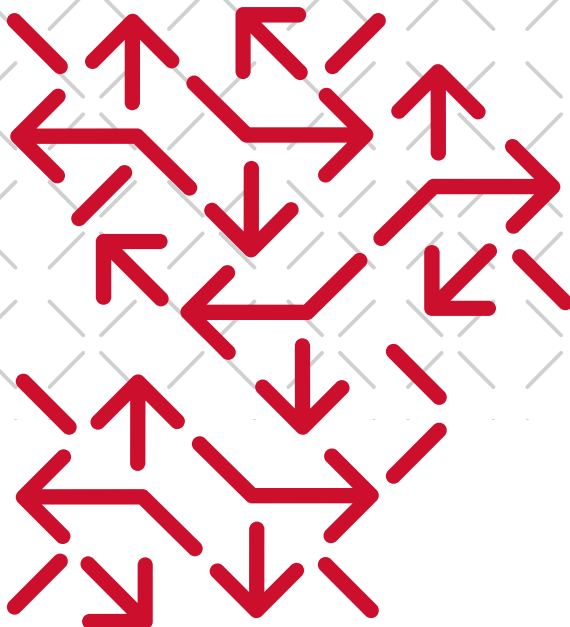


Reversing Effects Between Inflation Expectations and Consumer Intentions

Two decades of survey evidence from Germany

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RESEARCH REPORT

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ABSTRACT

This study examines possible predictors and consequences of expected inflation, a central determinant of individuals' decision making. We utilize unique microdata from the German consumption climate survey covering monthly data from more than 220,000 individuals between 2003 and 2025. Our findings confirm that consumer perception of past inflation plays a decisive role for inflation expectations leading to sticky inflation expectations that need some time to adjust to official inflation statistics. In addition, results indicate that across the sample period, inflation expectations are correlated with reduced individual income expectations. In contrast and as a novelty, the present data shows that the relationship with buying and saving intentions is not stable. During moderate inflation phases inflation expectations are related to lower buying and lower saving intentions, during inflation peaks this relationship reverses to the opposite and during transition phases from moderate to high inflation or vice versa, no significant relationships can be found. Theoretically, the present research indicates that high frequency data is needed to estimate how inflation expectations and consumer intentions are related. Practically, the present research can be used to better time and frame inflation communication and mitigation policies.

Keywords: inflation perceptions, consumer climate, consumer confidence, behavioral economics, consumption behavior

JEL: E31, E39

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1. INTRODUCTION

Inflation is a core factor in the economy. Increasing prices or uncertainty about prices and inflation are seen as costly for the economy and society (Barro, 1996). Thus, most Western central banks pursue official and importantly, also subjective perceived inflation rates around 2 percent. The reason is, as Robert Lucas's (1976) revolutionary theoretical work on rational expectations showed that economic agents' subjective expectations (and not only official statistics) influence current decisions. Therefore, future expected inflation impacts today's consumption, investment, and labor supply.

Although empirical work robustly shows that consumers' inflation expectations are considerably higher than official inflation rates, relatively little is known on how inflation expectations are formed (Weber et al., 2022, Abberger et al., 2024). Though a correlation with official inflation statistics exists (Antonides, 2008), also individual experiences appear to matter. As Weber et al. (2025) show, the upward bias in expectations is typically large when inflation is low and gets smaller when inflation is rising, as households pay more attention to inflation news in times of high inflation. Several studies suggest that inflation expectations are determined by households relating specific prices to purchase experiences on frequently consumed goods such as food and gasoline (D'Acunto et al., 2021). Consequently, inflation expectations are shown to vary with sociodemographic characteristics: female gender, low formal education or low income are associated with higher inflation expectations (Angelico & Di Giacomo, 2024; Weber et al., 2022). In contrast, panel-data from the Michigan survey concludes that inflation expectations are sticky, in the sense that only about 10% of the expectations are based on regular information updating for instance, based on current purchase experiences (Pfajfar & Santoro, 2010). Related research concludes that stickiness stems from selective memory about specific life-time inflation experiences (Gennaioli et al., 2024). Moreover, a recent study used data from the Bundesbank Online Household Panel and implemented three experimental manipulations of different past inflation rates to show that past inflation perceptions causally influence future inflation expectations (Huber, Minina & Schmidt, 2023). Conrad, Enders, and Glas (2022) show that "households obtain inflation numbers from the media, but their 'economic model' is shaped by experience". Thus, inflation expectations appear to be related to individual experiences such as to current purchase events, life-events or simple pass-through of experience.

The empirical literature often reports that expected inflation is related to financial decision making (Botsch & Malmendier, 2023; Fischer, Herler, & Schnattinger, 2025; Ropele, Gorodnichenko, & Coibion, 2023). However, results on the direction and strength of the relationship between inflation expectations and for instance attitudes that compose the consumption climate (i.e., a central indicator for economic activity) are mixed. A large Australian survey study (N = 300,000) shows that individuals with high inflation expectation also have low income expectations (Tsiaplias, 2021). In contrast, an online experiment from the US (N = 3,323) indicates that high inflation expectations are related to higher income expectations (based on an increased willingness to search a new job; Hajdini, Knotek, Leer, Pedemonte, Rich, & Schoenle, 2025). Panel-data from the Netherlands (N = 2,131 per wave) indicates that high inflation expectations are related to low saving rates and high purchasing intentions (Vellekoop & Wiederholt, 2019). Another panel-data study from Poland (N = approx. 1,600 per wave) also reports a positive relationship between inflation expectation and saving intention, however, a negative relationship with spending intention (Premik & Stanislawski, 2017). Mixed results might be explained by considering inflation phases. A panel study (N = 22,000 per wave) from Italy reports that in a high-inflation regime buying intentions are higher than in a low-inflation regime (Rondinelli & Zizza, 2020).

The aim of this research report is twofold: First, we examine factors that are related to inflation expectations such as official inflation statistics, sociodemographic factors and inflation experiences but also possible consequences such as income expectations, saving and buying intentions. Second, we are also interested in exploring

whether the strength or directions of found relationships change over time. To answer our research questions, we use the German consumption climate survey over a long sample period ranging from 2003 to 2025. Section 2 outlines the data and methodology, section 3 presents the results, and section 4 provides a discussion.

2. DATA & METHODOLOGY

This study uses monthly data from the German Consumer Climate Survey (formerly GfK Konsumklima and since 2026 NIM Konsumklima), conducted by the Nürnberg Institute for Market Decisions (NIM). The survey samples approximately 2,000 households monthly as repeated cross-sections and has been conducted consistently since 2003, providing over 22 years of continuous data. Respondents are asked: “How, in your opinion, have consumer prices developed over the last 12 months?” They have 1: increased strongly, 2: increased moderately, 3: increased slightly; 4: remained about the same, 5: decreased or don’t know. And: “How, in your opinion, will consumer prices develop over the next 12 months compared with the last 12 months?” They will 1: increase more strongly than before, 2: increase by about the same amount as before, 3: increase less strongly than before, 4: remain about the same 5: decrease, or don’t know. In both cases, if respondents ticked 1,2,3 or 5, they receive a follow-up question, which forms our key variables. We refrain from imputing missing values with zero if respondents have ticked 4¹.

Households’ inflation expectations as measured in consumer confidence surveys tend to lie substantially above both the officially measured inflation rate (Consumer Price Index, official inflation rate) and other survey-based measures of inflation expectations, including those collected by the central banks (see, for example, ECB, 2021; Bundesbank, 2015). A key part of this discrepancy can be traced to differences in question wording: while consumer confidence surveys typically ask about expected changes in “consumer prices” or “prices in general,” specialized surveys—such as the Bundesbank’s household panel—explicitly refer to the expected “rate of inflation” (ECB, 2021; Bundesbank, 2015). Experimental evidence shows that formulations referring to “prices in general” or “the prices you pay” systematically elicit higher and more dispersed responses than questions about the “inflation rate,” because they are more strongly driven by salient individual price experiences (for example, energy and food prices; Bruine de Bruin et al., 2012; Bruine de Bruin et al., 2016; Pavlova, 2024). Recent studies for the euro area and for Germany confirm that such framing effects account for a non-trivial share of the elevated level and pronounced heterogeneity of inflation expectations measured in consumer confidence indicators, and help explain why these measures persistently exceed both realized inflation and technically more precise survey-based expectation measures (ECB, 2021; Bundesbank, 2015; Glombitza et al., 2023).

Key Variables:

1. **Past inflation perception ($P_{i,t-12}$):** Respondents are asked: "By what percentage do you think consumer prices have risen or fallen over the past 12 months?" Answers are possible up to 3 digits before the decimal point and one digit after plus a checkbox “don’t know”. This captures respondents’ retrospective inflation perception. Inflation expectations are truncated at the 2 and 98 percent percentile on a yearly basis to ensure, we observe the same part of the distribution throughout the sample period which runs

¹ The proportion of responses that do not perceive or expect any changes in inflation varies over time. The impact on the mean value over time is approximately 1.5 to 2 percentage points, but does not fundamentally change the evolution over time. Our results are therefore robust with regard to a variant with imputed values.

from April 2003 to September 2025. These truncated inflation perceptions range between -10 and 100 percent with a mean of 8.7 percent and a standard deviation of 11.3 percentage points.

2. **Inflation expectations ($E_{i,t+12}$):** Respondents are asked: "By what percentage do you think consumer prices will rise or fall over the coming 12 months?". Answers are possible up to 3 digits before the decimal point and one digit after plus a checkbox "don't know". This measures respondents forward-looking expectations. Inflation expectations ran on an interval between -5 and 80 percent, with a mean of 7.3 percentage points and a standard deviation of 8.6 percentage points.

We also incorporate official inflation data from Germany's Federal Statistical Office (Destatis), which publishes the Index of Consumer Prices (CPI) monthly.

Analytical Approach:

To identify the determinants of inflation expectations, we estimate models of the form:

$$E_{i,t+12} = \alpha + \beta_1 SD_{it} + \beta_2 I_t + \beta_3 P_{i,t-12} + t + \epsilon_{i,t} \quad (1)$$

where $E_{i,t+12}$ denotes inflation expectations for individual i at time t , SD_{it} includes sociodemographic characteristics such as age, gender, household composition, income, region, city size, living conditions, education, occupation and family status, I_t is official inflation, $P_{i,t-12}$ is past inflation perception, and $\epsilon_{i,t}$ is the error term. Furthermore, we include a linear trend t , and cluster standard errors monthly. This model is similar to the estimation approach of Huber, Minina and Schmidt (2023) but modified to fit our data structure.

We extend this benchmark model, which will name model (1), in two ways:

First, we add the respondents' attitudes regards the indicators, that together build the consumer climate (model 2). These are:

3. **Income expectations (IE):** "How do you think your household income will develop over the next 12 months?" Responses are coded on a scale from "1 = strong increase" to 5 "strong decrease." The variable has a mean of 3.1 and a standard deviation of 0.84 .
4. **Willingness- to-buy (WtB):** "Do you think now is a good time for major purchases?" Responses range from 1 "The moment is favorable." to 3 "not favorable." The variable has a mean of 2.1 and a standard deviation of 0.81 .
5. **Willingness-to save (WtS):** "How advisable do you think it is to save money at present?" Responses range from 1 "very advisable" to 4 "definitely not advisable." The variable has a mean of 2.2 and a standard deviation of 1.055 .

To ease interpretation, we recode these variables with a linear transformation, such that higher values indicate more optimistic income expectations, a higher willingness to buy and to save.

$$E_{i,t+12} = \alpha + \beta_1 SD_i + \beta_2 I_t + \beta_3 P_{i,t,t-12} + t + IE_{i,t} + WtB_{i,t} + WtS_{i,t} + \epsilon_{i,t} \quad (2)$$

Second, we inspect the time-varying relationship of the expectations formation and these attitudes by estimating a nested model over time. This allows us to shed light on how the relationship of the consumer climate

indicators changes at points at which inflation perceptions and expectations diverged from the evolution of official statistics (see Figure 1). For that purpose, we interact the climate indicators with a full set of year dummies.

$$E_{i,t+12} = \alpha + \beta_1 SD_i + \beta_2 I_t + \beta_3 P_{i,t,t-12} + D_{year} + IE_{i,t} \times D_{year} + WtB_{i,t} \times D_{year} + WtS_{i,t} \times D_{year} + \epsilon_{i,t} \quad (3)$$

From an economic, model-theoretical perspective, inflation expectations influence income expectations, willingness to save, and willingness to purchase. Models 2 and 3 are therefore counterintuitive at first glance, as they reverse this relationship. Nevertheless, we favor modeling it that way for the following reasons: First, the econometric model measures correlations, not causalities, with the available data anyway. Second, the model is nested, which makes it possible to interpret the relative relationships between income expectations, willingness to buy, and willingness to save and inflation expectations.

3. RESULTS

In the following, we first present a visual inspection of the central variables (3.1), before we present the mentioned regression model. We present regression results separately on possible determinants of inflation expectations (3.2), the general relationship between inflation expectation and the consumption climate (3.3) and finally, the time-varying relationship between inflation expectation and the consumption climate (3.4).

3.1. VISUAL INSPECTION OF DATA

Figure 1 shows the time series of official inflation, perceived inflation and expected inflation. It is notable that after the Covid-19 pandemic the gap between official inflation and perceived inflation almost doubled, from 4 percentage points in 2015 to 8.1 percentage points in 2025. In addition, in the beginning of 2003, after the introduction of the Euro, and currently, since the start of the Covid-19 pandemic, a gap between perceived past and expected future inflation emerged, indicating that individuals in high inflation phases are optimistic about a decrease of inflation. Overall, the visual inspection of the data is in line with the finding of Huber, Minina & Schmidt (2023) that in times of low inflation, there is a strong correlation between perceived and expected inflation, but that this correlation weakens in times of high inflation.

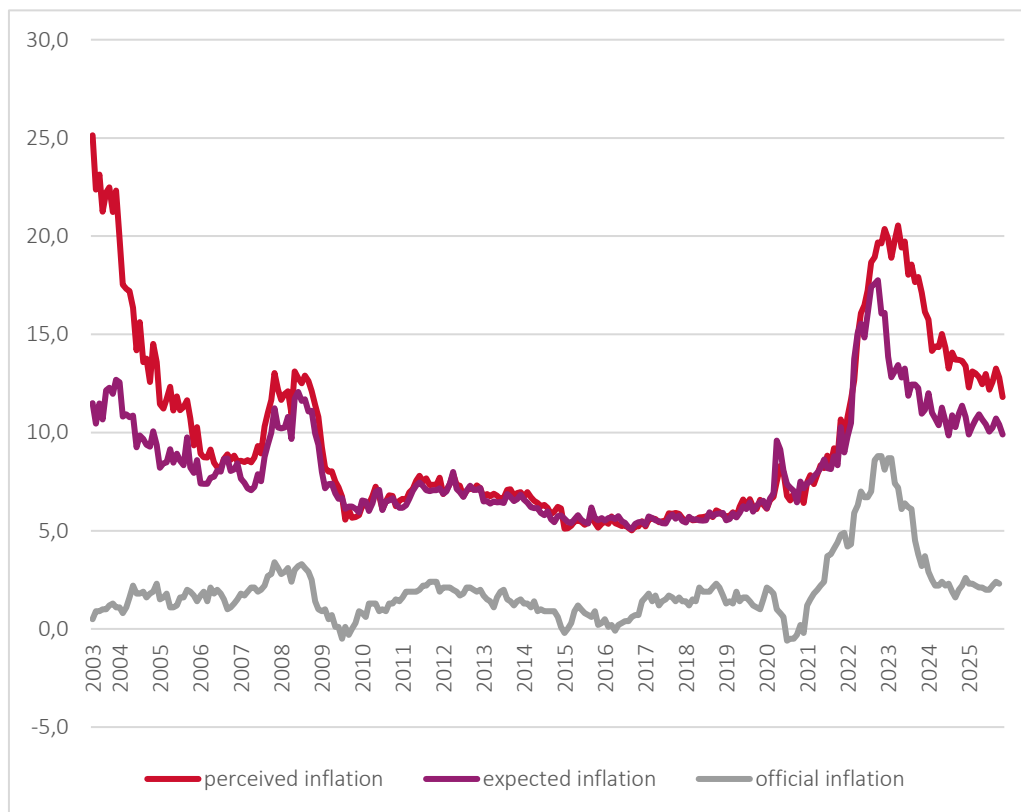


Figure 1: Inflation perceptions, expectations, and official rate, 2003-2025 (Source: Destatis and German Consumer Climate Survey.)

3.2. POSSIBLE DETERMINANTS OF INFLATION EXPECTATIONS (MODEL 1)

To examine the determinants of inflation expectations, we conducted a pooled OLS regression model as explained in the analytical approach part (Model 1). Figure 2 displays the respective parameter estimates (only significant coefficients are shown for readability; the detailed results can be found in the appendix). Results show that sociodemographic variables are related to inflation expectations such that respondents who are not employed or are retired have particularly high inflation expectations whereas respondents with a high income (in the 3rd and 4th quartile in the OECD equivalence income distribution) have particularly low inflation expectations. However, all socio-demographic variables combined, only explain about 7 percent of the variation in inflation expectations (see first column of Appendix Table 1).

In contrast, official inflation and past inflation perceptions increase explanatory power substantially. When we add only the official inflation rate to the model, the explanatory power rises to 0.13. When we only add the perceived inflation rate the adjusted R^2 is at 0.58. When we add both variables to the model, the explanatory power increases to roughly 0.63. Past perception of inflation is a robust powerful predictor of current inflation expectations (Coef: > 0.6, t-value: >40.0), with a coefficient substantially larger and more precisely estimated than official inflation (Coef: >0.2, t-value: 3.4-4.6). This perception-expectation link is well documented, and for Germany our results on the pass-through parameter are well in line with the findings of Huber, Minina and Schmidt (2023), which estimate this parameter with panel regressions to lie between 0.53 and 0.83. Full table can be found in Appendix. In a robustness check (see appendix), we can further show that our estimates are not confounded by a change as of the impact of sociodemographic variables over the large sample span.

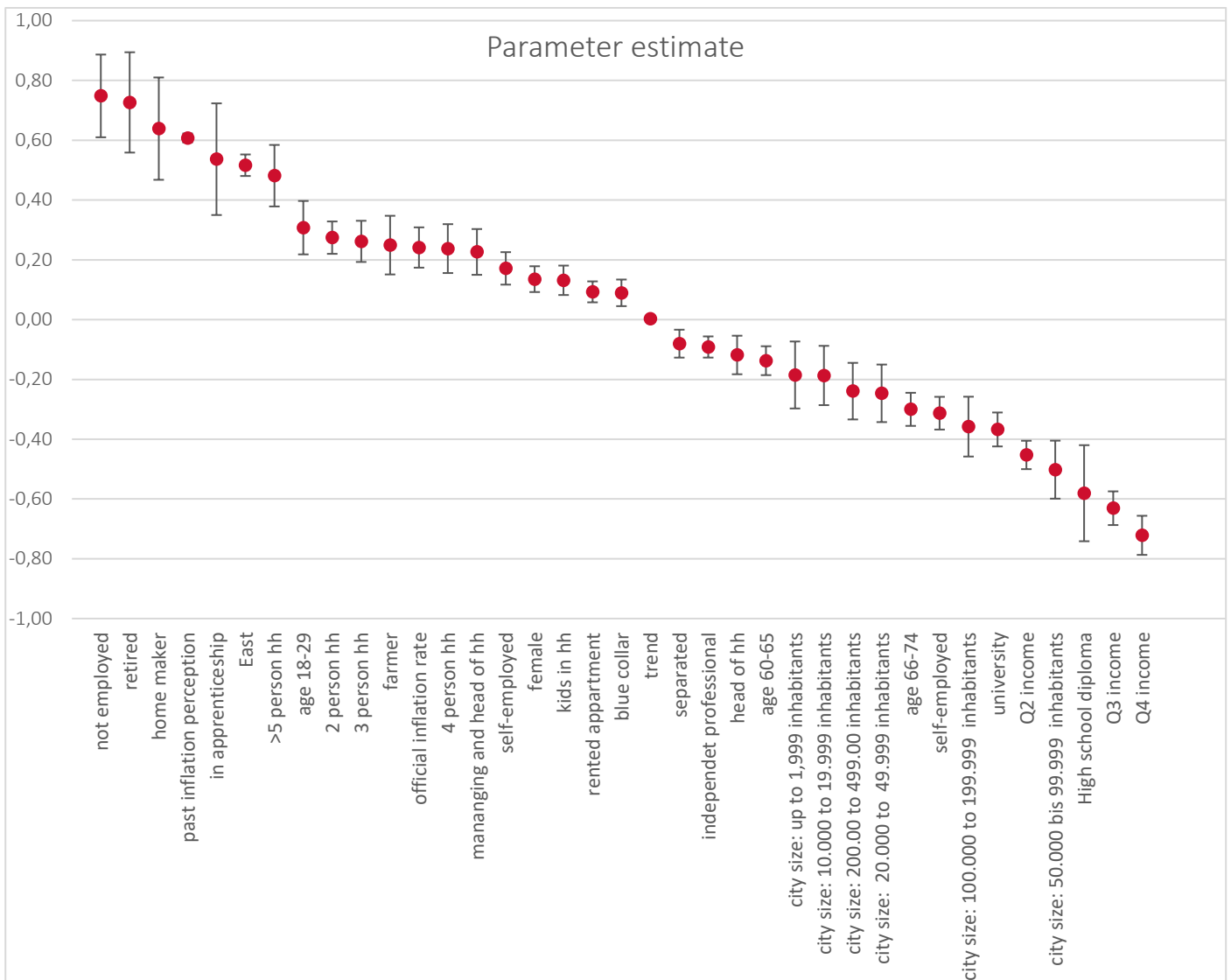


Figure 1: Coefficient and confidence intervals of parameters of OLS regression of model 1

3.3. GENERAL RELATIONSHIP BETWEEN INFLATION EXPECTATIONS AND CONSUMER CLIMATE (MODEL 2)

To examine the relationship between inflation expectations and the components of the consumption climate (income expectations, willingness to buy, and willingness to save), we expanded the pooled OLS regression model as explained in the analytical approach part (Model 2). Results are displayed in Table 1.

Table 1: General relationship between expected inflation and consumption climate components

Regression Model 2 Dependent variable: inflation expectations [-5,80]	Coefficient (t-value)
Income expectations	-0.475 *** (-11.92)
Willingness to buy	-0.0307 (-0.94)
Willingness to save	-0.0389 * (-1.93)
Control variables: perceived inflation rate, official inflation rate, age (reference: 50–59 years), gender (reference = male), household size (reference = 1-person household), children in the household (reference = none), household management (reference = no), head of household (reference = no), education (reference = elementary/lower secondary school), occupational status (reference = employed), occupation (reference = salaried employee), city size (reference = up to 2,000 inhabitants), East/West (reference = West), housing tenure (reference = own house), and equivalised net income (in quartiles, reference = 1st quartile). R^2 adj = 0.625; Prob > F = 0.0000, n = 225,120. Standard errors clustered by survey month. Income expectations: In your opinion, how will your household's financial situation develop over the next 12 months? Propensity to buy: Do you think that, given the current general economic situation, it is currently a good time to make major purchases (furniture, electrical/electronic appliances, etc.)? Propensity to save: Do you think that, given the current general economic situation, it is currently advisable to save?	

Concerning **income expectations** results show a strong negative relationship between inflation expectations and income expectation. The coefficient of -0.475 implies that if income expectations are 1 point more optimistic on a scale from 1 to 5 (with 1: income will get a lot worse to 5: income will improve a lot in the upcoming 12 months) the inflation expectation of that person is ~ 0.5 percentage points lower. This implies that consumers' high inflation expectations go together with pessimism about future income growth.

Concerning **willingness to buy**, surprisingly, long-term analysis reveals no significant correlation between inflation expectations and willingness-to-buy across the full sample. This suggests that higher inflation expectations alone do not directly suppress purchasing decisions for durable goods or lead to advanced purchases. However, when we restrict the sample to the low inflation phase between 2010 and 2020, a significant effect emerges (Appendix Table 3) which points to negative relationship, i.e. a one point more optimistic view on the propensity to buy (from 1: the moment is not favorable to buy to 3: the moment is favorable.) is associated with lower inflation expectations.

Results on **willingness to save** indicate that inflation expectations show a negative correlation with the willingness to save. When respondents think that it is 1 point more advisable to save on a scale from 1 to 4 (with 1: not advisable at all to 4: very advisable), their inflation expectations decrease by 0.0389 percentage points. However, economically the effect is rather small and not very precisely estimated.

3.4. TIME-VARYING-RELATIONSHIP BETWEEN INFLATION EXPECTATION AND CONSUMER CLIMATE

To assess how expectation formation and related economic attitudes vary across inflation regimes, we estimate a nested model that allows the relationship between inflation expectations, and consumer climate indicators to evolve over time. Specifically, by interacting income expectations (IE), willingness to buy (WtB), and willingness to save (WtS) with a full set of year dummies (model 3), we trace how attitudes change in periods in which inflation perceptions and expectations diverged from official statistics. This approach is closely related to recent evidence on state-dependent expectation formation. Huber, Minina, and Schmidt document that the pass-through from perceived to expected inflation increases when inflation becomes salient, while Weber et al.

(2025) show that learning is substantially more structured in high-inflation environments. Results are displayed in Figure 3.

Figure 3 shows a plot of the coefficients from income expectations, willingness to buy and willingness to save on inflation expectations over time. The dots show the coefficient; black vertical lines indicate the standard deviation, significant coefficients are plotted in red circles, insignificant coefficients are shown as grey dashed line.

Three things become evident: First, the relationship of income expectations and inflation expectations holds almost across the whole period; however, varies considerably in size. While in 2017 the coefficient is -0.09 , in 2022 it is ten times lower: -0.98 . In general, there is a negative relationship between inflation expectations and income expectations or in other words, high inflation expectations are related to the expectation of a lower income.

Second, willingness to buy and willingness to save are less stable in their connection across time with inflation expectations and appear to be disrupted by economic shocks, such as the introduction of a new currency like the euro, the rise in value-added taxes or the current multi-crises after the Covid-Pandemic. Furthermore, our estimates provide weak evidence that the sign of the relationship changes when shocks are sufficiently large: The coefficients on willingness to buy and willingness to save change signs and turn significantly positive in 2022, during a peak of high inflation. Thus, in times of low or moderate inflation expectations, there is a negative relation between inflation expectation and willingness-to-buy or in other words high inflation expectations and low buying intentions are related. Surprisingly, during low or moderate inflation, higher inflation expectations are also related to lower saving intentions. However, during the peak of inflation these relationships turn and high inflation expectations are related to an immediate higher willingness-to-buy and a higher willingness-to save. Shortly after the peak of inflation buying intentions are still high, but saving intentions are negative (likely because after the Covid-Lockdowns, people had money saved which they preferred to finally spend again). Generally, before and after the peak of inflation there is no significant relationship between inflation expectations and willingness-to-buy or willingness-to-save.

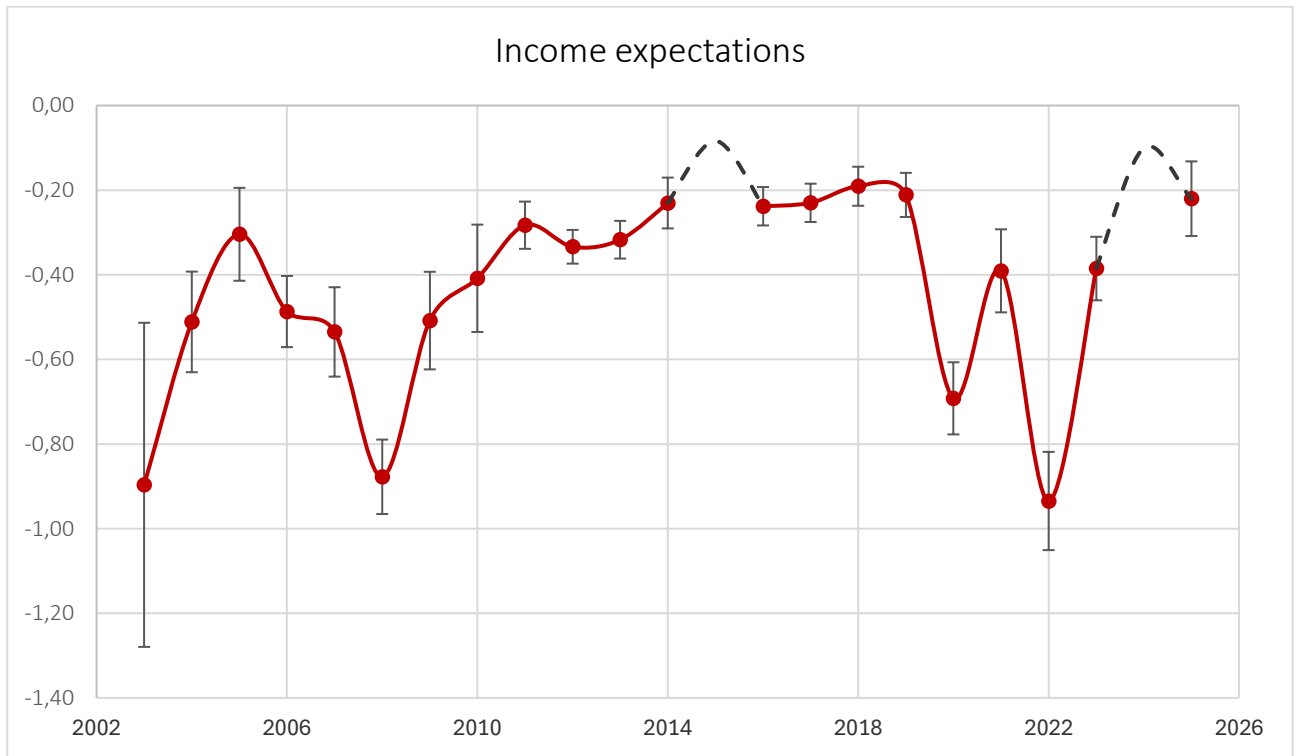
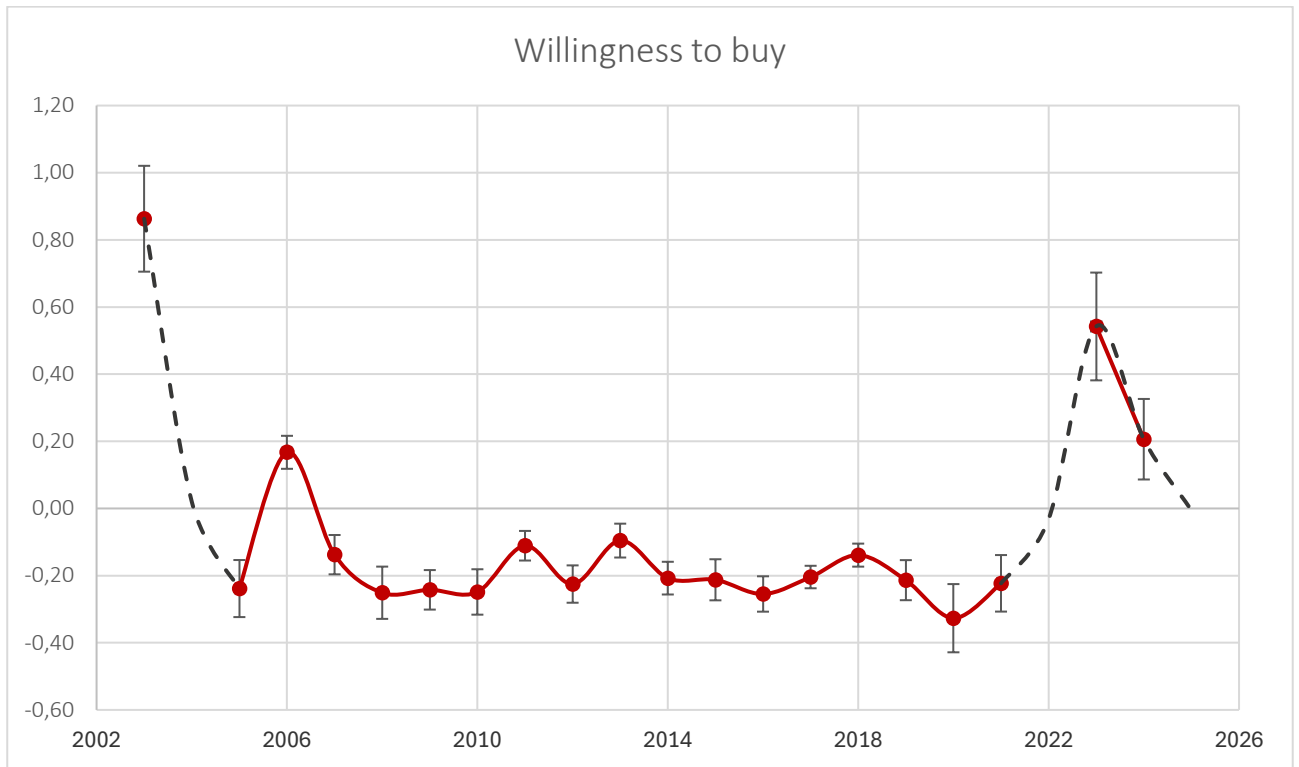
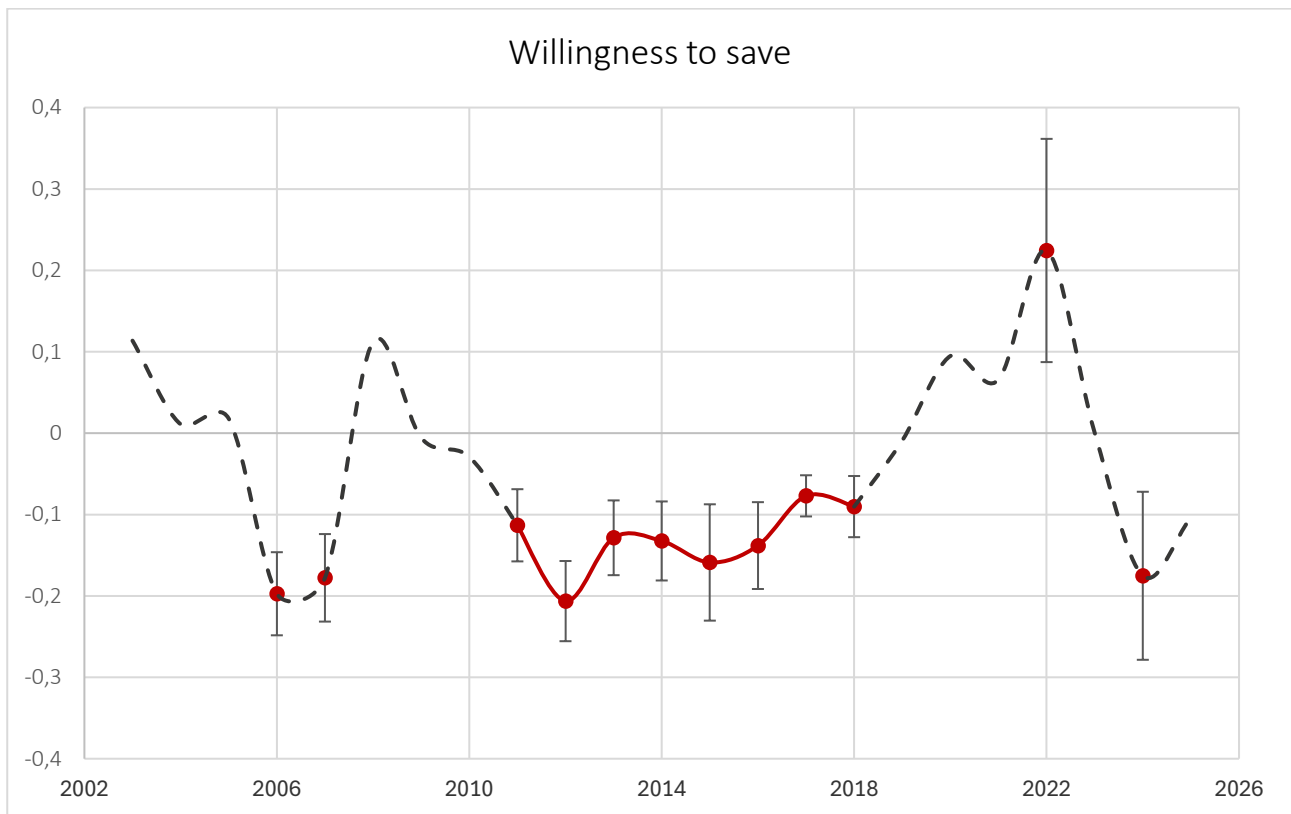


Figure 2: yearly coefficient on consumer climate indicators

Interpretation guide: For example, in 2007 the correlation between inflation and income expectations is - 0.49, implying that a 1 point more optimistic view of income expectations on a scale from 1 to 5 (with 1: income will get a lot worse to 5: will improve a lot in the upcoming 12 months) is associated with a 0.49 percentage points lower inflation expectation on average across the year.



Interpretation guide: For example, in 2007, the correlation between inflation and willingness to buy is -0.14, which means that a 1 point higher willingness to buy on a scale from 1 to 3 (with 1: no, it is not the right moment now to 3: yes, it is the right moment now to make major purchases) correlates with 0.14 percentage points lower inflation expectations.



Interpretation guide: For example, in 2007, the correlation between inflation expectations and willingness to save is -0.18 that means when consumers think that it is 1 point more advisable to save on a scale from 1 to 4 (with 1: not advisable at all to 4: very advisable), inflation expectations are 0.18 percentage points lower.

Thus, the present data indicates that during peaks of high inflation the relationship between inflation expectations and consumer related intentions flips. In the appendix, we present a robustness check which directly tests and confirms this reversal of the correlation between inflation expectations and buying and saving intentions.

4. DISCUSSION

Inflation expectations are an important factor for the economy and society. The aim of the present research was, based on 22 years of data from the German consumption climate survey (2003-2025), to examine factors that are related to inflation expectations, either as possible determinants or as possible consequences. In addition, we examined whether the relationship changes over time when inflation increases or decreases.

Results show that, in the German consumption climate survey data, inflation expectations are correlated to socio-demographic characteristics as suggested by the literature (Angelico & Di Giacomo, 2024; Weber et al., 2022). Especially, low versus high income is related to high versus low inflation expectations. However, the explanatory power between socio-demographics and inflation expectations is weak. Instead, results indicate that inflation perceptions explain a major part of future inflation expectations. Hence, individual experience matters for inflation expectations, but these experiences are more aligned to the past or in other words to the memory of inflation and the memory is projected to the future. This result supports the assumption of sticky inflation expectations (Pfaifar et al., 2010) related to a simple pass-through of past and existing inflation perceptions (Huber, Minina & Schmidt, 2023). Thus, individuals appear to form inflation expectations in slow dynamics with

a time lag instead by immediate updates on available information. This might be indicative for the general assumption that consumers do not form their inflation expectations based on current official inflation statistics but more likely based on a comparison of today's prices to the past prices of several years or other points in their memory (Goldfayn-Frank and Wohlfahrt, 2020). In particular, when inflation increases sharply, there is a large difference between official inflation statistics and inflation expectations. However, the visual inspection of the data also suggests that when official inflation decreases, the adjustment mechanism of inflation expectations is less sluggish than that of inflation perceptions.

Concerning the relationship between inflation expectations and consumer climate, results show a robust negative relationship with income expectations. Even though our estimation strategy does not allow for causal interpretation, the results are indicative for the following relationship: Individuals who believe that inflation will increase, expect lower income. The mechanism shows that respondents understand the difference between nominal and real income losses in relationships with inflation. However, results also show that after the high inflation phase of 2023, this relationship weakens, indicating that consumers may expect a nominal and real income increase. Indeed, in Germany in 2023 income increased by 6% on average, which was the strongest income growth in more than 10 years (Destatis, 2024). Finally, the distortions in the relationship between inflation expectations and income expectations during rising inflation might partly also be related to the fact, that the labor market stayed relatively robust during that time. Usually, when consumers fear losing their job, they tend to see inflation as a sign of economic crisis and unfairness (Burke & Ozdagli, 2023; Shiller, 1996; Stancheva, 2024).

For the relationship between inflation expectations and willingness to buy durable goods and willingness to save, we find that sharp increases of inflation turn around the relationship. During phases of moderate inflation higher consumers' inflation expectations are negatively related to buying *and* saving intentions. The simultaneous negative effects in the intention to buy durable goods and to save during moderate times appears counter-intuitive as the intention to buy less come along with the intention to save more. However, the relationship, though statistically significant, is economically not meaningful and thus, results should not be overinterpreted. Surprisingly, when inflation increases sharply, high inflation expectations are related to a higher intention to buy durable goods and a higher intention to save. In such times, households seem to seek temporary ways to preserve value — partly by investing in durable goods, partly by saving more. In addition, during times of a change from moderate inflation to high inflation or vice versa for instance, for instance between 2020 and 2022, on average no meaningful correlation between inflation expectation and buying and, in particular, saving intentions can be found. Thus, the relationship between inflation expectations and buying and saving is much more complex than assumed in the vast majority of the literature, in which rising inflation expectations are associated to increasing buying intentions of durable goods (Li, Sun, & Qiu, 2025) or in which antagonistic relationships between buying and saving intentions are reported (Premik & Stanislawski, 2017; Vellekoop & Wiederholt, 2019)

As possible explanation can be that the reversing interaction terms of our regression capture shifts from sentiment-driven correlations toward expectation-based behavioral adjustments. In periods of moderate inflation, they predominantly reflect a sentiment channel, in which inflation expectations are mainly a proxy for generalized economic pessimism. This generates a stable, but largely non-structural, co-movements in income expectations, saving attitudes, and purchase intentions. When inflation rises and moves into the focus of public attention (Weber et al., 2025), the same coefficients point to a stronger role for a forward-looking expectations channel. Then the willingness to buy and to save starts to react in the theoretically expected direction, while the direct link to income expectations weakens as households increasingly factor in prospective nominal income adjustments. As households start anticipating nominal wage adjustments, their real income expectations become less pessimistic, supporting both buying and saving intentions.

As other rare empirical evidence suggests (Ronidelli & Zizza, 2020), also our data leads to the conclusion that the inflation phase seems to play a key factor that moderates the relationship between inflation expectation and buying and saving intention. However, it is hard to determine inflation phases a priori which makes it necessary to analyze inflation expectations with more comprehensive data such as panel data. In the present data, we do not find a phase lasting over years but only a spike during one year, when inflation peaked. In addition, not only inflation expectations impact decisions but also the perceived impact of past inflation. For instance, a survey study in Germany and the United States, conducted in 2025 when official inflation and inflation expectations were moderate, indicates that individuals might save more after a high inflation phase because they have the intention to re-save the value of the savings – as the purchasing power of savings decreased due to inflation (Bauer, Bürkl & Gangl, 2025).

To sum up, on a theoretical level, the present research confirms that inflation expectations are sticky and thus, are heavily related to inflation perceptions based on memory. As a novelty the present research shows that the relationship between inflation expectations and consumption-related intentions (i.e., saving, spending) is moderated by inflation peaks or phases. This insight implies that there is no simple relationship between inflation and consumption and that future methods to investigate inflation need to be able to take inflation phases or the context in general into account.

A limitation of the present study is that the peak of inflation in 2023 corresponds to the year after the Covid-19 pandemic. Thus, not inflation might have caused a higher intention to buy but the possibility to make purchases after the Pandemic induced lockdowns. Nonetheless, inflation is always related to some political or economic events and likely does not just appear out of itself. Thus, the present research can be taken as evidence that inflation expectations and consumer related intentions have no stable relationship. Future studies need to clarify, whether only very high and prolonged inflation leads to an increase of purchases.

The practical implications of the present research concern monetary policy communication about inflation and social policy. Monetary policy needs to manage the fact that expected inflation is subject to a phasing-out-period after peaks of high inflation. Although there is no statistical valid test, Figure 1 indicates that it took four years between 2003 and 2007, until the high inflation experiences and high inflation expectations synchronized again. Another indicator for when individuals “digested” past inflation would be the moment when the correlation between inflation expectation and buying and saving intention turns from positive to negative. The present data indicates that during normal times, inflation expectations and buying and saving intentions are rather negatively related. It can be assumed that during the phasing out time, low prices are particularly important to not further prolong high levels of subjective expected inflation and to allow consumers to get adjusted to the new price levels.

Concerning communication about inflation, citizens might lose trust in official statistics and public institutions, if their perception is not aligned with official statistics. Thus, during the time when the public still is concerned with phasing out the high peaks of inflation, communication of official inflation statistics should be conducted with caution, especially through media (Bjerkander and Glas, 2024). Instead of telling, that “inflation is over” more sensitive messages should be chosen such as “inflation has slowed down”. Experimental studies can test which messages increase trust instead of corroborating trust during the phasing-out time of high subjective inflation expectation.

Social policy needs to consider that vulnerable groups suffer the most from inflation and in particular, price increases in daily consumer goods such as food. Thus, starting with inflation peaks, social policy needs to mitigate the effect of price increases in essential daily goods by either targeted increase of monetary transfers or by issuing vouchers. Indeed, Germany also followed that approach in principle and introduced different social policy

measured intended to target vulnerable groups (inflation compensation bonus, energy price cap, etc.). However, considering our findings, the timing and phase-outs of these policies would need to be revisited to better align them to consumers perceptions.

The current research should be interpreted based on the following limitations. The present data is not panel data in which the same individuals are observed over time. Instead, the German consumer climate survey is a repeated cross-section. However, the respondents of the German consumer climate survey can be seen as unbiased concerning inflation related attitudes and thus as more representative for the public opinion compared to respondents of panels which must fill in questions on inflation regularly and thus, gain an expert opinion. Another limitation is the assessment of inflation experience and expectations in close special proximity within the survey which might have caused a priming effect, such that simply the sequence of questions leads to similar answering patterns. Nonetheless, previous studies based on experimental data also indicate that past experiences are a main driver of inflation expectations (Huber, Minina & Schmidt, 2023). However, future studies should examine with panel data whether also inflation experiences and inflation expectations which were assessed in different survey waves are related. To fully explain inflation expectations, future studies also should investigate more possible determinants of inflation expectation in combination such as general inflation perceptions next to daily shopping perceptions and media reports (Lamla & Lein, 2014). For instance, the data of the German consumer climate survey could be combined with other data on media reports to test the effect of media coverage on individuals' inflation expectations. It could be argued that another limitation of the present study is that the peak of inflation in 2023 corresponds to the years after the Covid-19 pandemic. Thus, not inflation might have caused a higher intention to buy but the possibility to make purchases after the Pandemic-induced lockdowns. However, all Covid-19 related restrictions in Germany terminated in March 2022 and thus, our effects cannot fully be attributed to the recovery after lockdowns. Finally, the simultaneous and coherent relationships of buying and saving intentions with inflation cannot fully be explained based on the present data. Future research needs to assess buying and saving intentions in more detail in addition to different potential motivational drivers to provide empirical evidence for the mechanisms found in the present data.

This study used novel data to show that only peaks but not low inflation phases or high inflation phases increase buying intentions. Future studies on data from other countries need to clarify whether this finding is generalizable or not. More research is also needed to confirm and examine the interplay of savings and consumption intentions after phases of high inflation. Finally, different communication strategies after phases of high inflation should be experimentally tested to identify ways to increase trust in public statistics and institutions.

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APPENDIX

ADDITIONAL TABLES

6. COMPREHENSIVE RESULTS

Appendix Table 1: REGRESSION RESULTS: INFLATION EXPECTATIONS – FULL TABLE

Effects of model 1 to 3 on expected inflation.

Variable	Expected Inflation	Expected Inflation	Expected Inflation	Expected Inflation	Expected Inflation	Expected Inflation
	Only Demographics	Model 1	Model 2	Model 3 (With trend)	Model 3 (with year dummies)	Model 3 (robustness – before and after 2023)
Perceived Inflation		0.608***	0.605***	0.616***	0.616***	0.615***
		(40.85)	(41.25)	(42.46)	(42.39)	(40.15)
Official Inflation (CPI)		0.241***	0.219***	0.097	0.094	0.216***
		(3.58)	(3.38)	(1.85)	(1.46)	(4.63)
Gender (Ref: Male)						
Female	0.748***	0.135***	0.104**	0.138***	0.139***	0.096**
	(7.29)	(3.14)	(2.36)	(3.22)	(3.23)	(2.15)
Household Size (Ref: 1 person)						
2 persons	1.113***	0.274***	0.314***	0.262***	0.263***	0.320***
	(10.08)	(5.06)	(5.65)	(4.62)	(4.73)	(5.76)
3 persons	1.248***	0.262***	0.270***	0.230***	0.230***	0.285***
	(9.21)	(3.80)	(3.78)	(3.24)	(3.26)	(4.00)
4 persons	1.345***	0.238***	0.289***	0.258***	0.259***	0.315***
	(8.44)	(2.91)	(3.45)	(3.11)	(3.13)	(3.78)
5+ persons	2.292***	0.481***	0.506***	0.458***	0.457***	0.531***
	(12.99)	(4.68)	(4.63)	(4.24)	(4.25)	(4.88)

City Size (Ref: < 2,000 inhab- itants)						
2,000–2,999	0.418** (2.11)	-0.185* (-1.65)	-0.297*** (-2.74)	-0.437*** (-4.41)	-0.440*** (-4.42)	-0.257** (-2.43)
3,000–4,999	0.392** (2.27)	-0.0794 (-0.75)	-0.194* (-1.91)	-0.286*** (-2.99)	-0.289*** (-3.00)	-0.167 (-1.65)
5,000–9,999	-0.0190 (-0.11)	-0.0807 (-0.79)	-0.153 (-1.55)	-0.231** (-2.42)	-0.232** (-2.42)	-0.143 (-1.45)
10,000– 19,000	-0.617*** (-4.09)	-0.187* (-1.88)	-0.270*** (-2.81)	-0.301*** (-3.26)	-0.303*** (-3.26)	-0.278*** (-2.89)
20,000– 49,000	-1.022*** (-6.94)	-0.247** (-2.56)	-0.313*** (-3.36)	-0.345*** (-3.86)	-0.354*** (-3.87)	-0.334*** (-3.58)
50,000 – 99,000	-1.582*** (-10.47)	-0.502*** (-5.18)	-0.564*** (-6.00)	-0.481*** (-5.32)	-0.479*** (-5.26)	-0.615*** (-6.63)
100,000 – 199,000	-2.026*** (-10.50)	-0.0811 (-0.80)	-0.159 (-1.57)	-0.0886 (-0.92)	-0.091 (-0.95)	-0.197** (-1.98)
200,000 – 499,000	-1.584*** (-8.58)	-0.239** (-2.53)	-0.335*** (-3.63)	-0.2767 (-3.11)	-0.282 (-3.17)	-0.376*** (-4.13)
Over 500,000	-2.815*** (-16.55)	-0.358*** (-3.58)	-0.408*** (-4.30)	-0.3266 (-3.74)	-0.328 (-3.72)	-0.486*** (-5.25)
Marital Sta- tus (Ref: Single)						
Coupled	0.0927 (0.92)	-0.0488 (-0.77)	-0.0259 (-0.39)	-0.035 (-0.53)	-0.033 (-0.50)	-0.0341 (-0.52)
Married	-0.139 (-1.47)	-0.0448 (-0.84)	-0.0192 (-0.35)	-0.0432 (-0.80)	-0.0432 (-0.80)	-0.0281 (-0.53)
Widowed/	-0.388***	-0.0804*	-0.0373	-0.0278	-0.0298	-0.0595

di- vorced/sep- arated	(-5.20)	(-1.72)	(-0.77)	(-0.59)	(-0.61)	(-1.24)
Children in Household (Ref: No children)						
Has children	0.570*** (6.79)	0.131*** (2.67)	0.147*** (2.90)	0.131*** (2.60)	0.133*** (2.65)	0.151*** (2.96)
Housing Sta- tus (Ref: Owner-oc- cupied house)						
Rented	0.445*** (5.50)	0.0530 (1.15)	0.0779* (1.68)	0.0282 (0.62)	0.0259 (0.57)	0.0881* (1.91)
Owner-oc- cupied apartment	0.870*** (14.52)	0.0928*** (2.65)	0.0776** (2.31)	0.0360 (1.15)	0.0361 (1.16)	0.0979*** (3.06)
Age Group (Ref: 50-59 years)						
unkown	0.445*** (5.50)	-0.1120 (-1.58)	-0.0368 (-0.50)	0.0398 (0.58)	0.0371 (0.54)	-0.0527 (-0.74)
18–29 years	0.870*** (14.52)	0.308*** (3.44)	0.562*** (5.92)	0.5449*** (5.94)	0.544*** (5.93)	0.172*** (3.14)
30–39 years	-0.793*** (-6.50)	0.0337 (0.62)	0.1810*** (3.33)	0.176*** (3.32)	0.176*** (3.32)	0.1720*** (3.14)
40–49 years	1.381*** (8.12)	-0.0175 (-0.41)	0.0566 (1.24)	0.0452 (1.02)	0.0441 (0.99)	0.0390 (0.86)
60–65 years	0.750*** (6.73)	-0.137*** (-2.84)	-0.135*** (-2.58)	-0.1188* (-2.37)	-0.120** (-2.39)	-0.0905*** (-1.80)
66–74 years	-0.0898 (-1.30)	-0.300*** (-5.42)	-0.264*** (-4.55)	-0.1188 (-2.37)	-0.217*** (-3.93)	-0.196*** (-3.49)

Household Status (Ref: neither head nor managing)						
Head of household manages household	1.145***	0.226***	0.283***	0.2168***	0.219***	0.293***
	(7.35)	(2.96)	(3.55)	(2.85)	(2.86)	(3.74)
Managing the household	-0.361***	-0.0864	-0.0333	-0.0727	-0.0725	-0.0663
	(-2.66)	(-1.19)	(-0.48)	(-1.09)	(-1.08)	(-0.97)
Head of household	-0.448***	-0.118*	-0.1000	-0.0517	-0.0515	-0.113*
	(-4.14)	(-1.84)	(-1.60)	(-0.86)	(-0.85)	(-1.83)
Education (Ref: general secondary school)						
Intermediate secondary school	-0.249***	-0.0917**	-0.0850**	-0.0526	-0.0509	-0.0467
	(-4.19)	(-2.59)	(-2.24)	(-1.41)	(-1.36)	(-1.26)
University entry qualification	-0.425***	-0.313***	-0.280***	-0.220***	-0.218***	-0.168***
	(-4.23)	(-5.72)	(-4.86)	(-3.87)	(-3.85)	(-2.94)
University	-1.024***	-0.367***	-0.335***	-0.322***	-0.320***	-0.229***
	(-8.04)	(-6.48)	(-5.84)	(-5.91)	(-5.84)	(-4.11)
Region (Ref: Old Bundesländer)						
New Bundesländer	0.570***	0.516***	0.513***	0.5277***	0.529***	0.476***
	(7.84)	(14.34)	(13.79)	(14.40)	(14.39)	(12.94)

Employment Status (Ref: Employed)						
Partially employed	0.299*** (3.87)	-0.0642 (-1.29)	-0.0879* (-1.69)	-0.0474 (-0.94)	-0.048 (-0.95)	-0.0638 (-1.26)
Not employed	1.316*** (4.07)	-0.581*** (-3.61)	-0.572*** (-3.54)	-0.0546 (-0.35)	-0.0702 (-0.45)	-0.197 (-1.21)
Respondent's Occupation						
Farmer	-0.0172 (-0.10)	0.249** (2.54)	0.354*** (3.73)	0.2913*** (3.29)	0.279*** (3.16)	0.384*** (4.01)
Liberal profession	0.601 (1.16)	-0.223 (-0.55)	-0.180 (-0.43)	-0.1555 (-0.38)	-0.161 (-0.39)	-0.224 (-0.54)
Self-employed professional	0.479*** (5.60)	0.171*** (3.16)	0.238*** (4.20)	0.2421*** (4.33)	0.241*** (4.32)	0.214*** (3.81)
Civil servant	-0.270*** (-2.65)	0.0102 (0.20)	0.00448 (0.08)	-0.0011 (-0.02)	-0.003 (-0.06)	-0.00469 (-0.09)
Blue-collar worker	0.316*** (4.14)	0.0895** (2.01)	0.0854* (1.85)	0.1091** (2.43)	0.108** (2.40)	0.100** (2.14)
Student	-2.175*** (-5.62)	0.212 (1.23)	0.198 (1.10)	-0.3296* (-1.87)	-0.311* (-1.78)	-0.184 (-0.99)
Apprenticeship	-1.443*** (-3.99)	0.537*** (2.87)	0.607*** (3.11)	0.0904 (0.48)	0.105 (0.56)	0.237 (1.21)
Homemaker	-0.545 (-1.64)	0.639*** (3.73)	0.600*** (3.49)	0.1152 (0.67)	0.128 (0.75)	0.258 (1.47)
Retiree	-0.580* (-1.72)	0.727*** (4.33)	0.667*** (3.92)	0.1508 (0.90)	0.168 (1.01)	0.278 (1.63)

Without occupation	-0.0381 (-0.13)	0.748*** (5.41)	0.736*** (5.28)	0.3041** (2.17)	0.320** (2.31)	0.410*** (2.93)
OECD Income Quartile (Ref: Q1)						
Q2	-1.106*** (-12.92)	-0.453*** (-9.54)	-0.400*** (-8.24)	- 0.3521*** (-7.19)	-0.353*** (-7.18)	-0.367*** (-7.59)
Q3	-1.646*** (-16.15)	-0.631*** (-11.19)	-0.547*** (-9.87)	- 0.4455*** (-8.39)	-0.444*** (-8.36)	-0.501*** (-9.31)
Q4	-1.831*** (-15.58)	-0.722*** (-11.04)	-0.618*** (-9.63)	- 0.5057*** (-8.43)	-0.502*** (-8.34)	-0.540*** (-8.81)
Time trend (date)	0.0119*** (5.08)	0.00291*** (3.55)	0.00321*** (3.85)	0.0094*** (5.67)		0.00760*** (8.04)
Model 2: Income expectations			-0.475*** (-11.92)			
Model 2: Willingness to buy			-0.0307 (-0.94)			
Model 2: Willingness to save			-0.0389* (-1.93)			
Year-Dummy 2003					.	.

2004	2.052*	(1.89)
2005	2.492**	(2.31)
2006	3.686***	(3.53)
2007	4.141***	(3.44)
2008	5.192***	(4.90)
2009	3.552***	(3.37)
2010	3.417***	(3.17)
2011	3.084***	(2.93)
2012	4.018***	(3.88)
2013	3.248***	(3.15)
2014	3.066***	(2.92)
2015	2.547**	(2.42)
2016	3.255***	(3.13)
2017	2.858***	(2.71)
2018	2.653**	(2.54)
2019	3.114***	(2.98)
2020	5.782***	

			(5.31)
2021			4.193***
			(3.75)
2022			6.100***
			(5.03)
2023			1.180
			(1.02)
2024			2.236**
			(1.99)
2025			3.409***
			(3.20)
Model 3: In-			
come ex-			
pectations x			
Year			
2003	-0.7580	-0.7580	
	(-3.33)	(-3.33)	
2004	-0.4810	-0.4810	
	(-5.84)	(-5.84)	
2005	-0.4416	-0.4416	
	(-4.75)	(-4.75)	
2006	-0.8158	-0.8158	
	(-11.78)	(-11.78)	
2007	-0.5167	-0.5167	
	(-8.40)	(-8.40)	
2008	-0.8213	-0.8213	
	(-12.86)	(-12.86)	
2009	-0.4163	-0.4163	
	(-5.81)	(-5.81)	
2010	-0.3825	-0.3825	
	(-4.39)	(-4.39)	
2011	-0.4006	-0.4006	
	(-8.86)	(-8.86)	
2012	-0.3190	-0.3190	
	(-9.23)	(-9.23)	
2013	-0.3426	-0.3426	
	(-9.08)	(-9.08)	
2014	-0.1780	-0.1780	
	(-3.84)	(-3.84)	

2015	-0.0679 (-1.14)	-0.0679 (-1.14)
2016	-0.0759 (-1.57)	-0.0759 (-1.57)
2017	-0.0876 (-2.02)	-0.0876 (-2.02)
2018	-0.0897 (-2.27)	-0.0897 (-2.27)
2019	-0.2216 (-4.15)	-0.2216 (-4.15)
2020	-0.6215 (-7.82)	-0.6215 (-7.82)
2021	-0.4269 (-5.47)	-0.4269 (-5.47)
2022	-0.9804 (-8.94)	-0.9804 (-8.94)
2023	-0.3243 (-5.35)	-0.3243 (-5.35)
2024	-0.1232 (-1.59)	-0.1232 (-1.59)
2025	-0.2171 (-2.28)	-0.2171 (-2.28)
Model 3: Willingness to buy x Year		
2003	0.9572 (4.86)	0.9572 (4.86)
2004	0.0417 (0.36)	0.0417 (0.36)
2005	-0.3115 (-3.39)	-0.3115 (-3.39)
2006	0.0277 (0.54)	0.0277 (0.54)
2007	-0.1248 (-2.32)	-0.1248 (-2.32)
2008	-0.2136 (-2.99)	-0.2136 (-2.99)
2009	-0.1964 (-3.06)	-0.1964 (-3.06)
2010	-0.2347 (-3.16)	-0.2347 (-3.16)

2011	-0.1671 (-3.77)	-0.1671 (-3.77)
2012	-0.2185 (-4.44)	-0.2185 (-4.44)
2013	-0.1083 (-2.36)	-0.1083 (-2.36)
2014	-0.1861 (-3.83)	-0.1861 (-3.83)
2015	-0.2033 (-2.85)	-0.2033 (-2.85)
2016	-0.1879 (-3.52)	-0.1879 (-3.52)
2017	-0.1424 (-5.63)	-0.1424 (-5.63)
2018	-0.0958 (-2.55)	-0.0958 (-2.55)
2019	-0.2225 (-3.30)	-0.2225 (-3.30)
2020	-0.2426 (-2.83)	-0.2426 (-2.83)
2021	-0.2753 (-4.11)	-0.2753 (-4.11)
2022	-0.1464 (-1.07)	-0.1464 (-1.07)
2023	0.7112 (5.89)	0.7112 (5.89)
2024	0.1437 (1.39)	0.1437 (1.39)
2025	0.0029 (0.02)	0.0029 (0.02)
Model 3: Willingness to save x Year		
2003	0.1136 (0.63)	0.1136 (0.63)
2004	0.0109 (0.18)	0.0109 (0.18)
2005	0.0178 (0.23)	0.0178 (0.23)
2006	-0.1973 (-4.96)	-0.1973 (-4.96)

2007	-0.1778 (-2.70)	-0.1778 (-2.70)
2008	0.1122 (1.61)	0.1122 (1.61)
2009	-0.0058 (-0.08)	-0.0058 (-0.08)
2010	-0.0291 (-0.49)	-0.0291 (-0.49)
2011	-0.1132 (-2.26)	-0.1132 (-2.26)
2012	-0.2064 (-6.11)	-0.2064 (-6.11)
2013	-0.1286 (-4.50)	-0.1286 (-4.50)
2014	-0.1325 (-4.07)	-0.1325 (-4.07)
2015	-0.1589 (-6.90)	-0.1589 (-6.90)
2016	-0.1381 (-7.95)	-0.1381 (-7.95)
2017	-0.0770 (-2.73)	-0.0770 (-2.73)
2018	-0.0903 (-3.40)	-0.0903 (-3.40)
2019	-0.0091 (-0.17)	-0.0091 (-0.17)
2020	0.0947 (1.36)	0.0947 (1.36)
2021	0.0656 (1.16)	0.0656 (1.16)
2022	0.2244 (1.80)	0.2244 (1.80)
2023	0.0005 (0.00)	0.0005 (0.00)
2024	-0.1752 (-1.86)	-0.1752 (-1.86)
2025	-0.1036 (-1.45)	-0.1036 (-1.45)

Model 3: Interactions (2023 × attitudes)					
Income expectations					-0.584*** (-13.54)
2023 × Income expectations					-0.244*** (-5.16)
Willingness to buy					-0.173*** (-5.24)
2023 × Willingness to buy					0.308*** (3.23)
Willingness to save					0.0490** (2.28)
2023 × Willingness to save					-0.109* (-1.87)
Constant	-0.141 (-0.28)	-1.984*** (-3.55)	0.877 (0.76)	0.0164 (0.01)	-1.194** (-2.45)
N	259,704	225,120	225,120	225,120	225,120
Adjusted R²	0.073	0.625	0.635	0.635	0.628

Note. T-values in parentheses. Statistical significance: *** $p < .001$, ** $p < .05$, * $p < .10$. Model 1 includes demographic and socioeconomic variables. Model 2 adds subjective attitudes regarding income expectations, willingness to buy, and willingness to save. Model 3 tests time-varying interactions between the 2023 period indicator and attitudinal variables. Standard errors are clustered by month.

7. ROBUSTNESS CHECKS

First, we did a robustness check on model (3) which allows us to test whether coefficients are different after 2023 compared to the average beforehand, and whether the difference is significant. While for willingness to buy, and willingness to save, no test is needed as these variables switch signs, for income expectation whether there is a fundamental difference is less obvious. So we use a dummy variable which divides the sample in a period before 2023 and after 2023 and interact this dummy variable with the consumer climate indicators². The negative correlation between inflation expectations and income expectations significantly weakens after 2023 (coefficient increases from approximately -0.58 to -0.24, $p < .001$). This suggests that the connection between inflation expectations and real income loss has partially dissipated after the peak inflation phase, possibly due to wage demands (and, with a time lag, also nominal wage gains) also adjusting to inflation.

Appendix Table 2: Comparing coefficients before and after 2023

Dependent variable: inflation expectations [-5,80]	Coefficient (t-value)	
<i>Income expectations</i>		
Before 2023	-0.584	***
	(-13.54)	
After 2023	-0.244	***
	(-5.16)	
<i>Willingness to buy</i>		
Before 2023	-0.173	***
	(-5.24)	
After 2023	0.308	***
	(3.23)	
<i>Willingness to save</i>		
Before 2023	0.049	**
	(2.28)	
After 2023	-0.109	*
	(-1.87)	
Control variables: perceived inflation rate, official inflation rate, age (reference: 50–59 years), gender (reference = male), household size (reference = 1-person household), children in the household (reference = none), household management (reference = no), head of household (reference = no), education (reference = elementary/lower secondary school), occupational status (reference = employed), occupation (reference = salaried employee), city size (reference = up to 2,000 inhabitants), East/West (reference = West), housing tenure (reference = own house), and equivalised net income (in quartiles, reference = 1st quartile). R^2 adj = 0.625; Prob > F = 0.0000, n = 225,120. Standard errors clustered by survey month. Income expectations: In your opinion, how will your household's financial situation develop over the next 12 months? Propensity to purchase: Do you think that, given the current general economic situation, it is currently a good time to make major purchases (furniture, electrical/electronic appliances, etc.)? Propensity to save: Do you think that, given the current general economic situation, it is currently advisable to save?		

Table 2: Time-varying relationship between expected inflation and consumption climate components

Full table is given in last column of Table 1 above.

Second, one could argue that our estimates are confounded as over the large sample period the impact of socio-demographic variables also changes. To check in this influence, we also interacted the socio-demographic

² To rule out that our estimates are confounded by that unbalanced period design, we modify our sample to run from 2020 to 2025, repeating the estimation. Qualitatively, the results remain robust.

variables with the 2023 dummy and repeated the estimation of model 3 (see table 3 below). Also here, the effects remain.

Appendix Table 3: Comparing coefficients before and after 2023 controlling for socio-demographics

Variable	Model (1.1)	Model (2.1) Time Span: 2010-2020	Model (3.1)
Perceived inflation	0.611*** (28.34)	0.771*** (126.55)	0.607*** (28.52)
D23 # Perceived inflation	0.618*** (67.77)		0.617*** (68.00)
Official inflation	0.411*** (6.88)	0.155*** (6.72)	0.374*** (6.54)
D23 # Official inflation	-0.169*** (-4.24)		-0.176*** (-4.54)
Base: male before 2023			
female	0.135*** (3.08)	-0.0495** (-2.07)	0.103** (2.34)
D23#male	-0.279 (-0.46)		0.713 (1.09)
D23#female	-0.0459 (-0.08)		0.937 (1.49)
Householdsize: base 1 person hh			
2 person hh	0.147*** (2.70)	0.0156 (0.41)	0.187*** (3.25)
3 person hh	0.103 (1.50)	-0.0325 (-0.80)	0.110 (1.50)
4 person hh	0.0698 (0.94)	-0.0386 (-0.80)	0.119 (1.55)
5 or more person hh	0.298*** (2.91)	0.0751 (1.03)	0.297*** (2.73)
D23# 1 person hh	-0.610** (-2.10)		-0.695** (-2.24)
D23#2 person hh	-0.0580 (-0.23)		-0.146 (-0.53)
D23#3 person hh	-0.0647 (-0.29)		-0.185 (-0.73)
D23#4 person hh	-0.121 (-0.43)		-0.164 (-0.55)
D23#5 or more person hh			
City Size (Ref: < 2,000 inhabitants)			
2,000–2,999	-0.0377 (-0.34)	-0.364*** (-4.06)	-0.143 (-1.34)
3,000–4,999	-0.0500 (-0.47)	0.0602 (1.13)	-0.169* (-1.66)
5,000–9,999	-0.0971 (-0.92)	0.0150 (0.33)	-0.155 (-1.52)
10,000–19,999	-0.234** (-2.31)	-0.215*** (-4.31)	-0.310*** (-3.17)
20,000–49,000	-0.316*** (-3.14)	-0.305*** (-7.05)	-0.387*** (-4.00)
50,000 – 99,000	-0.567*** (-5.82)	-0.397*** (-7.57)	-0.612*** (-6.50)

100,000 – 199,000	-0.135 (-1.27)	0.0616 (1.10)	-0.203* (-1.95)
200,000 – 499,000	-0.301*** (-3.09)	-0.124** (-2.01)	-0.394*** (-4.14)
Over 500,000	-0.474*** (-4.40)	-0.139*** (-3.01)	-0.513*** (-5.05)
City-Size x D₂₃	.		.
2,000–2,999	-0.457*** (-2.83)		-0.491*** (-2.95)
3,000–4,999	-0.0884 (-0.59)		-0.141 (-0.94)
5,000–9,999	-0.00675 (-0.04)		-0.0546 (-0.35)
10,000–19,000	-0.0838 (-0.58)		-0.113 (-0.69)
Martial status (base: Single)			
cohabiting	-0.0753 (-1.14)	-0.0557 (-1.26)	-0.0730 (-1.09)
married	-0.0744 (-1.28)	-0.0210 (-0.51)	-0.0860 (-1.50)
Widowed/divorced/separated	-0.0742* (-1.70)	-0.0659* (-1.73)	-0.0432 (-0.93)
D23# cohabiting	0.211 (1.28)		0.181 (1.07)
D23#married	0.0759 (0.43)		0.101 (0.48)
D23# Widowed/divorced/separated	0.154 (0.93)		0.234 (1.28)
Kids in household (base: no kids before 2023)			
Has kids	0.0533 (1.20)	-0.00534 (-0.18)	0.0680 (1.50)
D23#has kids	0.623*** (3.60)		0.637*** (3.40)
Living conditions (own house before 2023)	.		.
Own apartment	0.0567 (1.24)	0.0826** (2.57)	0.0685 (1.49)
For rent	0.184*** (5.26)	0.0230 (1.16)	0.164*** (4.93)
D23#own house	0.196* (1.96)		0.148 (1.52)
D23#own apartment	0.146 (1.24)		0.169 (1.25)
Age categories (base 50-59 before 2023)			
No answer	-0.251*** (-3.81)	-0.163*** (-3.93)	-0.195*** (-2.86)
18-29	-0.0245 (-0.32)	-0.0813* (-1.81)	0.193** (2.52)
30-29	-0.0292 (-0.57)	0.0103 (0.33)	0.0865* (1.76)
40-49	-0.0477 (-1.18)	-0.0154 (-0.55)	0.0143 (0.35)
60-65	-0.146*** (-3.15)	-0.0570* (-1.77)	-0.136*** (-2.67)

66-74	-0.292*** (-5.14)	-0.127*** (-3.65)	-0.257*** (-4.22)
D23# Age categories			
D23#18-29	1.656*** (6.46)		2.045*** (7.33)
D23#30-39	0.356* (1.82)		0.634*** (3.08)
D23#3.40-49	0.125 (0.63)		0.247 (1.13)
D23#4.50-59	0.0376 (0.26)		0.0140 (0.10)
D23#5.60-65	0.0200 (0.15)		-0.0619 (-0.47)
Household constellation			
Managing and making household	0.00620 (0.09)	0.0672 (1.58)	0.0401 (0.58)
Making but not managing	-0.167** (-2.43)	0.0278 (0.62)	-0.121* (-1.77)
Managing but not making	-0.166** (-2.57)	-0.0582 (-1.39)	-0.138** (-2.23)
D23# Managing and making household	0.650*** (3.26)		0.659*** (3.52)
D23# Making but not managing	-0.0195 (-0.08)		-0.0127 (-0.06)
D23# Managing but not making	-0.0512 (-0.24)		-0.127 (-0.58)
Education (ref: lower secondary school before 2023)			
Intermediate secondary school	0.0106 (0.34)	0.0392* (1.85)	0.0455 (1.46)
University entry qualification	-0.200*** (-3.56)	0.0854** (2.61)	-0.126** (-2.35)
University	-0.214*** (-3.76)	0.0426 (1.38)	-0.153*** (-2.78)
D23# lower secondary school	0.812*** (6.21)		0.932*** (6.12)
D23# Intermediate secondary school	0.155 (1.58)		0.147 (1.33)
D23# University entry qualification	0.0810 (0.82)		0.0375 (0.36)
D23# University	.		.
Region			
East	0.523*** (13.49)	0.362*** (13.20)	0.523*** (13.19)
D23#West	-0.378*** (-3.73)		-0.307*** (-2.78)
D23#East	.		.
Employment status (Base: employed)			
Part-time	0.0124 (0.27)	-0.0103 (-0.34)	0.00518 (0.11)
Non-employed	-0.439*** (-2.76)	-0.0871 (-0.53)	-0.455*** (-2.87)
D23#employed	-0.735 (-1.28)		-0.970 (-1.64)

D23#part-time	-1.050* (-1.81)		-1.368** (-2.34)
D23#non-employed	.		.
Occupational status (base: white collar)			
Farmer	0.159* (1.67)	0.0492 (0.69)	0.272*** (2.97)
Liberal profession	-0.251 (-0.97)	-0.313* (-1.66)	-0.168 (-0.66)
Self-employed	0.0830* (1.68)	0.0850** (2.45)	0.144*** (2.71)
Civil servant	0.00649 (0.12)	-0.0703 (-1.59)	-0.00251 (-0.04)
	.		.
Civil servant	0.0550 (1.30)	-0.0591** (-2.13)	0.0357 (0.84)
Student	0.300* (1.77)	-0.0578 (-0.35)	0.299* (1.72)
Apprenticeship	0.470*** (2.60)	0.194 (1.11)	0.521*** (2.68)
Homemaker	0.530*** (3.13)	0.188 (1.10)	0.529*** (3.05)
Retiree	0.615*** (3.69)	0.164 (1.01)	0.575*** (3.40)
No occupation	0.577*** (4.35)	0.232 (1.54)	0.570*** (4.26)
D23#Farmer	.		.
D23# Liberal profession	-1.577 (-0.45)		-2.285 (-0.57)
D23# Self-employed	0.0711 (0.12)		0.329 (0.54)
D23# Civil servant	-0.443 (-0.76)		-0.333 (-0.56)
D23# White collar	-0.378 (-0.66)		-0.252 (-0.44)
D23# Civil servant	0.161 (0.27)		0.376 (0.66)
D23# Student	-2.879*** (-6.96)		-2.901*** (-6.37)
D23# Apprenticeship	-0.944 (-1.07)		-0.448 (-0.54)
D23# Homemaker	-0.611 (-1.27)		-0.789 (-1.51)
D23# Retiree	-1.157** (-2.58)		-1.346*** (-2.86)
D23# no occupation	.		.
Income (Base: 1st Quartile)			
2nd quartile	-0.358*** (-7.72)	-0.0830*** (-3.10)	-0.307*** (-6.76)
3rd quartile	-0.498*** (-9.08)	-0.0871*** (-2.68)	-0.422*** (-7.90)
4th quartile	-0.529*** (-8.57)	-0.0582* (-1.68)	-0.428*** (-7.28)
D23# 1st quartile	1.426*** (7.26)		1.221*** (5.56)

D23# 2nd quartile	0.576*** (3.33)		0.461** (2.40)
D23# 3rd quartile	0.201* (1.65)		0.183 (1.38)
D23# 4th quartile			
Time trend	0.0052*** (6.18)	-0.0003 (-0.64)	0.0058*** (6.83)
Consumer Climate Indicators			
Income expectations	.	-0.170*** (-10.53)	-0.539*** (-13.48)
D23# Income expectations	.		-0.443*** (-7.09)
Willingness to buy	.	-0.142*** (-8.97)	-0.152*** (-4.38)
D23Willingness to buy	.		0.268*** (2.93)
Willingsness to save	.	-0.0873*** (-6.18)	0.0146 (0.71)
D23# Willingsness to save	.		-0.121* (-1.89)
Constant	-1.697*** (-3.03)	0.138 (0.38)	-0.187 (-0.34)
Observations	241,579	95,729	225,120
Adjusted R-squared	0.630	0.705	0.632

Note. T-values in parentheses. Statistical significance: *** $p < .001$, ** $p < .05$, * $p < .10$. Model 1.1 includes demographic and socioeconomic variables and interacts them with the 2023 dummy. Model 3.1 adds tests on time-varying interactions between the 2023 period indicator and attitudinal variables. Standard errors are clustered by month.



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