tend to be less educated. As a result, the relationship between the housing status and how people form inflation expectations may be driven by factors other than housing status. To bring our analysis closer to causal interpretation, we need to correct for possible selection effects. To this end, we estimate a multinomial probit regression with homeownership status as the dependent variable and a set of regressors, including gender, age (and its square), presence of children, household size, region, income categories, education, and time fixed effects[6]. Using the estimated coefficients (reported in Table

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[6]Our results remain robust to the inclusion of additional control variables in the computation of the weights, such as the number of panel waves the respondent participated in, and financial constraints, measured by the ability to cover unexpected expenses.

2), we compute propensity scores and derive Inverse Probability Weights (IPW) to balance the sample.

Second, survey data are noisy with many outliers and other influential observations. We recode inflation expectations (both priors and posteriors) as missing if expectations are below 0 or above 20 percent. Then we calculate weights from a Huber (1964) robust regression. In this regression, posterior expectations are regressed on prior expectations, homeownership status, treatment dummies, and their interactions, with all variables weighted by the square root of the IPW.

The final estimation weights, used to compute moments and regression coefficients, are constructed as the product of sampling weights, the IPW weights, and the Huber weights. This approach ensures both balance and robustness in our analyses.[7]

2.4   Preliminary facts on prior expectations

As a first pass at the data, we examine the distribution of 12-month-ahead inflation expectations prior to any information treatment, by homeownership and by wave. The main summary statistics are reported in Table 3, while Figure 3 displays the histograms for wave 2021Q2 as an example. Figure 4 shows the mean of such expectations for the full sample, by homeownership, and by survey wave. The figure also displays the standard deviation and the median for each subgroup. All summary statistics are computed using the weights described earlier. Several stylized facts emerge.

First, across all groups and time periods considered, the distribution of priors exhibits three key features: (i) considerable dispersion, (ii) positive right skewness, with the mean consistently exceeding the median, and (iii) sluggish adjustment to current inflation levels. Specifically, mean expectations are persistently below observed inflation, except in 2023Q3, when mean and median expectations range between 5% and 6%, despite actual inflation having already fallen

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[7]Our findings are robust to not using weights. All tables and figures computed without weights are presented in Appendix A.

to 3.5%. These patterns align closely with findings in the existing literature on survey data (D'Acunto et al. (2024)).

Focusing on heterogeneity by homeownership status, we find no significant differences in inflation expectations prior to the treatment. The means and dispersions are strikingly similar across homeowners, mortgagors, and renters, both in the pooled sample and within individual waves. This indicates that, regardless of homeownership status, households enter the experiment with broadly similar prior beliefs about inflation. However, these unconditional moments (measured before any information treatment) do not provide insights into potential differences in attention to inflation across homeownership groups. Rather, they indicate that the groups are well-balanced.

3 Attention to inflation

3.1 Conceptual framework

In a basic Bayesian framework, posterior expectations of respondent i are a weighted average of prior expectations and the new information received through the treatment:

$$Posterior_i = (1 - G) \cdot Prior_i + G \cdot Signal_i \tag{1}$$

where G represents the Kalman gain, which captures the relative weight individuals assign to the new information. A higher G implies that the signal is perceived as more informative, leading to a stronger update in expectations.

This framework allows us to interpret observed patterns of expectation updates as indicators of prior knowledge and attention to inflation, providing a lens through which to evaluate heterogeneity across homeownership groups in the empirical analysis. In particular, one can use $(1 - G)$ to gauge the degree of attention to information that provided in a signal: higher values of $(1 - G)$ correspond to individuals being more aware of publicly available information in

$Signal$ and thus putting a higher weight on the prior. Intuitively, individuals who are already well-informed about inflation should display minimal revisions, reflecting lower perceived informativeness of the signal. In the extreme case of Full-Information Rational Expectations (FIRE), publicly available information should already be incorporated into priors, implying $(1 - G) = 1$; that is, respondents do not revise their beliefs at all (posteriors are equal to priors) because respondents know $Signal$. On the other hand, a low value of $(1-G)$ corresponds to respondents being surprised by the publicly available information in $Signal$ which is consistent with respondents being inattentive to this information.

Naturally, how much inflation-related information from statistical agencies or central banks is incorporated in the priors depends on the costs and benefits of acquiring and processing this information. While this optimization problem can be rather complex, Weber et al. (2025) show that, under fairly general conditions, $(1 - G)$ is a summary statistic for how much attention is paid to information in $Signal$.

3.2 Empirical specification

To map equation (1) and the RCTs into a regression, we can re-write Bayesian updating for each group $g \in \{\text{Homeowners, Mortgagors, Renters}\}$ as follows:

$$
\begin{aligned}
Posterior_i =& \alpha^g \cdot Prior_i \\
& + \sum_{\tau \in \{\pi^{\text{actual}}, \pi^*, \pi^{\text{forecast}}\}} \mathbb{1}\{i \in \tau\} \cdot \left[\delta_\tau^g + \phi_\tau^g \cdot Prior_i\right] \\
& + wave\ FE + error
\end{aligned}
\tag{2}
$$

In this specification, *Posterior* represents inflation expectations measured after the treatment, while *Prior* denotes inflation expectations measured before the treatment. τ represents treatment groups, with the control group serving as the reference category. The model also incorporates interactions between prior ex-

pectations and treatment dummies to capture the heterogeneous effects of different types of information on inflation expectations. We include wave fixed effects to account for time-specific shocks and estimate the regression using the weights defined in Section 2.3.

The coefficient α^g measures the relationship between prior and posterior expectations in the control group — specifically, individuals who do not receive any treatment. Under the assumption of no new information, the posteriors should equal the priors, implying $\alpha^g = 1$. However, differences in measurement between priors and posteriors may cause deviations from this theoretical value.

Coefficient δ_τ^g measures the "level" effect which is the product of the Kalman gain G and the difference between $Signal$ and the average prior in the sample. Thus, δ_τ^g can be positive or negative depending on the sign of the difference.

The coefficients ϕ_τ^g measure learning effects induced by the treatments. Specifically, they capture how the slope linking priors and posteriors changes for each treatment group, relative to the control group. In Bayesian terms, $\alpha^g + \phi_\tau^g$ represents the weight that households assign to prior beliefs (that is, $1 - G$ in equation (1)), with $1 - (\alpha^g + \phi_\tau^g)$ indicating the weight placed on the new information. If $\phi_\tau^g = 0$, the treatment has no impact on beliefs, and posteriors remain anchored to priors. A negative $\phi_\tau^g \in [-1, 0)$, however, suggests that treated households assign less weight to their priors, implying greater responsiveness to the information provided.

We will use $(\alpha^g + \phi_\tau^g)$ as a measure of attention that respondents have to information provided in the treatments, with higher values indicating higher attention. Because α^g may deviate from one (recall that priors and posteriors are measured with different questions) we also consider $(\alpha^g + \phi_\tau^g)/\alpha^g$, that is, the coefficient on the prior for a treatment group scaled by the coefficient on the prior for the control group. Because we estimate equation (2) separately for each group g, we can test whether households with different housing statuses exhibit heterogeneous responses to information treatments and how these differences shape inflation expectations.

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3.3 Estimated attention

Table 4 reports the estimates of the regression coefficients, while Figure 5 illustrates the linear combination of coefficients ($\alpha^g + \phi_\tau^g$) that measure the weight assigned to prior beliefs in forming posterior expectations for each group, defined by treatment and homeownership. Panel B of figure 5 presents the linear combinations scaled by the weight assigned to prior beliefs in the control group for each homeownership category, allowing for easier comparability across treatments.

Focusing first on the control group, we find that the weight assigned to prior beliefs is consistently less than one across all groups. This indicates that, even in the absence of any information treatments, posteriors deviate from priors. Such deviations are likely attributable to differences in how priors and posteriors are elicited — priors as a probability distribution and posteriors as point estimates. Importantly, we detect no statistically significant differences in the weight assigned to priors across housing status groups in the control condition.

Turning to the effects of the information treatments, the coefficient of the interaction between prior beliefs and treatment (ϕ_τ^g) is negative and statistically significant. This result indicates that households consistently revise their expectations in response to the information provided, placing less weight on their priors and more weight on the new signal. However, the magnitude of these revisions (measured by the linear combination of coefficients $\alpha^g + \phi_\tau^g$ displayed in Figure 5) varies by treatment type and housing status, highlighting important heterogeneity.

For the treatment providing information about past inflation, we find no significant differences in responsiveness across homeownership groups. Although the confidence intervals overlap, the point estimate for renters remains lower than that for homeowners. This pattern is consistent with all groups being similarly informed about past inflation.

For the treatment providing information about the Federal Reserve's inflation target, we observe clear heterogeneity. Homeowners — both with and without mortgages — are the least responsive, reflecting higher awareness of the Fed's

objective. Differences between these two groups are not statistically significant. Renters are the most responsive, suggesting lower prior knowledge about the information received in the treatment.

For the treatment providing information about the Federal Open Market Committee's (FOMC) short-term inflation forecast, we observe a similar pattern: homeowners are again the least responsive, consistent with greater baseline attentiveness; mortgagors display an intermediate level of responsiveness, suggesting moderate prior awareness relative to other groups; renters are the most responsive, reinforcing the interpretation that they have limited prior knowledge about inflation and are therefore more reactive to new information.

The results presented in Figure 5 reveal heterogeneity in attention across treatments, a pattern consistent across all homeownership status groups. When households receive information about past inflation, their expectations remain more anchored to prior beliefs, assigning a higher weight to the prior. In contrast, treatments involving the inflation forecast and inflation target lead to larger revisions in expectations. What explains these differences in attention? One possibility is that forward-looking information, such as the FOMC's inflation forecast and the Fed's inflation target, is perceived as more relevant for future inflation and thus given greater weight in expectation formation. Alternatively, these treatments may introduce less familiar information, making them more surprising and, consequently, more influential—suggesting that respondents may be less attentive to this type of information in general.

Are these patterns consistent across survey waves? Figure 6 illustrates the weight assigned to prior inflation expectations in the formation of posterior expectations, analyzed separately for each wave. The ranking of attention levels among homeowners, mortgagors, and renters remains remarkably stable over time. In the control group, the confidence intervals for the weight of prior beliefs overlap across all three housing status groups in every wave, indicating no statistically significant differences in attention levels among untreated households. However, in the treatment groups, as shown in the pooled data, the estimates for homeowners and mortgagors frequently overlap, while the estimates for renters are consistently and significantly lower. This suggests that renters assign less

weight to their prior beliefs when processing new information, reflecting a persistently lower level of attentiveness to inflation-related information. These findings indicate that renters' lower attention to inflation information is a persistent feature of their expectations formation process, showing little variation across survey waves. By contrast, homeowners and mortgagors consistently demonstrate higher attentiveness, maintaining more stable and informed expectations over time.

3.4 Homeownership and incentives for attention to inflation

Taken together, our findings highlight two key points. First, inflation expectations are broadly similar across housing status groups prior to treatment, confirming that the groups are well-balanced at baseline. This ensures that observed differences in responsiveness to treatments can be credibly attributed to heterogeneity in attention and learning processes rather than initial disparities in inflation beliefs. Second, we document significant heterogeneity in attention, as reflected in the weight assigned to prior beliefs, which varies systematically across homeownership groups. Homeowners, for instance, exhibit higher baseline attentiveness to inflation dynamics compared to renters and mortgagors.

These findings shed light on the incentives and mechanisms driving households' attentiveness to inflation. The heterogeneous levels of attention indicate that homeowners are more likely to monitor inflation dynamics, as reflected in their more informed expectations. Why is this the case? The literature offers several explanations.

A key insight comes from Schnorpfeil et al. (2023), who conducted a large-scale randomized controlled trial (RCT) on customers of a major German bank, 55% of whom had outstanding debt. Participants were provided with information about the inflation-induced erosion of either nominal assets or nominal debt. Their findings reveal that households, on average, are concerned about the impact of inflation on their wealth. However, while most participants were aware of inflation eroding nominal assets, fewer understood the erosion of nominal debt.

Notably, less than a quarter of respondents recognized the positive impact of unexpected inflation on fixed-rate loans, and debtors were not significantly more aware of these redistributive effects. These findings align with our results, reinforcing the idea that mortgagors, despite benefiting from debt erosion, are not more attentive to inflation than other homeowners. This limited awareness likely explains why mortgagors exhibit muted attention and responsiveness to inflation dynamics.

By contrast, Li and Sinha (2023) provide evidence that the act of purchasing a home, particularly for younger buyers, heightens the sensitivity between sentiments and inflation expectations. Their analysis shows that homeowners' inflation expectations are less variable and less volatile, while their sentiments are more tightly linked to inflation expectations. This supports the idea that homeowners may view inflation as more relevant to their economic well-being, making homeownership more attentive to track inflation dynamics.

Another line of research highlights the role of selection effects in explaining the higher attentiveness of homeowners. Malmendier and Wellsjo (2024) document that households with significant exposure to personal inflation histories are more likely to become homeowners, viewing housing as a hedge against inflation. By studying immigrants in the U.S. housing market — who bring different inflation experiences from their countries of origin — Malmendier and Wellsjo (2024) show that these personal inflation histories significantly predict homeownership decisions. This suggests that individuals more concerned about inflation may self-select into homeownership, further contributing to the observed differences in inflation attentiveness.

What about renters? Figure 7[8] plots the time series of overall inflation (CPI) and rent-specific CPI over the period covered by our survey waves. The figure highlights a substantial lag in the response of rent CPI to changes in overall inflation, with rent inflation adjusting much more slowly. This lag provides an important clue as to why renters' inflation expectations tend to be less informed: for renters, current inflation may not provide meaningful information about near-

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[8]For comparison, the figure also plots the time series of home prices, which exhibit more pronounced cyclical fluctuations.

term changes in their rent costs, limiting the relevance of inflation dynamics for their economic decision-making.

Additionally, many renters benefit from rent-control contracts or long-term leases with fixed prices, further reducing the immediacy of inflation's impact on their housing costs. Unlike homeowners or mortgagors, who experience more direct wealth or cost effects from changes in inflation, renters face relatively lower short-term exposure to aggregate price changes. This diminished exposure may dampen their incentives to monitor inflation or incorporate inflation-related information into their expectations. In short, renters' relatively uninformed expectations could be a rational response to the limited pass-through of current inflation to their own economic circumstances.

4 Purchases of durable goods

The previous section documents that housing status affects how attentive households are to inflation. However, these results do not tell us how households use this information for their spending decisions. For example, homeownership can relax financial frictions and thus can make consumer spending more sensitive to changes in inflation expectations. This section studies if there is indeed a difference in the propensity to spend on durable goods across various groups. In particular, we leverage RCT-induced variation in beliefs to estimate causal effects of inflation expectations on spending.

4.1 IV approach

To assess how exogenous changes in inflation expectations influence durable spending decisions, we exploit the variation in beliefs induced by the information treatments, using an instrumental variables (IV) approach. This strategy allows us to isolate the causal effect of inflation expectations on household spending behavior by leveraging the random assignment of treatments as an exogenous

source of variation in expectations.

Our analysis focuses on the extensive margin of durable consumption, defined as whether households report purchasing durable goods in the period following the treatments. Durable spending is measured in the subsequent wave, conducted one quarter after treatment, where households are asked to report whether they had purchased a house or apartment, a car or other vehicle, or a large home appliance or electronic product in the preceding 6 months. Summary statistics shown in Table 1 indicate that, across waves, approximately 11% of respondents report purchasing a large home appliance or electronic product, 7% report purchasing a car, and fewer than 2% report purchasing a home.

Building on Coibion et al. (2023) and Coibion et al. (2022), we estimate the effects of inflation expectations on each category of durable goods:

$$
\begin{aligned}
BoughtDurables_{t+1,i} \times 100 = {} & \beta^g Posterior_{t,i} + \psi^g Prior_{t,i} \\
& + \eta^g PlanBuyDurable_{t,i} + controls_{t,i} \\
& + wave\ dummies + error
\end{aligned}
$$

(3)

$$\text{for } g \in \{\text{Homeowners, Mortgagors, Renters}\}$$

The dependent variable, $BoughtDurables_{t+1}$, is an indicator equal to one if respondent i reports purchasing a durable good in the subsequent wave of the survey. $PlanBuyDurable_{t,i}$ is an indicator variable equal to one if respondent i plans to buy that durable good over the next 12 months. *controls* include demographic and socioeconomic characteristics — such as gender, age, age squared, number of children, household size, region, income categories, and education — as well as wave dummies to capture time fixed effects[9]. To deal with outliers

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[9]Our results remain robust to including uncertainty in prior inflation expectations as an additional control. Inflation uncertainty is measured as the variance of the subjective probability distribution for inflation (see Appendix B for the question wording).

and other influential observations, we use the jackknife procedure described in Coibion et al. (2023) and Coibion et al. (2022).

Our key regressor of interest is posterior inflation expectations (*Posterior*) which we instrument using equation (2). The coefficients β^g capture the *causal* effect of inflation expectations (exogenously moved by the information treatments) on the probability of purchasing durable goods in the months following the treatments for each housing status group g. To be clear, the coefficients on *Prior* and other regressions do not have causal interpretations.

We observe a clear pattern in the estimates (Table 5). Homeowners, both with and without mortgages, show a statistically significant increase in the probability of purchasing durable goods in response to higher inflation expectations. For homeowners with a mortgage, a 1 percentage point increase in inflation expectations leads to a 1 percentage point increase in the likelihood of purchasing a durable good of any kind. The propensity to spend reaches 1.5 percent for homeowners without mortgages[10]. Disaggregating by category, the effect remains statistically significant for car purchases and big-ticket items. However, the effect is not significant for housing purchases, likely reflecting the low incidence of home purchases within the sample.

In contrast, renters display no significant response to changes in inflation expectations. For this group, the estimated effects are close to zero and lack statistical significance, suggesting that higher inflation expectations do not translate into changes in durable spending behavior.

4.2 Channels

Inflation expectations influence durable consumption through several channels. The instrumental variables (IV) approach employed in this analysis captures the *total* effect of exogenous changes in expectations on household spending decisions. This estimate reflects the combined influence of competing mechanisms,

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[10]The magnitude of these effects is comparable to estimates from other surveys, such as Georgarakos et al. (2024), which analyzes a European sample.

as highlighted by Coibion et al. (2022) and Coibion et al. (2023). On the one hand, the intertemporal substitution effect raises current consumption by lowering the relative price of spending today compared to the future. On the other hand, the income effect may reduce consumption due to concerns about lower real income or greater economic uncertainty (Candia et al. (2020)). By aggregating these channels, the IV approach provides a "total" estimate that captures their net impact, offering insight into how households balance incentives to adjust spending.

Empirical evidence on the relationship between inflation expectations and consumption suggests responses shaped by the inflation environment. Coibion et al. (2023) examine Dutch households in a low-inflation setting and find that higher inflation expectations — induced through information treatments — lead to lower spending on durables. This response is driven by improved real income expectations and more optimistic views about aggregate spending, suggesting that inflation expectations also operate through a supply-side lens. Similar results emerge for U.S. households in periods of low, pre-COVID19 inflation (Coibion et al. (2022)), where higher inflation expectations — interpreted as signals of future uncertainty — reduce durable consumption.

However, Candia (2024) highlights the time-varying nature of these effects. During periods of low inflation, the income effect dominates, leading to lower durable consumption as higher inflation expectations signal future income erosion. In contrast, during periods of high inflation, the intertemporal substitution effect becomes stronger, prompting households to increase durable spending to lock in current prices. These findings underscore the importance of accounting for inflation environments when analyzing consumption responses.

Our analysis builds on this literature by exploring how the relative strength of these mechanisms varies across homeownership categories and financial constraints. Consistent with Candia (2024), we find that the effect of inflation expectations on durable spending depends on the inflation environment, but we show that this pattern is entirely driven by homeowners. Figure 8 demonstrates that during the high-inflation periods of 2021 and 2022, inflation expectations had a positive effect on durable consumption, consistent with the dominance of the

intertemporal substitution effect. In contrast, following the end of the inflation spike in 2023Q3, the effect turned negative, reflecting the income effect as inflation expectations signaled a weaker economic outlook. Crucially, this reversal is observed only among homeowners: renters, by contrast, exhibit no significant response to inflation expectations — across all periods and all durable categories. Overall, our results reveal that the average effects reported in Candia (2024) are primarily driven by homeowners, obscuring the lack of responsiveness among renters.

This asymmetry raises questions about the mechanisms underlying the distinct behavior of homeowners. One plausible explanation relates to perceived wealth effects. As suggested by Schnorpfeil et al. (2023), inflation may increase the nominal value of wealth, making homeowners feel wealthier and more willing to spend. Renters, by contrast, may face consumption commitments, such as rent (as defined by Chetty and Szeidl (2007)), which restrict their ability to adjust spending in response to changes in inflation expectations. This group is likely more financially constrained, leaving them less able to reallocate spending towards durable goods, even when inflation expectations change. An alternative explanation is that renters simply do not place much importance on inflation, unlike homeowners, who are both more attentive and more responsive.

To distinguish between these interpretations, it is again informative to study how spending responses vary with inflation trends. Specifically, when inflation rises, constrained households should be unable to increase spending due to borrowing limits, whereas they should be able to reduce spending when inflation falls, as saving does not face the same constraints. Consistent with this mechanism, Figure 8 shows that in 2023Q3—a period of sharp inflation decline—the effect of posterior inflation expectations on durable spending was negative across all homeownership groups. The effect was highly significant for mortgagors and nearly significant for renters, with the 95% confidence interval just including zero. This pattern supports the idea that renters face credit constraints: they cannot increase spending when inflation rises but may reduce it when inflation falls. Further evidence supporting the financial constraints hypothesis is presented in Figure 9, which visualizes the coefficients from Table 5, showing the effect of

inflation expectations on durable consumption across different goods and home-ownership groups. In the 'Any durable' category, we also distinguish between individuals with and without liquidity constraints, defined as the inability to cover an unexpected expense equal to one month of income[11]. The results show that for unconstrained individuals, the effect of inflation expectations on durable consumption is significant and closely aligns with that observed for homeowners and mortgagors. In contrast, the effect is zero for liquidity-constrained individuals, reinforcing the idea that financial constraints may explain why renters do not adjust durable spending in response to inflation expectations.

5   Conclusion

This paper examines the role of inflation expectations in shaping household consumption decisions, with a particular focus on heterogeneity across homeownership status. Leveraging randomized controlled trials (RCTs) embedded in survey waves conducted between 2021 and 2023, we provide novel evidence on how households form inflation expectations, update their beliefs in response to new information, and adjust their durable spending patterns.

Our findings reveal systematic differences in both attention to inflation and behavioral responses across homeowners, mortgagors, and renters. Homeowners, particularly those without mortgages, display higher baseline awareness of inflation dynamics and respond less strongly to information treatments, consistent with already-formed expectations. Renters, by contrast, revise their expectations more sharply, indicating lower prior knowledge and greater learning from the information provided. Mortgagors occupy an intermediate position, combining limited responsiveness with weaker behavioral adjustments, possibly reflecting financial constraints or lower sensitivity to debt erosion effects.

We exploit the exogenous variation in inflation expectations induced by the

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[11]The wording of the question is: "Suppose that you had to make an unexpected payment equal to one month of your after-tax income, would you have sufficient financial resources (access to credit, savings, loans from relatives or friends, etc.) to pay for the entire amount? Yes/No/Don't know/Prefer not to answer".

treatments to estimate their causal impact on durable consumption. Consistent with the intertemporal substitution hypothesis, we find that higher inflation expectations lead to a statistically and economically significant increase in durable purchases among homeowners. In contrast, renters show no significant response, reinforcing the role of financial constraints and weaker expectations channels in moderating their behavior.

From a policy perspective, our results underscore the challenges faced by policymakers. On the one hand, it is easier to move expectations for renters but they are less likely to change spending in response. On the other hand, homeowners are more likely to change spending in response to changes in inflation expectations but it is harder to change their inflation expectations because this group is more attentive to inflation in the first place. This suggests the need for more targeted communication strategies that account for heterogeneous attentiveness to inflation, as well as potentially a combination of such communication policies with other policies (e.g., enhance renters' access to credit, as liquidity constraints are likely the key barrier to their ability to adjust consumption). Our findings also call for macroeconomic models that explicitly incorporate heterogeneous agents to better capture the distributional effects of inflation on expectations and subsequent consumption dynamics. Differences in attentiveness, learning, and spending behavior across groups underscore the need for models and policies that explicitly address heterogeneity and distributional concerns.

Future research could further explore the channels through which inflation expectations influence consumption decisions across different household groups, paying particular attention to the role of information frictions, credit constraints, and wealth dynamics. Such investigations could provide deeper insights into the heterogeneous impacts of inflation and inform the design of stabilization policies that better account for distributional differences and economic inequality.

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Variable	Total	2021Q2	2021Q3	2022Q3	2022Q4	2023Q3
Sample size						
No. observations	26443	8238	2929	4114	5182	5980
Homeownership groups, %						
Homeowner	39.52	38.76	38.89	39.01	40.45	40.42
Mortgagor	37.03	38.95	38.65	35.49	34.79	36.61
Renter	23.45	22.29	22.47	25.5	24.76	22.98
Durable consumption, fraction reporting a purchase, %						
Did buy a durable good	18.49	17.96	18.13	20.06	17.12	19.5
Did buy a car	7.34	7.92	6.33	7.22	6.63	7.63
Did buy a house	1.73	1.86	1.89	1.64	1.85	1.43
Did buy a big ticket item	11.2	9.9	11.92	13.21	10.16	12.28

Table 1: **Sample size and distribution of key variables, by wave**. Durable consumption is measured as a binary indicator (yes/no) based on purchases reported one wave after treatment. The sample is restricted to observations with non-missing values for homeownership, treatment assignment, and prior and posterior inflation expectations. As a result, there are no missing values for homeownership status or treatment assignment in the final estimation sample.

Variables	Renters	Mortgagors
Gender: female	-0.054 (0.018)***	0.048 (0.016)***
Age	-0.022 (0.003)***	0.020 (0.003)***
Age square/100	-0.028 (0.003)***	-0.042 (0.003)***
Has children	0.308 (0.029)***	0.298 (0.027)***
Household size	-0.130 (0.009)***	-0.001 (0.008)
Region: East	-0.195 (0.025)***	-0.277 (0.024)***
Region: Central	-0.497 (0.024)***	-0.154 (0.022)***
Region: South	-0.466 (0.022)***	-0.189 (0.020)***
Income under $5000	1.208 (0.050)***	-0.847 (0.056)***
Income bracket $5000-$7999	1.253 (0.077)***	-0.941 (0.092)***
Income bracket $8000-$9999	1.685 (0.071)***	-0.804 (0.087)***
Income bracket $10,000-$11,999	1.535 (0.058)***	-0.835 (0.069)***
Income bracket $12,000-$14,999	1.482 (0.050)***	-0.770 (0.056)***
Income bracket $15,000-$19,999	1.437 (0.042)***	-0.554 (0.044)***
Income bracket $20,000-$24,999	1.286 (0.038)***	-0.522 (0.038)***
Income bracket $25,000-$29,999	1.202 (0.038)***	-0.409 (0.036)***
Income bracket $30,000-$34,999	1.069 (0.037)***	-0.342 (0.035)***
Income bracket $35,000-$39,999	0.998 (0.039)***	-0.270 (0.036)***
Income bracket $40,000-$44,999	0.938 (0.040)***	-0.203 (0.036)***
Income bracket $45,000-$49,999	0.877 (0.039)***	-0.236 (0.035)***
Income bracket $50,000-$59,999	0.778 (0.033)***	-0.190 (0.028)***
Income bracket $60,000-$69,999	0.704 (0.036)***	-0.016 (0.030)
Income bracket $70,000-$99,999	0.450 (0.028)***	0.004 (0.022)
No college	0.042 (0.021)**	-0.074 (0.019)***
Some college	0.193 (0.019)***	0.039 (0.017)**
Constant	1.549 (0.095)***	0.544 (0.093)***
Observations	76193	76193

Table 2: **Multiple probit regression used to compute the IPW**. The group of homeowners without mortgage is the base outcome. The omitted categories are: "West" for the variable region; "Graduate" for the variable education; "Income bracket 100,000-124,999" for the variable income.

	Panel A (Weighted)					Panel B (Unweighted)				
Group	Mean	SD	p10	Median	p90	Mean	SD	p10	Median	p90
Pooled data										
Whole Sample	5.76	3.79	1	5.5	11.05	5.92	3.97	1	5.7	12
Homeowners	5.72	3.81	1	5.35	11.2	5.94	3.93	1	5.7	12
Mortgagors	5.79	3.76	1	5.6	11	5.94	3.89	1	5.75	11.6
Renters	5.79	3.81	1	5.7	11.05	5.85	4.16	.41	5.51	12
2021Q2										
Whole Sample	4.67	3.51	1	3.65	10	4.9	3.74	.98	3.9	10.45
Homeowners	4.58	3.48	1	3.5	10	4.86	3.71	1	3.76	10.4
Mortgagors	4.73	3.49	1	3.75	10	4.92	3.67	1	3.9	10.4
Renters	4.72	3.58	.9	3.75	10	4.91	3.9	.34	4.01	10.82
2021Q3										
Whole Sample	5.17	3.59	1	4.57	10.2	5.37	3.82	.82	4.85	11
Homeowners	5.35	3.74	1	4.8	11	5.49	3.81	1	5	11.6
Mortgagors	5.12	3.44	1	4.57	10	5.28	3.65	1	4.8	10.44
Renters	5.01	3.61	.81	4.4	10.38	5.33	4.11	.2	4.77	12
2022Q3										
Whole Sample	7.15	3.87	1.6	7	12.4	7.12	4.01	1.2	7	12.8
Homeowners	7.08	3.87	1.6	6.8	12.4	7.22	3.96	1.5	7.05	12.8
Mortgagors	7.18	3.84	1.42	7.24	12.2	7.21	3.93	1.35	7.29	12.64
Renters	7.2	3.9	1.78	7.05	12.67	6.84	4.17	.8	6.8	12.67
2022Q4										
Whole Sample	6.7	3.74	1.27	6.25	12	6.77	3.96	1	6.4	12.05
Homeowners	6.59	3.79	1.2	6.06	11.85	6.8	3.86	1.25	6.25	12
Mortgagors	6.71	3.75	1.4	6.35	12	6.82	3.88	1.2	6.5	12
Renters	6.79	3.68	1.32	6.45	11.7	6.64	4.23	.45	6.41	12.61
2023Q3										
Whole Sample	5.73	3.74	1	5.4	11.12	6.02	3.94	1	5.7	12
Homeowners	5.68	3.75	1	5.3	11.2	5.97	3.88	1	5.7	12
Mortgagors	5.98	3.75	1.15	5.7	11.45	6.2	3.86	1.11	5.93	12
Renters	5.5	3.7	.6	5.15	11	5.84	4.15	.24	5.45	12

Table 3: **Summary statistics of prior inflation expectations, by wave and by homeownership status.** The summary statistics presented in panel A account for sampling weights as defined in section 2.3, while those in panel B are computed without weighting.

| | Homeownership status | | |
| | Homeowners | Mortgagors | Renters |
	(1)	(2)	(3)
Prior	0.610***	0.597***	0.576***
	(0.010)	(0.010)	(0.012)
Treatment: past π	0.893***	0.873***	1.188***
	(0.116)	(0.121)	(0.152)
Treatment: π target	0.168	0.047	0.313**
	(0.111)	(0.111)	(0.133)
Treatment: FOMC forecast	0.096	0.207*	0.493***
	(0.109)	(0.110)	(0.130)
Prior x Treatment: past π	-0.193***	-0.196***	-0.213***
	(0.018)	(0.018)	(0.022)
Prior x Treatment: π target	-0.279***	-0.272***	-0.365***
	(0.018)	(0.018)	(0.020)
Prior x Treatment: FOMC forecast	-0.298***	-0.366***	-0.393***
	(0.018)	(0.018)	(0.020)
Observations	10144	9416	5764
R-squared	0.439	0.439	0.449

Table 4: **Effect of prior expectations and information treatments in the formation of posterior expectations, by homewonership status.** Estimates obtained through weighted OLS, using weights defined in Section 2.3. Table A1 presents the unweighted results. Pooled data from waves 2021Q2, 2021Q3, 2022Q3, 2022Q4, 2023Q3. Including wave fixed effects. Robust standard errors in parentheses, clustered by household. */**/*** refer to p-values lower than 0.10/0.05/0.01, respectively. Table A2 reports the p-values from tests assessing whether the weight of the prior differs significantly between homeownership groups.

Category: Bought home/car/big item						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought home/car/big item	H	1.485***	(0.550)	6205	0.049	99.355
Bought home/car/big item	M	1.037**	(0.492)	5260	0.066	126.536
Bought home/car/big item	R	0.693	(0.489)	2905	0.104	93.440
Category: Bought a car						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a car	H	0.698***	(0.241)	6196	0.023	101.020
Bought a car	M	0.699***	(0.243)	5250	0.049	130.271
Bought a car	R	0.279	(0.188)	2918	0.052	106.247
Category: Bought a big ticket item						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a big ticket item	H	1.272***	(0.384)	6201	0.043	102.285
Bought a big ticket item	M	1.198***	(0.313)	5240	0.059	130.018
Bought a big ticket item	R	0.234	(0.297)	2920	0.073	96.953
Category: Bought a home						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a home	H	0.013	(0.050)	6224	0.066	106.055
Bought a home	M	0.057	(0.039)	5275	0.023	135.985
Bought a home	R	0.078*	(0.046)	2940	0.039	108.195

Table 5: **Effect of Posterior t on having bought any durable good, a car, a big ticket item, a home, in last 6 months (wave $t+1$), by homeownership.** Estimates obtained with Jackknife technique. The estimation uses sampling weights defined in Section 2.3. Table A3 presents the unweighted results. First stage: posterior t instrumented using willingness to buy durables in t, prior, treatment dummies, and interactions between priors and treatments dummies. Controls: gender, age, age^2, children, household size, region, income categories, education, wave dummies. All variables in the 1st stage are measured in wave t. Pooled data from waves 2021Q2, 2021Q3, 2022Q3, 2022Q4, 2023Q3. Robust standard errors in parentheses, clustered by household. */**/*** refer to p-values lower than 0.10/0.05/0.01, respectively. Table A4 reports the p-values from tests assessing whether the weight of the prior differs significantly between homeownership groups.
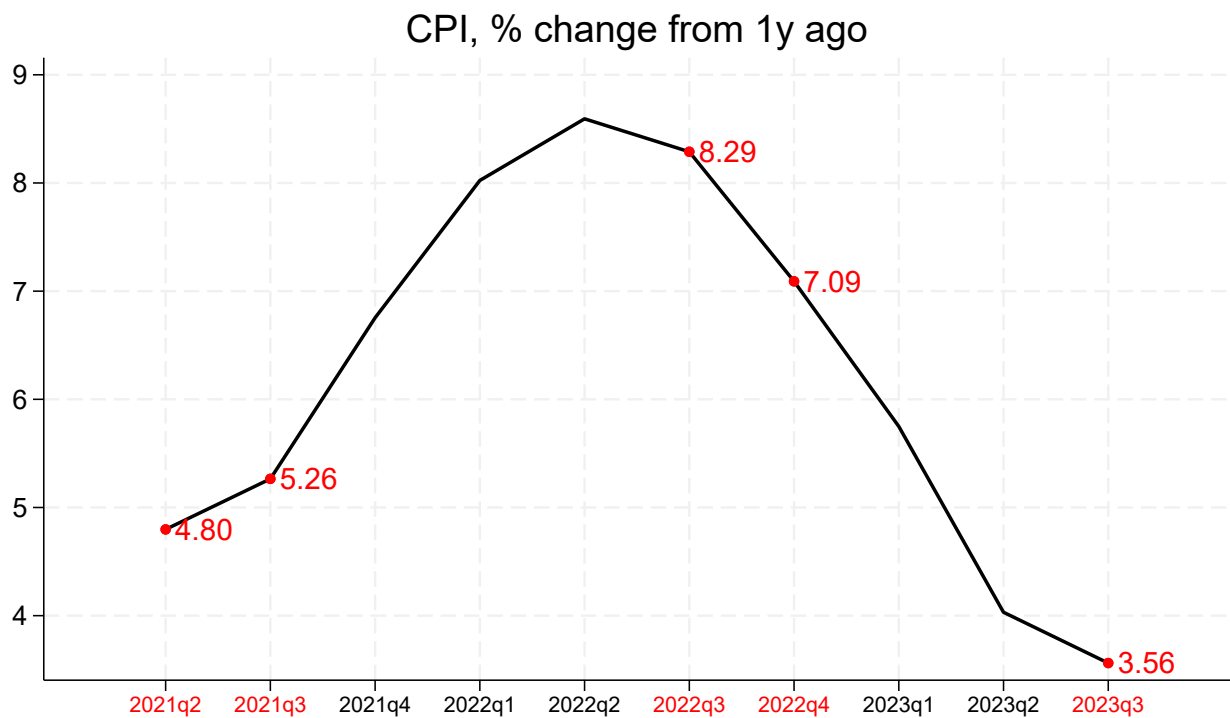
Figure 1: **Year-on-year Consumer Price Index (CPI) at quarterly frequency**. The red markers indicate the quarters during which the survey waves analyzed in this paper were conducted. Source of the data: U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCSL, January 8, 2025.
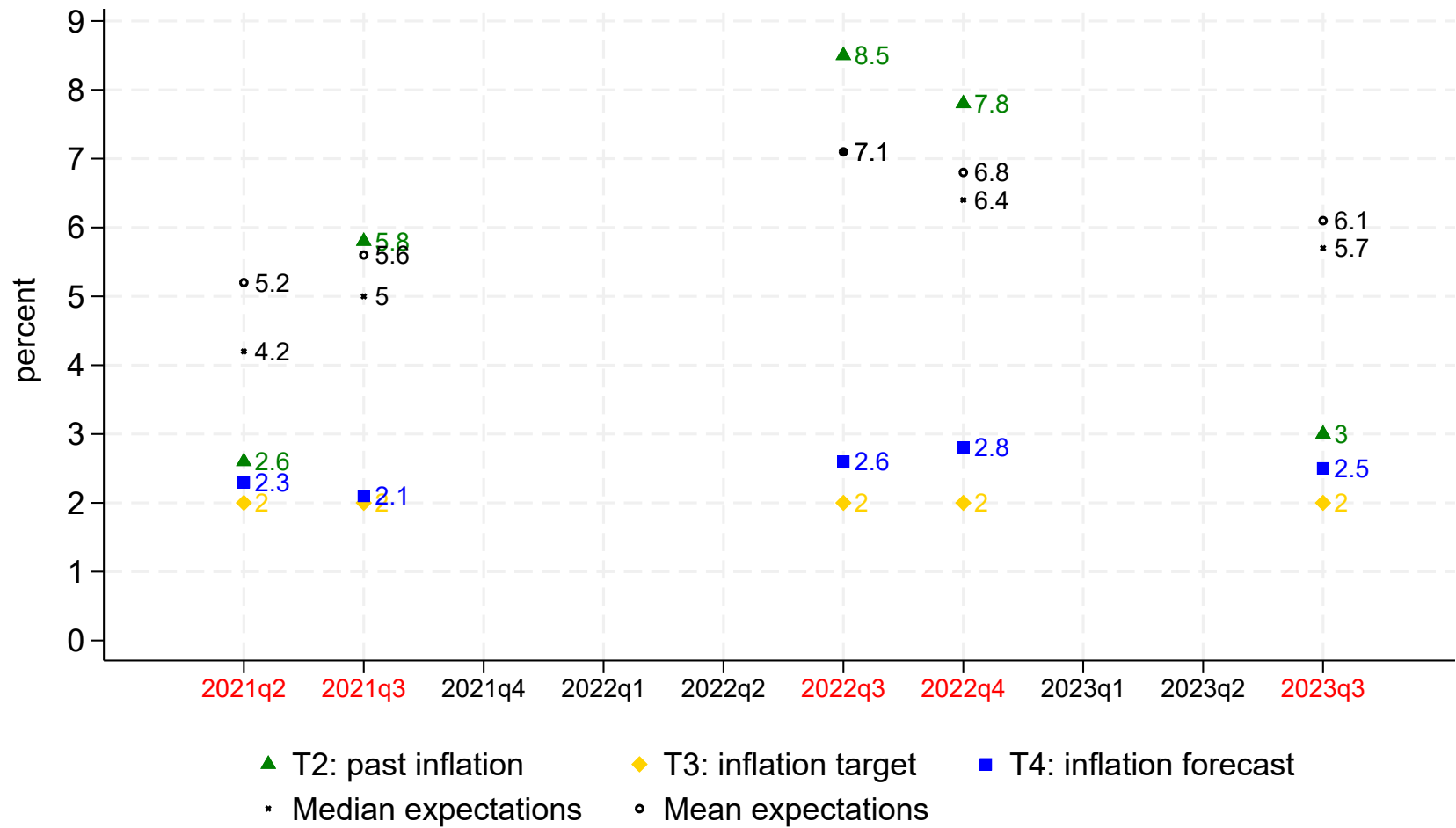
Figure 2: **Expectations and treatments**. The figure compares mean and median prior inflation expectations in each wave with the information treatments households received in each wave of the survey
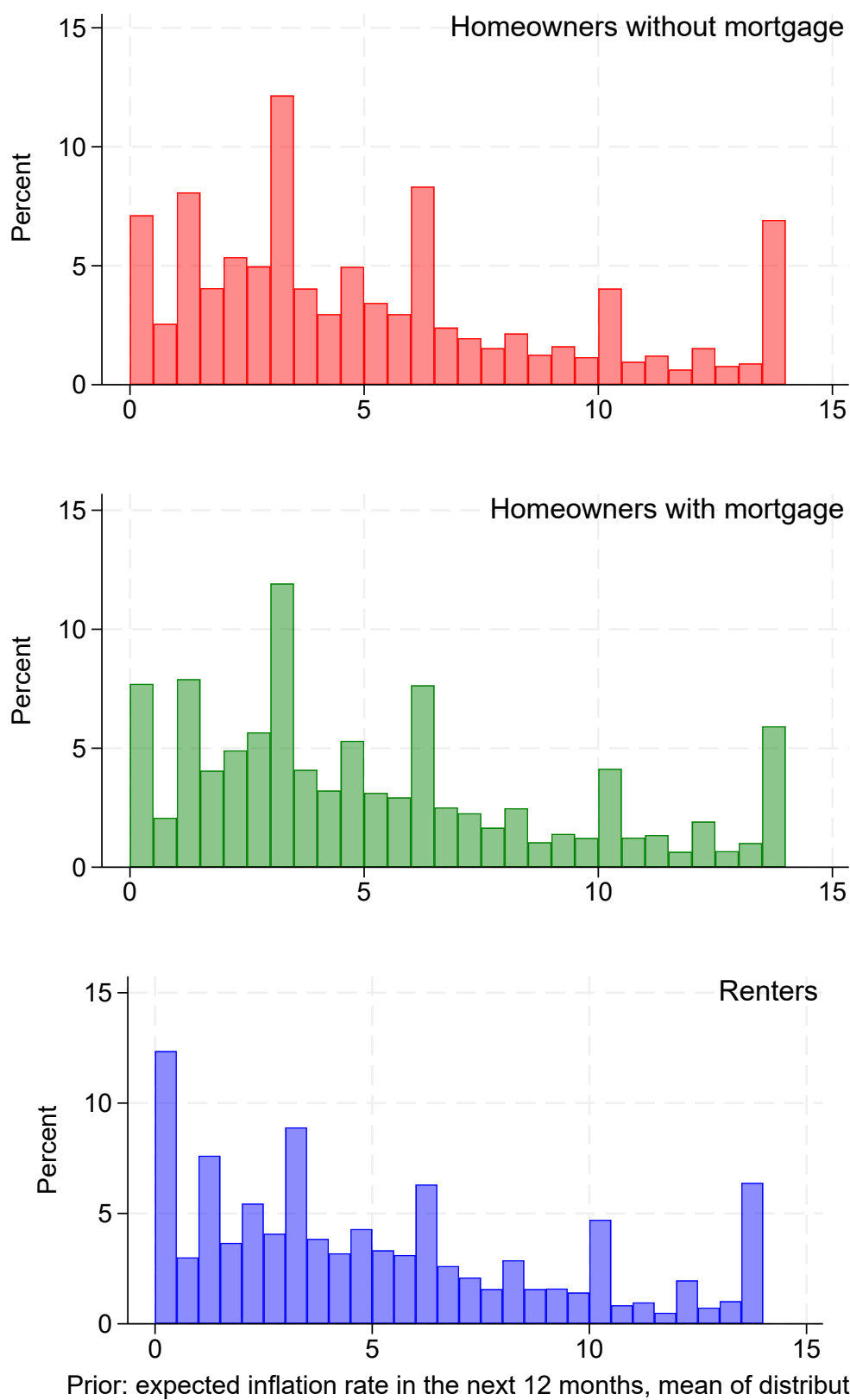
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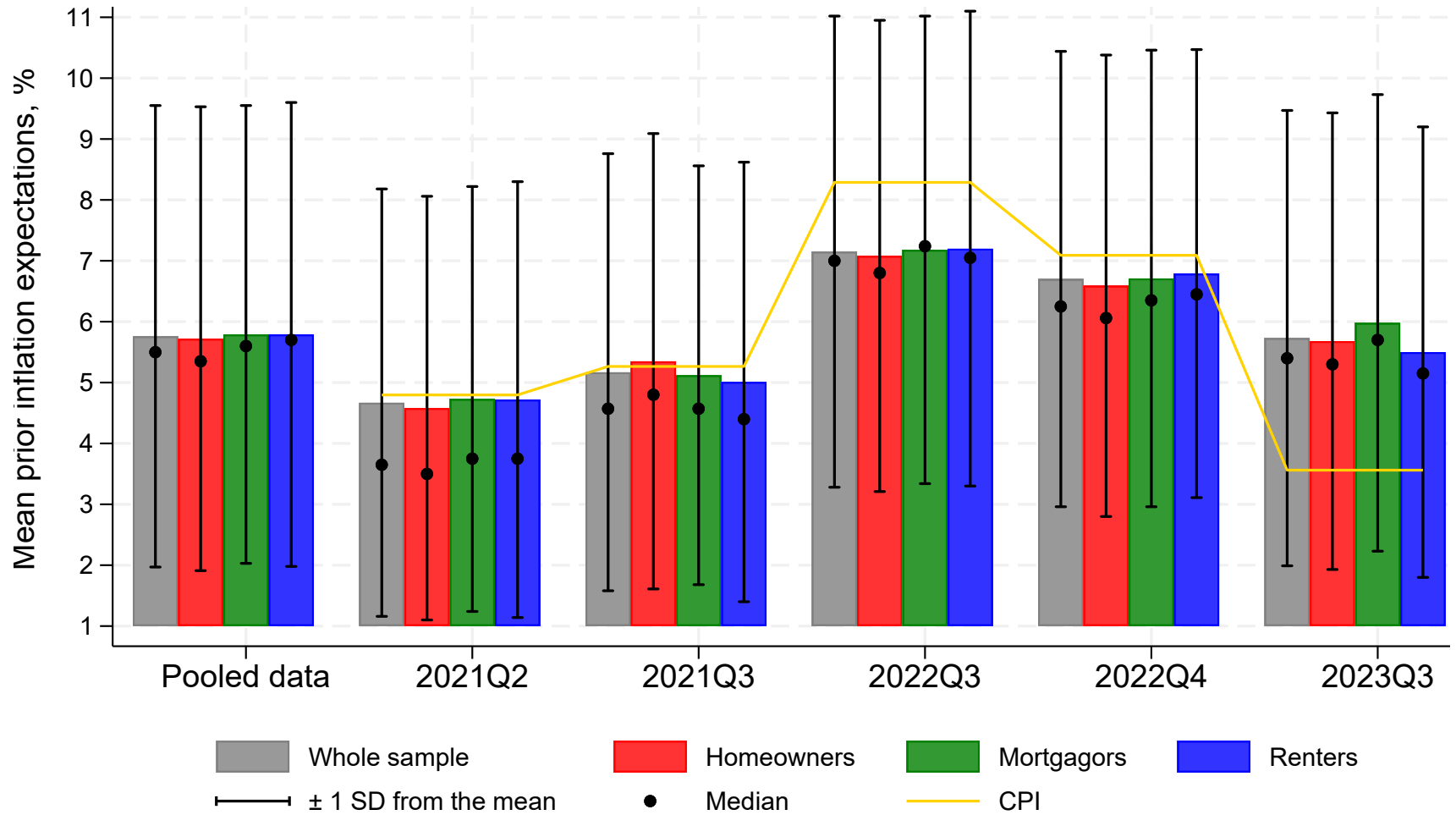Figure 3: **Distribution of prior inflation expectations (implied mean) by homeownership status in wave 2021 Q2**.

Figure 4: **Prior inflation expectations by wave and homeownership status**. The bars represents the mean expectation for each group, along with median expectations (black dots). The error bars represent one standard deviation above and below the mean. The yellow line represents the year-on-year Consumer Price Index (CPI) at the time of each wave (source of CPI data: U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCSL, January 8, 2025). All means, medians and standard deviations are computed using sampling weights as defined in Section 2.3.

Panel A. Weight on prior
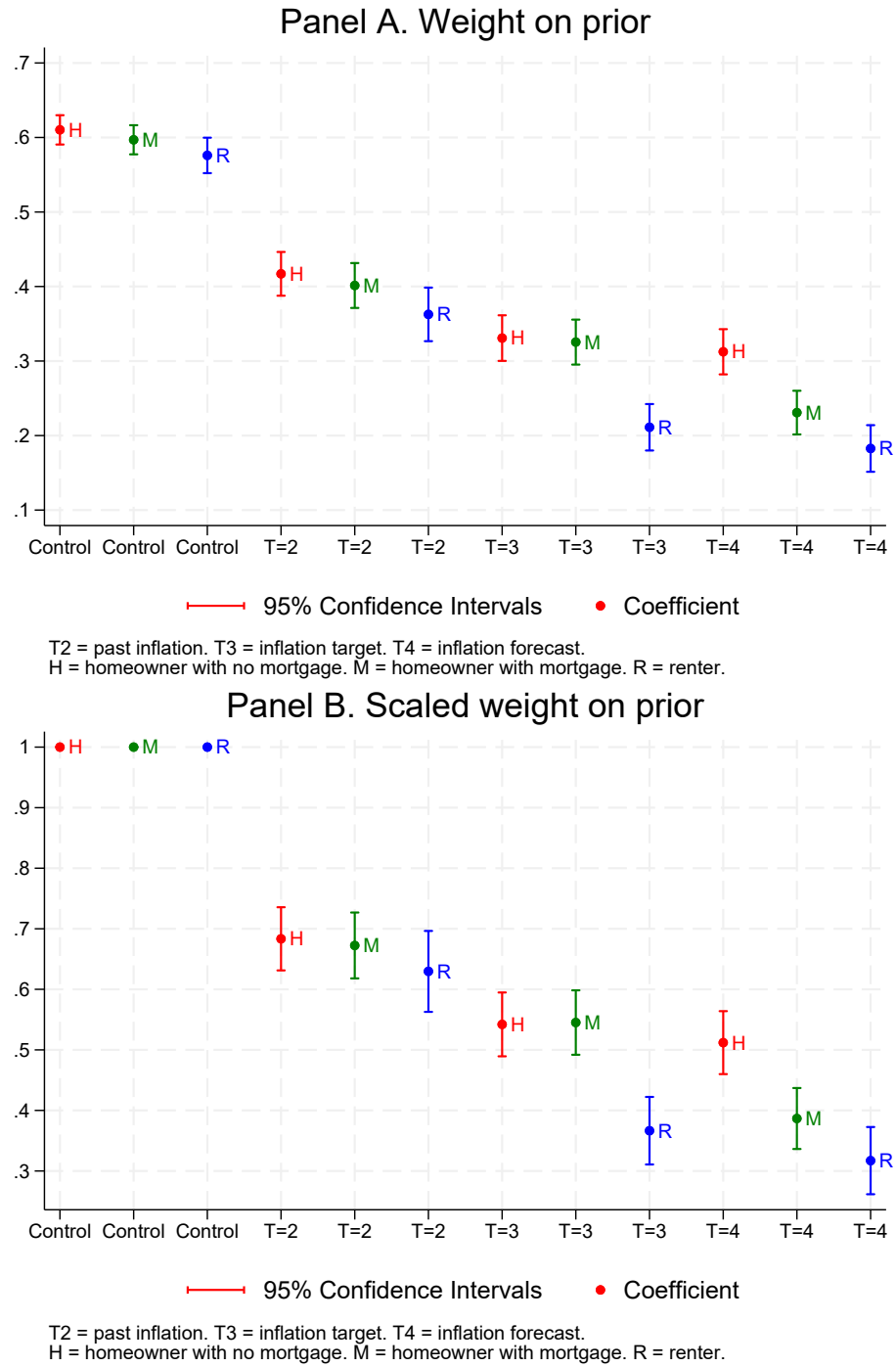
T2 = past inflation. T3 = inflation target. T4 = inflation forecast.
H = homeowner with no mortgage. M = homeowner with mortgage. R = renter.

Panel B. Scaled weight on prior

T2 = past inflation. T3 = inflation target. T4 = inflation forecast.
H = homeowner with no mortgage. M = homeowner with mortgage. R = renter.

Figure 5: **Weight of the prior.** Panel A: The figure reports the weight assigned to prior infla-
tion expectations in the formation of posterior expectations. The coefficients shown represent
the linear combinations of regression estimates presented in Table 4, computed on the pooled
data. Table A2 reports the p-values from tests assessing whether the weight of the prior differs
significantly between homeownership groups.
Panel B: The figure reports the scaled weight assigned to prior inflation expectations in the for-
mation of posterior expectations. Scaling ensures that the weight of the prior for each home-
ownership status in the control group equals one, facilitating comparability across groups. The
coefficients shown represent linear combinations of regression estimates presented in Table 4,
normalized by the weight of the prior for the corresponding status group in the control group.
All estimates are computed using sampling weights as defined in Section 2.3. Figure A1 presents
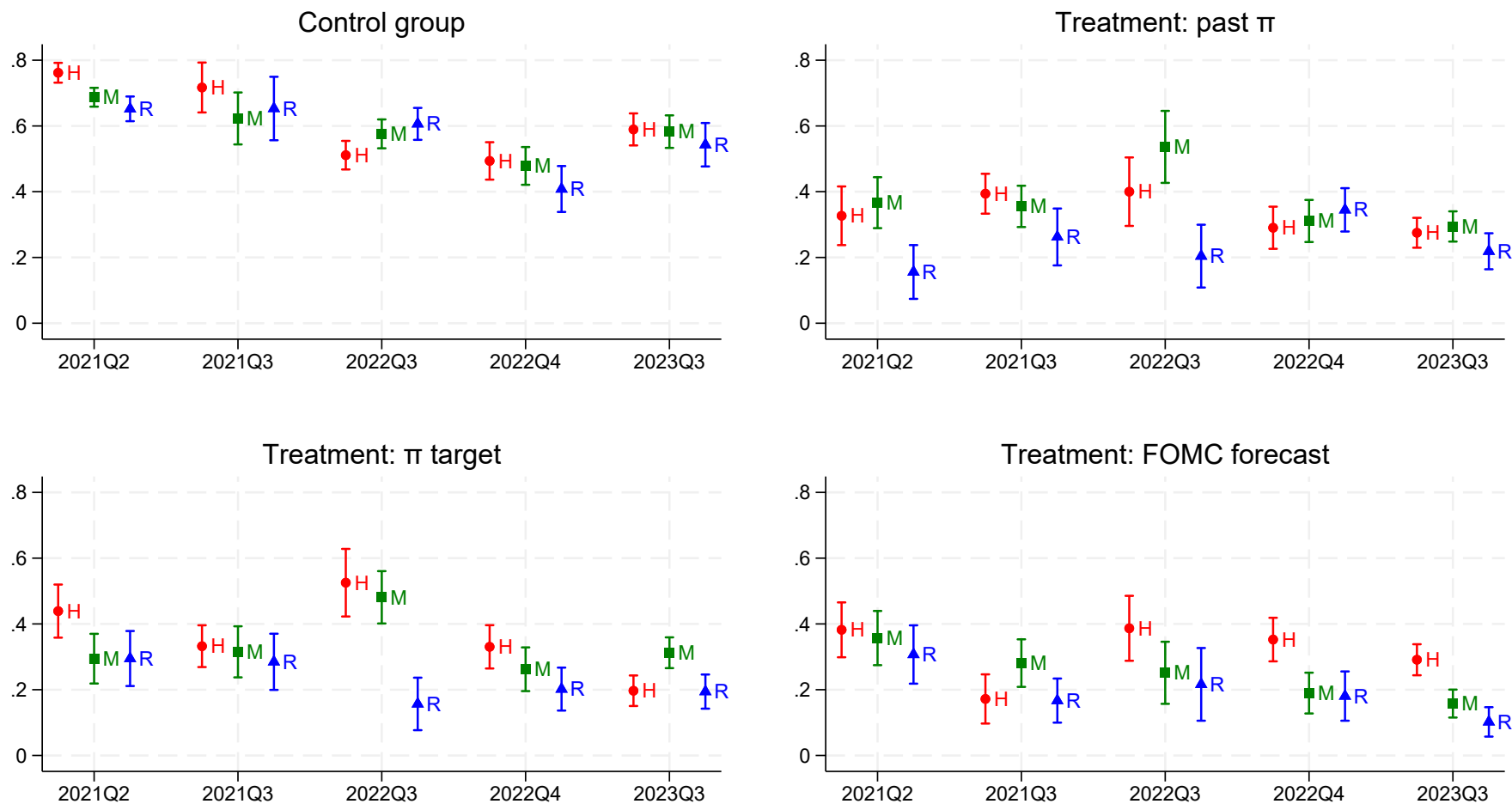the unweighted results.

Figure 6: **Weight on prior, over time.** The figure reports the weight assigned to prior inflation expectations in the formation of posterior expectations, separately for each wave. All estimates are computed using sampling weights as defined in Section 2.3
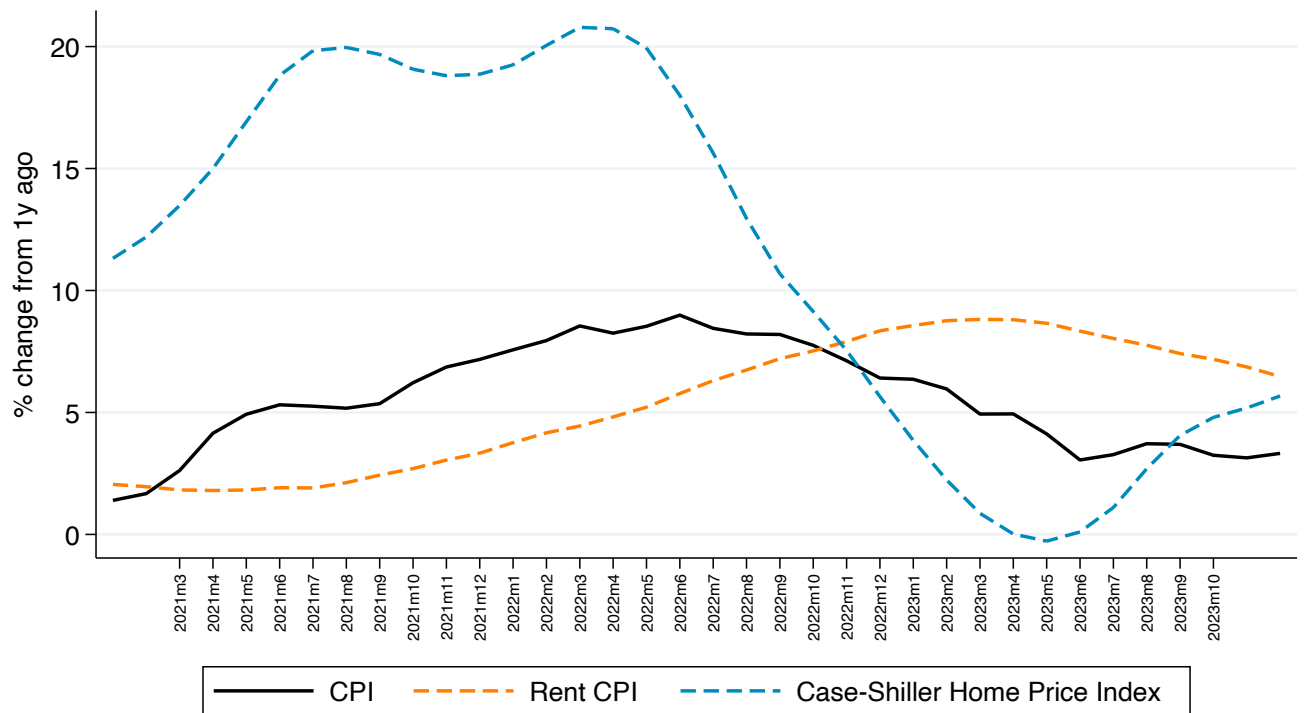
Figure 7: **CPI, rent CPI and Case-Shiller Home Price Index**. Monthly year-on-year CPI and CPI for rent on primary residence, during the time period covered by the survey waves. Source of CPI data: U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCSL, January 8, 2025. Source of CPI for rent on primary residence: U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: Rent of Primary Residence in U.S. City Average [CUUR0000SEHA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CUUR0000SEHA, January 9, 2025. Source for Case-Shiller Home Price Index: S&P Dow Jones Indices LLC, S&P CoreLogic Case-Shiller U.S. National Home Price Index [CSUSHPINSA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CSUSHPINSA, March 5, 2025.
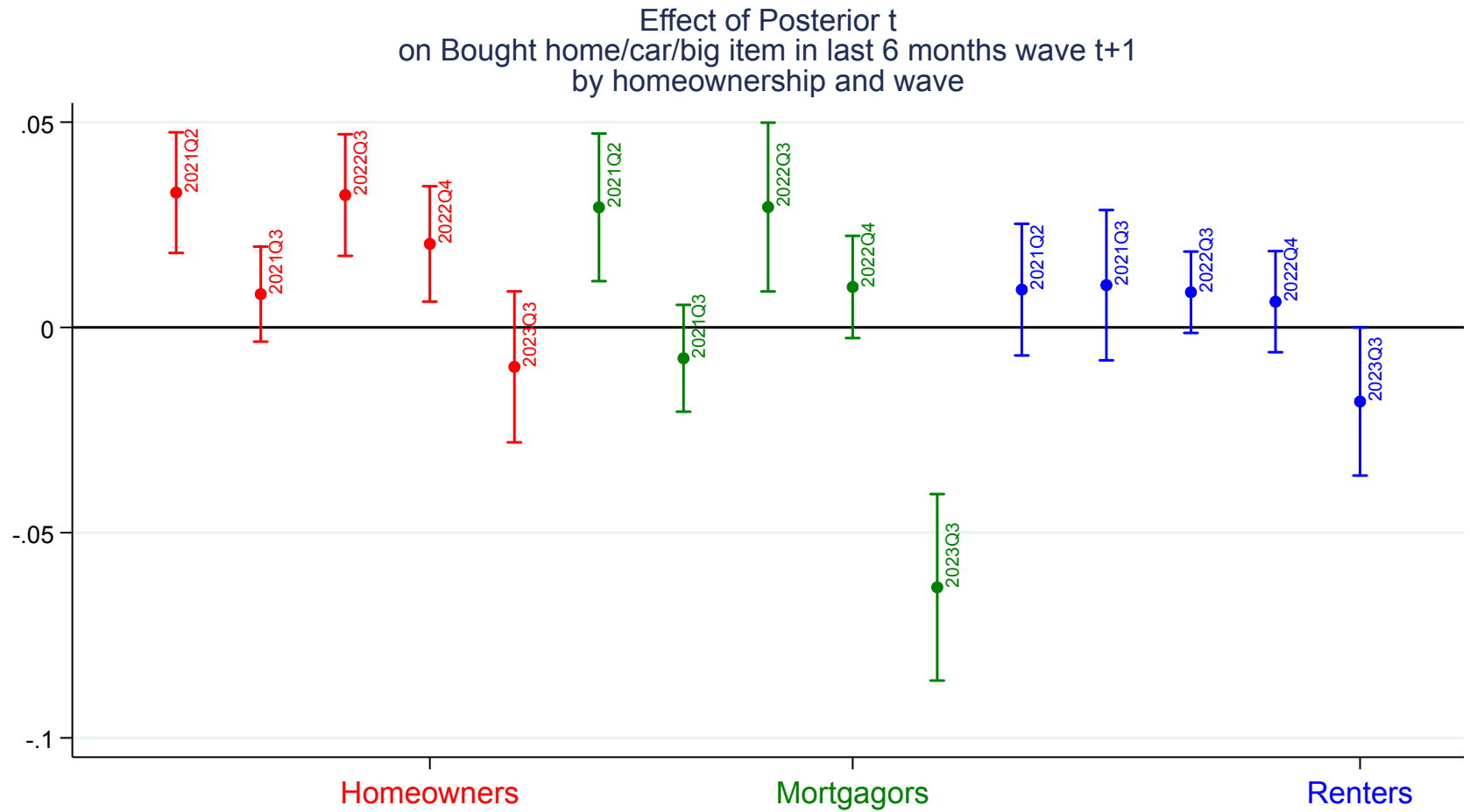
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Figure 8: **Effect of inflation expectations on purchases of durable goods of any kind in the months following the treatment, by Homeownership status and wave.** All estimates are computed using sampling weights as defined in Section 2.3. Figure A3 displays the unweighted results.
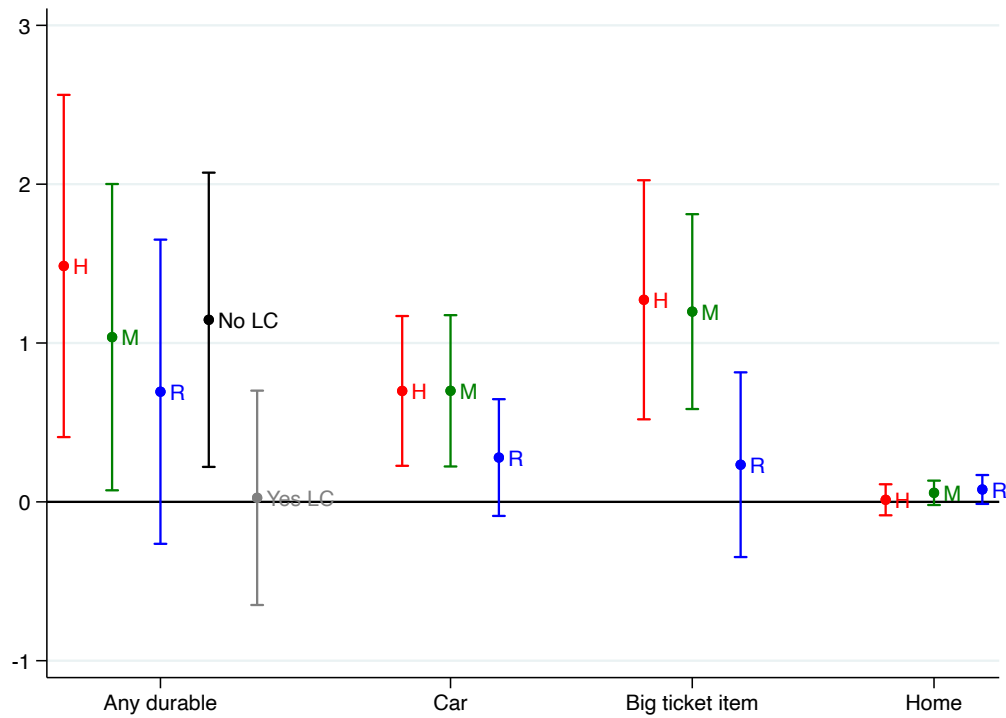
Figure 9: **Effect of inflation expectations on purchases of durable goods (cars, big items, homes) in the months following the treatment, by homeownership status.** The coefficients shown represent the linear combinations of regression estimates presented in Table 5, computed on the pooled data. The coefficients 'No LC' and 'Yes LC' correspond to individuals without and with liquidity constraints, respectively, where liquidity constraints are defined as the inability to cover an unexpected expense equal to one month of income (see Appendix B for question wording).All estimates are computed using sampling weights as defined in Section 2.3. Figure A2 displays the unweighted results.

Online Appendix

Appendix A: Additional Tables and Figures

	(1) Posterior	(2) Posterior	(3) Posterior
Prior	0.505***	0.490***	0.383***
	(0.018)	(0.019)	(0.025)
Treatment: past π	0.258	-0.043	0.101
	(0.199)	(0.212)	(0.294)
Treatment: π target	-0.489**	-1.037***	-0.854***
	(0.203)	(0.199)	(0.284)
Treatment: FOMC forecast	-0.603***	-0.745***	-0.724**
	(0.202)	(0.212)	(0.299)
Prior x Treatment: past π	-0.097***	-0.092***	-0.124***
	(0.030)	(0.032)	(0.041)
Prior x Treatment: π target	-0.155***	-0.132***	-0.161***
	(0.031)	(0.031)	(0.042)
Prior x Treatment: FOMC forecast	-0.162***	-0.201***	-0.142***
	(0.031)	(0.033)	(0.043)
Constant	4.177***	4.309***	5.791***
	(0.164)	(0.168)	(0.220)
Observations	10450.000	9793.000	6200.000
R-squared	0.202	0.190	0.106
Homeownership status	Homeowners	Mortgagors	Renters

Table A1: **Effect of prior expectations and information treatments in the formation of posterior expectations, by homeownership status.** Estimates obtained through OLS, without using sampling weights. Pooled data from waves 2021Q2, 2021Q3, 2022Q3, 2022Q4, 2023Q3. Including wave fixed effects. Robust standard errors in parentheses, clustered by household. */**/*** refer to p-values lower than 0.10/0.05/0.01, respectively.

	Control group
Comparison	P-value
Homeowners vs Mortgagors	.329
Homeowners vs Renters	.050
Mortgagors vs Renters	.275
	Treatment group: past π
Comparison	P-value
Homeowners vs Mortgagors	.926
Homeowners vs Renters	.448
Mortgagors vs Renters	.503
	Treatment group: π target
Comparison	P-value
Homeowners vs Mortgagors	.757
Homeowners vs Renters	.002
Mortgagors vs Renters	.001
	Treatment group: FOMC forecast
Comparison	P-value
Homeowners vs Mortgagors	.007
Homeowners vs Renters	0.000
Mortgagors vs Renters	.281

Table A2: **Significance of differences in prior weights for posterior inflation expectations across homeownership groups.** The null hypothesis states that prior weights are equal between the two groups. A p-value below 0.05 indicates rejection of the null, implying a significant difference in coefficients. P-values are derived from t-tests on regression coefficients in a model regressing posterior expectations on prior expectations, homeownership status dummies, treatment groups, and their interactions. The two groups are considered to assign the same weight to the prior if the coefficient of the relevant interaction term is not significant.

Category: Any durable (car, home, big ticket item)						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought home/car/big item$_{t+1}$	H	2.177***	(0.642)	6367	0.007	38.316
Bought home/car/big item$_{t+1}$	M	1.275**	(0.631)	5498	0.043	41.722
Bought home/car/big item$_{t+1}$	R	0.087	(0.611)	3048	0.095	13.488

Category: Car						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a car$_{t+1}$	H	1.151***	(0.266)	6294	-0.007	35.438
Bought a car$_{t+1}$	M	1.135***	(0.313)	5408	0.017	40.158
Bought a car$_{t+1}$	R	0.484**	(0.189)	3063	0.045	15.030

Category: Big ticket item						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a big ticket item$_{t+1}$	H	1.416***	(0.411)	6320	0.018	42.990
Bought a big ticket item$_{t+1}$	M	1.804***	(0.442)	5442	0.008	39.356
Bought a big ticket item$_{t+1}$	R	0.020	(0.287)	3042	0.046	15.174

Category: Home						
Item	Homeownership status	Posterior	Std. Error	Observations	R-squared	First stage F
Bought a home$_{t+1}$	H	0.102**	(0.046)	6354	0.043	32.801
Bought a home$_{t+1}$	M	0.101*	(0.052)	5467	0.024	13.760
Bought a home$_{t+1}$	R	0.025	(0.025)	3126	0.012	16.934

Table A3: **Effect of inflation expectations on purchases of durable goods in the months following the treatment, by homeownership status. Computed without using sampling weights**. These estimates are computed without using the sample weights defined in Section 2.3. Robust standard errors in parentheses, clustered by household. */**/*** refer to p-values lower than 0.10/0.05/0.01, respectively.

	Category: Any durable (car, home, big ticket item)
Comparison	P-value
Homeowners vs Mortgagors	0.031
Homeowners vs Renters	0.026
Mortgagors vs Renters	0.587
	Category: Car
Comparison	P-value
Homeowners vs Mortgagors	0.713
Homeowners vs Renters	0.036
Mortgagors vs Renters	0.105
	Category: Big ticket item
Comparison	P-value
Homeowners vs Mortgagors	0.033
Homeowners vs Renters	0.173
Mortgagors vs Renters	0.822
	Category: Home
Comparison	P-value
Homeowners vs Mortgagors	0.413
Homeowners vs Renters	0.847
Mortgagors vs Renters	0.479

Table A4: **Significance of differences in the effect of inflation expectations on durable goods purchases across homeownership groups.** The null hypothesis states that the effect of inflation expectations on durable consumption is the same for both groups. A p-value below 0.05 indicates rejection of the null, suggesting a significant difference in coefficients. P-values are derived from t-tests on regression coefficients in an IV regression, where posterior inflation expectations and their interactions with homeownership status are instrumented using prior expectations, treatment groups, homeownership status, and all their interactions. The second stage includes willingness to buy durables and control variables as regressors. The two groups are considered to have the same response to inflation expectations if the coefficient of the interaction between inflation expectations and homeownership status is not significant.
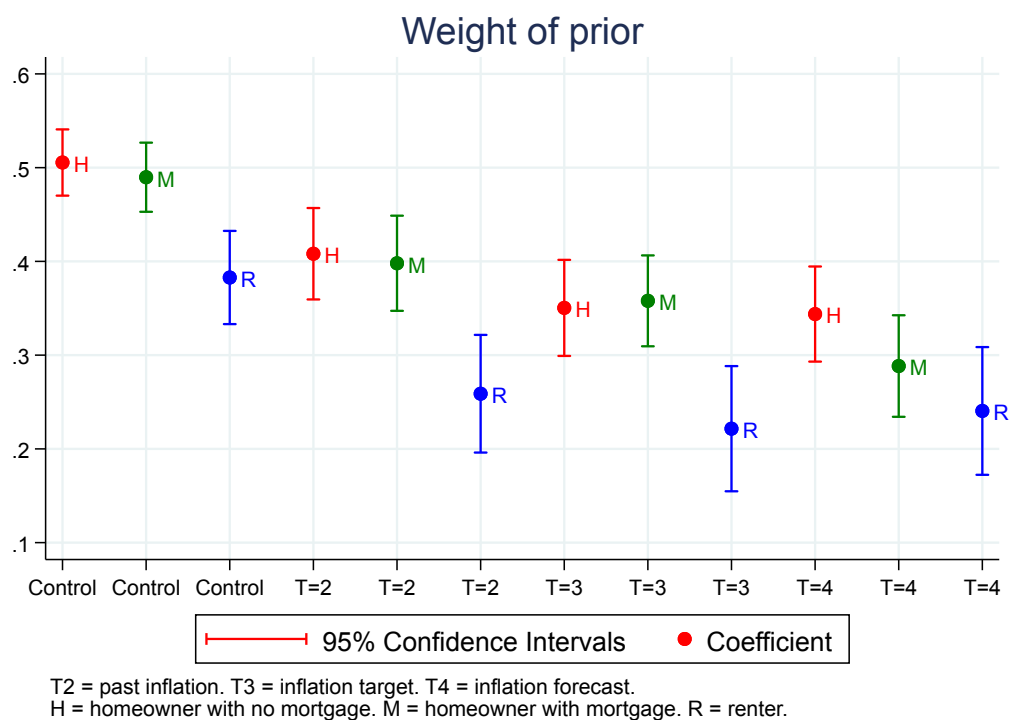
Figure A1: **Weight of the prior, computed without using sampling weights.** The figure reports the weight assigned to prior inflation expectations in the formation of posterior expectations. These estimates are computed without using the sample weights defined in Section 2.3.
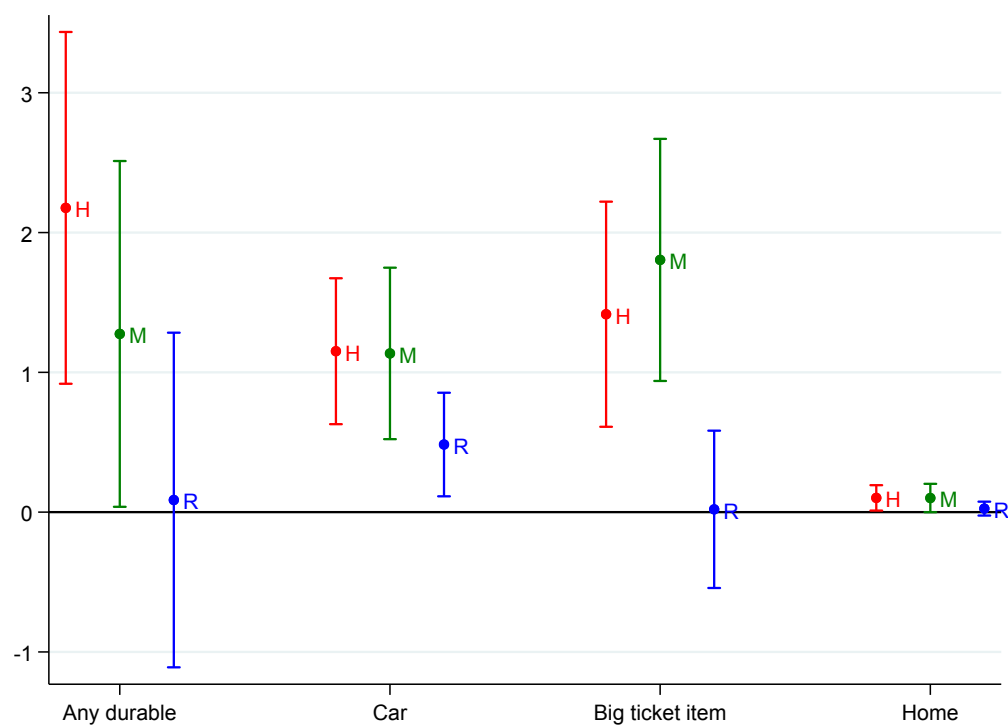
Figure A2: **Effect of inflation expectations on purchases of durable goods (cars, big items, homes) in the months following the treatment, by Homeownership status.** These estimates are computed without using the sample weights defined in Section 2.3.
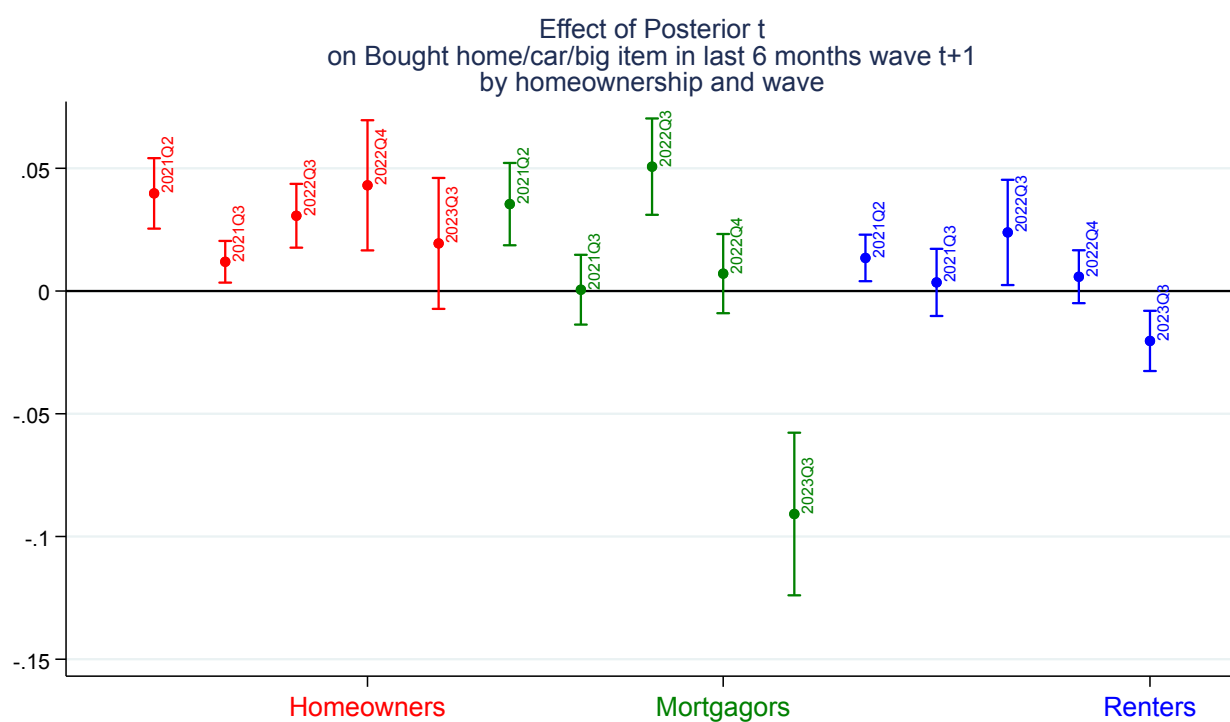
Figure A3: **Effect of inflation expectations on purchases of durable goods of any kind in the months following the treatment, by homeownership status and wave.** All estimates are computed without sampling weights.

Appendix B: Survey questions

This appendix provides the verbatim wording of the survey questions from which the variables used in the analysis were derived. All waves included in the analysis employed identical phrasing for these questions. For illustration, we refer to the questionnaire from the wave administered in Q2 2021.

Homeownership Status

- *Which of the following best characterizes your household?*

    – Own our house/apartment without a mortgage

    – Own our house/apartment with a fixed-rate mortgage

    – Own our house/apartment with a variable-rate mortgage

    – Rent our house/apartment

    – Other

Durable Spending

- *Over the last 6 months, did you buy a new home, car, or other major big-ticket item (e.g., fridge, TV, furniture)?*

    – Yes

    – No

- *Which of the following did you purchase in the last 6 months? (Select all that apply.)*

    – A house/apartment

    – A car or other vehicle

    – A large home appliance or electronics

    – None of the above

- *Do you currently plan to buy a new home, car, or other major big-ticket item (e.g., fridge, TV, furniture) in the next 12 months?*

    – Yes

    – No

- *Which of the following do you plan to purchase in the next 12 months? Please select all that apply.*

  - A house/apartment
  - A car or other vehicle
  - A large home appliance or electronics
  - None of the above

Inflation Expectations (Priors)

- *We would like to ask you about the rate of inflation/deflation. (Note: inflation is the percentage rise in overall prices in the economy, most commonly measured by the Consumer Price Index, and deflation corresponds to when prices are falling). In this question, please indicate the probability (PERCENT CHANCE) of something happening. The percent chance must be a number between 0 and 100, and the sum of your answers must add up to 100. What do you think is the percentage chance that, over the next 12 months...*

  - The rate of inflation will be 12% or more _____
  - The rate of inflation will be between 8% and 12% _____
  - The rate of inflation will be between 4% and 8% _____
  - The rate of inflation will be between 2% and 4% _____
  - The rate of inflation will be between 0% and 2% _____
  - The rate of deflation (opposite of inflation) will be between 0% and 2% _____
  - The rate of deflation (opposite of inflation) will be between 2% and 4% _____
  - The rate of deflation (opposite of inflation) will be between 4% and 8% _____
  - The rate of deflation (opposite of inflation) will be between 8% and 12% _____
  - The rate of deflation (opposite of inflation) will be 12% or more _____

  Total: [TOTAL MUST SUM TO 100%] _____

Inflation Expectations (Posteriors)

- *What do you think the inflation rate (as measured by the Consumer Price Index) is going to be over the next 12 months? Please provide your answer as a percentage change from current prices. If you expect inflation, please enter a positive number. If you expect deflation, please enter a negative number. If you think there was neither inflation nor deflation, please enter zero. _____*

Liquidity constraints

- Suppose that you had to make an unexpected payment equal to one month of your after-tax income, would you have sufficient financial resources (access to credit, savings, loans from relatives or friends, etc.) to pay for the entire amount?

    – Yes

    – No

    – Don't know/Prefer not to answer