Food prices matter most: Sensitive household inflation expectations

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Abstract

We construct a novel dataset to investigate the sensitivity of household inflation expectations to personal experienced inflation, testing whether households weigh price changes differently across items in the consumption basket. Across households of all age, income, gender, work status, UK region, and house tenure groups, food prices matter significantly more for inflation expectations dynamics than other components, including energy. In particular, households' expectations are sensitive to changes in food price-driven inflation at short-, medium- *and* long-horizons, and this association is persistent, non-linear and asymmetric. Our results imply that the risk of household expectations contributing to persistent inflationary dynamics are greatest following *large* and *inflationary* shocks to, specifically, food prices. Moreover, our findings can rationalise a number of empirical regularities related to household expectations: their upwards bias relative to actual inflation; cross-sectional heterogeneity across demographic groups; and their 'supply-side' oriented view of the economy.

Keywords: Households, inflation expectations, inflation experiences, food prices, heterogeneity, persistence, non-linearities, asymmetries
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1 Introduction

Household inflation expectations are widely inaccurate, cross-sectionally dispersed, and poorly understood (Weber et al., 2022; Arioli et al., 2017; Del Giovane et al., 2008). A rapidly growing literature has emerged seeking to understand what determines household inflation expectations, which are in turn a key driver of consumption and macroeconomic dynamics (Roth and Wohlfart, 2020; Beraja et al., 2019; Agarwal and Qian, 2014). A particular strand of work, to which we contribute, studies the degree to which households focus on their own personal shopping experiences in forming inflation expectations (D'Acunto et al., 2021; Coibion and Gorodnichenko, 2015). If households place more weight on certain items, then price shocks to those components of the basket may be more likely to raise inflation expectations and generate inflationary pressures.

In this paper, we study whether households are more sensitive to price changes in certain components of the consumption basket, and how that may drive inflation expectations dynamics. To answer these questions, we construct a novel dataset to investigate the sensitivity of household inflation expectations to changes in their *own* experienced inflation rate, given the composition of their basket. Our key finding is that food prices matter significantly more for aggregate dynamics than other components of the basket, including energy. In particular, we document sensitivity of inflation expectations to food price-driven inflation at short-, medium-, *and* long-horizons, and show that these associations are persistent, non-linear, and asymmetric; with disproportionate sensitivity to *large* and *inflationary* shocks. Exploiting cross-sectional information in our dataset, we show that sensitivity to food price-driven inflation is present across *all* age, income, gender, work status, UK geographical region, and house tenure groups, with evidence of greater sensitivity amongst households above the second quartile of the income distribution.

The novel dataset we construct combines UK household data on inflation expectations (from the Inflation Attitudes Survey, IAS) with UK household data on personal expenditure (from the ONS's Living Costs and Food Survey, LCFS) and granular CPI inflation rates. The LCFS contains granular expenditure information on 85 items across the entire CPI consumption basket, which we aggregate into 11 CPI components across four key categories: Energy (split into utilities and fuel), Food & Alcohol (split into each of the two components), Core Goods, and Services (split into rent, restaurants & catering, recreation services, transport, hair & beauty services, and other services). Combining the personal expenditure and CPI inflation rate data, we calculate households' personal experienced inflation rates. We then merge this with household inflation expectations data at the demographic-group level, based on common characteristics between the LCFS and IAS datasets: age, income, gender, work status, region, and house tenure. This yields a novel panel dataset with quarterly information on the average experienced personal inflation rate and the average expected inflation rate of a household in a particular demographic group, between 2003 Q1 and 2022 Q1.

Exploiting our novel dataset, we make four contributions to the literature. First, the main contribution of this paper is to test the *relative* sensitivity of inflation expectations to experienced inflation across the *entire* consumption basket. To date, only a handful of studies have sought to identify the impact on inflation expectations of *experienced* inflation based on personalised expenditure. Where studies have sought to do so, they have focused on narrow subsets of the consumption basket such as grocery (D'Acunto et al., 2021) or energy (Coibion and Gorodnichenko, 2015) expenses in isolation. With data across the entire basket, we are able to test households' sensitivity to price changes in a certain CPI component while holding fixed price changes in all other components. We show that

households are most sensitive to changes in food and alcohol price-driven inflation, with the former being particularly important for aggregate expectations dynamics given its relatively large share in the consumption basket (15%-20%, on average). Indeed, households' aggregate inflation expectations are significantly more sensitive to food and alcohol price-driven inflation than they are to changes in *total* experienced inflation or aggregate CPI inflation, implying that changes in experienced inflation driven by these specific components matter over and above aggregate price changes. Consistent with previous evidence (Binder and Makridis, 2022; Binder, 2018; Trehan, 2011), inflation expectations are also correlated with changes in fuel prices. However, this association is significantly weaker than that with food, and does not hold over and above changes in total inflation; implying that aggregate expectations are not specifically sensitive to fuel prices per se. Expectations are insensitive to other components of the basket.

Second, we identify households' sensitivity to food price-driven inflation as a novel source of persistent, non-linear, and asymmetric macroeconomic dynamics. In particular, we show that short-, medium-, *and* long-horizon household inflation expectations are sensitive to food price changes and that this sensitivity is particularly acute following *large increases* in food price-driven inflation, and is especially the case for longer-horizon expectations, which are particularly important for aggregate macroeconomic dynamics (Diegel and Nautz, 2021). Moreover, the response of households' expectations to such food price-driven shocks are persistent and slower to fall once the shock has subsided. These findings contribute to a growing body of work seeking to identify non-linearities in aggregate inflation dynamics (Benigno and Eggertsson, 2024).

Third, digging into the mechanisms, we document a pivotal role for households' *perceptions* of *current* inflation. Consistent with Weber et al. (2023) and Jonung (1981), we identify a close link between inflation perceptions and short-horizon expectations, showing that changes in households' perceived current rate of inflation explains up to 50% of variation in 1-year ahead expectations. In addition, we show that perceptions are also important for *medium-* and *long*-horizon expectations, accounting for up to 30% of variation in 2- and 5-year ahead expectations, respectively. Moreover, we show that the impact of changes in personal experienced inflation on households' expected inflation is nearly *entirely* driven by changes in households' perceived current rate of inflation. The exception is for sufficiently large and positive food price shocks, which are associated with an increase in medium- and long-horizon expectations over and above changes in households' perceived current rate of inflation; implying that households actively imply from such shocks that inflation will be persistently higher in the medium- to long-term.

Fourth, we explore cross-sectional heterogeneity in the degree to which households are sensitive to certain components of the basket. While households of *all* age, income, house tenure, gender, region, and work status groups are sensitive to food prices, we observe particular sensitivity amongst households above the second quartile of the income distribution. Meanwhile, households are largely insensitive across demographics to changes in experienced inflation driven by other components of the basket, with the exception of alcohol. Indeed, while alcohol comprises only a small proportion of the basket (less than 5% on average), households in certain groups – particularly above-median income and older households – are *excessively* sensitive to price changes in it, with perceptions of inflation responding by nearly 4pp following a 1pp increase in experienced inflation driven by alcohol. We are able to identify these heterogeneities in sensitivity to food and alcohol price-driven inflation across groups as a direct result of being able account for differences in the composition of demographic groups'

respective consumption baskets: we show that repeating the analysis based instead on a representative basket of goods leads to biased estimates of households' sensitivity to changes in experienced inflation across groups, and masks these heterogeneities.

Taken together, our findings can help to rationalise a number of empirical puzzles relating to household inflation expectations. One puzzle relates to the commonly observed upwards bias in households' expectations for inflation relative to both actual inflation and the central banks' target rate of inflation (D'Acunto et al., 2024; Weber et al., 2022; Candia et al., 2021; Kumar et al., 2015). Indeed, we document that UK households' 2- and 5-year ahead expected inflation are approximately 1pp and 1.5pp higher in magnitude, on average, than actual experienced inflation (2.2%) over the sample period. This upwards bias in expectations can be partly rationalised by our finding that household expectations are asymmetrically sensitive to *increases* in food price-driven inflation, relative to decreases; generating a wedge between expected and experienced inflation. Specifically, our empirical estimates show that households' 2- and 5-year ahead inflation expectations change by approximately 1pp more following a rise in food-price inflation than they do following a fall, implying that this asymmetry could explain a significant amount of the observed wedge between expected and actual inflation.[1]

Another empirical puzzle relates to the well-documented cross-sectional heterogeneity in household inflation expectations (Arioli et al., 2017; Del Giovane et al., 2008; Jonung, 1981). Like Weber et al. (2023), we document significant heterogeneity across demographic groups not only in households' expectations for future inflation but also in their perceptions of current inflation, which could in turn explain heterogeneity in expectations. The range of factors driving variation in perceived inflation should be more limited than those driving variation in expected inflation, which is influenced also by news about the future, the source of which may vary significantly across households (Macaulay and Song, 2023; Lamla and Lein, 2015). One possible determinant could be differences in inflation rates that people actually experience, which Kaplan and Schulhofer-Wohl (2017) find varies significantly across demographic groups. Indeed, we show that the heterogeneity in perceived inflation is directionally consistent with heterogeneity in households' exposure to those specific components of the basket that households are most sensitive to – namely, food and alcohol. Magnitude-wise, this could feasibly rationalise a significant portion of the heterogeneity in inflation perceptions across income groups and nearly half of that across age groups.

Our results could also offer insights into the empirical puzzle that households seem to have a 'supply-side' view of shocks to the economy; consistently associating increases in inflation to decreases in output (Coibion et al., 2023; Candia et al., 2020). If, as our results indicate, households are most sensitive changes in inflation when they are driven by food price changes – which are typically associated to supply-side than demand-side shocks (Adjemian et al., 2024) – then this could explain why households may develop a supply-side view of the relationship between inflation and output.

The main policy implications emerge from our finding that household inflation expectations at short-, medium- and long-horizons are sensitive to food price-driven changes in inflation and that this association is persistent, nonlinear, and asymmetric. In particular, these results imply that household inflation expectations are most likely to become elevated and contribute to persistent inflationary dynamics in the face of large and inflationary shocks to, specifically, food prices. A monetary authority may wish to respond more aggressively than otherwise to such shocks, in order to reduce the risk of

[1] Our findings leave room also for other determinants of the upwards bias of beliefs – particularly for perceived inflation. Other possible explanations could include general pessimism about the future state of the economy (Michelacci and Paciello, 2024).

inflationary pressures persisting and propagating, even if the shock is temporary by nature.

Related literature. Our work relates to a broad literature seeking to understand the formation of household inflation expectations. A core thesis, across both theoretical and empirical strands, is the role of information frictions faced by households, with particular attention devoted to (variation in) financial literacy levels (De Bruin et al., 2011), cognitive abilities D'Acunto et al. (2019), levels of attention (Sims, 2010; Cavallo et al., 2017), sources of information (Lamla and Lein, 2015), subjective model of the economy (Macaulay, 2022), transmission of policy communication (Coibion et al., 2022, 2020; D'Acunto et al., 2020; Ehrmann and Wabitsch, 2022; McMahon and Naylor, 2023), and that that we contribute to, personal inflation experiences. The latter, in turn, can be split into studies that focus on how *past* experiences shape how much weight households place on new information (Malmendier and Nagel, 2016; D'Acunto et al., 2021; Angelico and Di Giacomo, 2019), and studies that instead focus on *current* shopping experiences and the weight that households place on certain types of good or certain components of the consumption basket.

To date, however, only a handful of papers have focused on the latter. D'Acunto et al. (2021) find that household expectations are associated with price changes in grocery items and particularly so to those items that they purchase more frequently. Binder and Makridis (2022), Binder (2018), Coibion and Gorodnichenko (2015) and Trehan (2011) find that household expectations are sensitive to changes in the price of fuel. However, studying the sensitivity of household beliefs to specific components of the consumption basket is difficult. To do so, one needs to match data on household inflation expectations with data on household expenditure. Only two papers have sought to do something along these lines. D'Acunto et al. (2021) do so for a subset of the consumption basket using the Kilts Nielsen Consumer Panel (KNCP) which focuses on non-durable goods expenditure of US households, covering approximately 25% of the consumption basket. Coibion and Gorodnichenko (2015) use statistics from the Consumer Expenditure Survey, also in the US, to capture differences at a certain point in time in expenditure shares of fuel across income and age groups. Meanwhile, Dietrich et al. (2022) adopt a slightly different approach to test which components of the consumption basket matter most to households; merging household-level data on 'total' inflation expectations with household-level data on inflation expectations for each component of the consumption basket. They show that expectations for 'total' inflation map most closely to their expectations for inflation in specifically non-core components of the consumption basket, such as food and energy. Building on the same dataset, Dietrich (2024) also finds that household inflation expectations are driven by beliefs about future energy and food prices, but are insensitive other components of the basket. This gives us a sense of which components might be most salient for households, which could offer *potential* insights into the relative sensitivity of beliefs to actual price changes in different components; though not explicitly. We, in contrast, are uniquely able to explicitly test the sensitivity of households' beliefs about inflation to price changes in different components of the consumption basket, across the *entire* basket of goods. Additionally, our paper extends the evidence from D'Acunto et al. (2021) as our novel dataset is constructed from surveys that are representative of the population as opposed to only participants in the Kilts Nielsen Consumer Panel.

Personal shopping experiences have also, in recent years, become a point of focus within a growing strand of work investigating heterogeneity across households. Hobijn et al. (2009) and Kaplan and Schulhofer-Wohl (2017) study variation in personal inflation rates experienced between households, with the latter documenting higher inflation rates among lower-income families. Meanwhile, significant

heterogeneity in inflation expectations across demographic groups is well-documented Arioli et al. (2017); Del Giovane et al. (2008); Jonung (1981). A natural question which we seek to answer in this paper, building also on Weber et al. (2023), is whether and to what extent cross-sectional heterogeneity in personal (current) inflation experiences can explain observed cross-sectional heterogeneity in inflation expectations. We show that cross-sectional heterogeneity across households in exposure to food and alcohol – the components of the basket to which households are most sensitive – can feasibly rationalise a significant amount of the observed cross-sectional heterogeneity in expectations across, in particular, age and income groups.

The paper is organised as follows. Section 2 details the construction of our novel dataset, while Section 3 presents descriptive analysis from the dataset. Section 4 presents the empirical strategy and aggregate results, while 5 exploits the richness of the dataset to compare results across demographic groups. Section 6 explores further implications from our findings, before Section 7 concludes.

2 Data

In this section, we construct a novel synthetic panel dataset by merging UK household inflation expectations with households' personal experienced inflation rates, at the demographic-group level. To calculate households' experienced inflation rates we combine a long-run survey of household-level expenditure with granular CPI rates. We then merge this with a long-run survey of household-level inflation expectations, based on common demographic characteristics. To the best of our knowledge, this is the first dataset that merges household inflation expectations with households' experienced inflation based on expenditure across the *entire* consumption basket. This section details the data used and methods deployed to construct this dataset.

2.1 Individual data sets

2.1.1 Inflation Expectations: Bank of England Inflation Attitude Survey

To retrieve information about inflation expectations, we use a quarterly cross-sectional survey called the Inflation Attitudes Survey (IAS) conducted on behalf of the Bank of England to assess public attitudes towards inflation and monetary policy. The weighted data are representative of the UK population aged 16 and over. The survey also collects detailed information on respondent's demographic characteristics across eight dimensions: age, housing tenure, income, gender, work status, education, region, and social grade. Each survey wave contains 1000-2000 observations.[2] The data we use spans 2003 Q1 to 2022 Q1. The survey contains a rich set of questions eliciting households' perception of the current rate of inflation (i.e., inflation over the past 12 months) as well as household expectations of future rates of inflation, at short- (1-year ahead), medium- (2-year ahead), and long- (5-year ahead) horizons. Data for 2-year and 5-year ahead expectations are available from 2009 Q1.

The precise wording used to elicit information about inflation expectations varies across different surveys run by different organisations in different countries. De Bruin et al. (2012) show that the choice of wording matters. In particular, they show that asking respondents about expectations for "prices in general" (as in, for instance, the Michigan Survey of Consumers) results in greater dispersion than asking about expectations for the "rate of inflation" (as in, for instance, the Survey of Consumer

[2]Each year, the survey wave conducted in the first quarter of the year contains twice the number of participants as the waves conducted in the other quarters of the year.

Expectations run by the Federal Reserve Bank of New York). This results from the fact that the former leads respondents to think about personal price experiences, rather than inflation more generally. The wording in the IAS inflation expectations survey used in our study aligns more closely with the "prices in general" style of question, asking: "How much would you expect prices in the shops generally to change over the next twelve months?".[3] This is convenient, for the purposes of our study, given that we are specifically interested in the relationship of inflation expectations with households' *personal* inflation experiences.

2.1.2 Household Expenditure: Living Cost and Food Survey

We obtain data on household expenditure using the Living Costs and Food Survey (LCFS) micro-dataset.[4] Survey participants fill in a diary of their households' spending over (at least) the past two weeks. LCFS collects information on households' spending patterns and the cost of living from across the whole of the UK. The survey provides rich demographic information including age, house tenure, income, gender, work status, geographical region, and socioeconomic group of household. The survey is published annually containing around 6000 observations. The data is collected throughout the year, which we split into quarterly data 2003 Q1 - 2022 Q1.

The LCFS dataset is comprehensive. It contains detailed information on household spending on a granular breakdown of 85 items across the entire consumption basket.[5] To aid the interpretability of our analysis, we aggregate the consumption items into 11 CPI components across four key categories: Food & Alcohol (split into each of the two components), Energy (split into fuel and utilities), Core Goods, and Services (split into rent, restaurants & catering, recreation, transport, hair & beauty, and other services). The aggregation into these four consumption categories aligns with practices commonly used by central banks, such as the Bank of England, which organises CPI data in similar categories in its Monetary Policy Reports. The choice of the 11 specific components we distinguish between across these four categories is based on discretion, motivated either by differences in the degree to which different demographic groups may be exposed to these components, or intuition as to which components may be be particularly salient. We do not find evidence of additional insights from more granular breakdowns within these categories.[6]

[3] The list of survey questions used in our analysis are provided in Appendix A.

[4] The survey has formerly been called the Family Expenditure Survey and the Expenditure and Food Survey.

[5] A full breakdown of these items is provided in Table A.1.

[6] The LCFS provides a different aggregation of the 85 consumption items, into 12 'COICOP' (Classification of Individual Consumption by Purpose) categories: (1) Food and non-alcoholic beverages; (2) Alcoholic beverages, tobacco, and narcotics; (3) Clothing and footwear; (4) Housing, water, electricity, gas, and other fuels; (5) Furnishings, household equipment, and routine household maintenance; (6) Health; (7) Transport; (8) Communication; (9) Recreation and culture; (10) Education; (11) Restaurants and hotels; (12) Miscellaneous goods and services. Such an aggregation would not allow us to distinguish between goods and services – a critical distinction in understanding inflation dynamics – nor separate energy into fuel and utilities, which have very different characteristics in the way in which households pay and consume these items. As such, we believe the aggregation we choose allows us to draw key distinctions between important consumption items, and aids the interpretability of our analysis for policy purposes.

Figure 1. LCFS Households' Expenditure Shares



Note: This figure shows the share of expenditure for eleven aggregated categories – Food, Alcohol, Utilities, Fuel, Core Goods, Rent, Recreation, Transport, Hair & Beauty, Restaurants & Catering, and Other Services – based on data from the Living Costs and Food Survey (LCFS) provided by the UK Office for National Statistics (ONS). Categories are aggregated from detailed item-level data. Expenditure shares are calculated as proportions of total household spending within each quarter. The sample period is 2003 Q1 - 2022 Q1.

Based on this classification, we use information from LCFS to calculate the sub-group expenditure shares. Figure 1 depicts the mean expenditure shares across the representative sample over our sample period. We see that services together comprise around 40% of the basket, core goods around 30%, food and alcohol together around 20% and energy around 10%. We observe a small amount of year-on-year variation in the shares of each component in the consumption basket – such as a fall in the services share around the Covid-19 pandemic in 2020 – but shares have remained broadly stable over time. LCFS is published with substantial delays of around one year, meaning our sample period ends in 2022.

2.1.3 Granular CPI inflation rates: Office for National Statistics

To calculate households' personal experienced inflation rates, we merge LCFS expenditure data with granular UK CPI data. Figures A.1 and A.2 in Appendix A plots the year-on-year CPI inflation rate for the components of the consumption basket that we focus on. We observe significant variation in the time series across these components, with particular volatility in energy prices (both fuel and utilities) throughout the sample, including a sharp pick-up at the end of our sample period, after Covid-19.

In order to then merge these personalised experienced inflation rates with the inflation expectations data, we aggregate experienced inflation at the demographic group level. Thus, we calculate an 'average' experienced inflation rate for a representative household of a specific demographic group in

a specific period, given the average composition of their consumption basket. This approach is similar to that adopted by Hobijn et al. (2009) who also focus on differences in consumption bundles across demographic groups. We do not, in addition, observe differences in prices that different demographic groups pay for items in the same component of the basket, as Kaplan and Schulhofer-Wohl (2017) also observe. However, we show in Section 3 that our estimated differences in experienced inflation rates across demographic groups are comparable to those obtained by Kaplan and Schulhofer-Wohl (2017), particularly across income groups. Moreover, our baseline empirical analysis focuses on *changes* in experienced inflation, the dynamics of which, across demographic groups, are shown by Weber et al. (2023) to be explained largely by heterogeneity in consumption bundles rather than in prices.

2.2 Novel datasets

Finally, we merge our datasets together at the demographic group level based on demographic characteristics across the IAS and LCFS datasets: age, income, house tenure, gender, region and work status. We create multiple synthetic panel datasets that are cut by each characteristic, as well as combinations of different characteristics. The most comprehensive dataset combines all six demographic characteristics together, to yield a synthetic panel dataset of over 13,000 observations over the 77 periods in our sample. Our focus on these six specific demographic characteristics is constrained by the availability of common demographic information across both surveys.[7]

The specific timing used to match these datasets at quarterly frequency is important. IAS surveys are collected early in the second month of each quarter – for example, the fieldwork for the Q2 waves are conducted in May. To ensure, then, that elicited inflation expectations correspond to the 'correct' inflation experiences, we match 'Q2' inflation expectations with experienced inflation in the *previous* quarter (Q1), based on year-on-year CPI data at the end of that quarter (Q1). This method has two additional advantages. First, this ensures we elicit expectations based on *given* prices and consumption. Second, given that CPI data is published with a one-month lag by the ONS (i.e., CPI data for March is published in mid-April), the quarter-end CPI data used to calculate households' experienced inflation is also the latest CPI print published by the ONS; allowing us to compare the relative importance of *experienced* inflation with news about the latest aggregate CPI print.

3 Perceived, Expected, and Experienced Inflation

In this section, we present descriptive evidence on households' perceived, expected, and experienced inflation from our novel dataset.

[7]Each survey contains information also on other demographic characteristics, but they either do not exist in the other survey, or their specific classification prevents us from being able to match them across the datasets. For instance, education is only available in IAS, so we cannot use education as our demographic identifier. 'Class' is a demographic variable that is available in both surveys but in IAS class is identified using Social Grade whereas LCFS classified class using Socio-economic group. Meanwhile, the variables we focus on can be matched, even if there are differences in the way in which they are defined across surveys.For example, in the IAS, 'age' is classified into six *age groups* whereas LCFS provides the information of *age in years*. In this case, we create a common 'age' aggregation across the two surveys. We provide further detail on the demographic characteristics and the matching in Table A.2 of Appendix A.

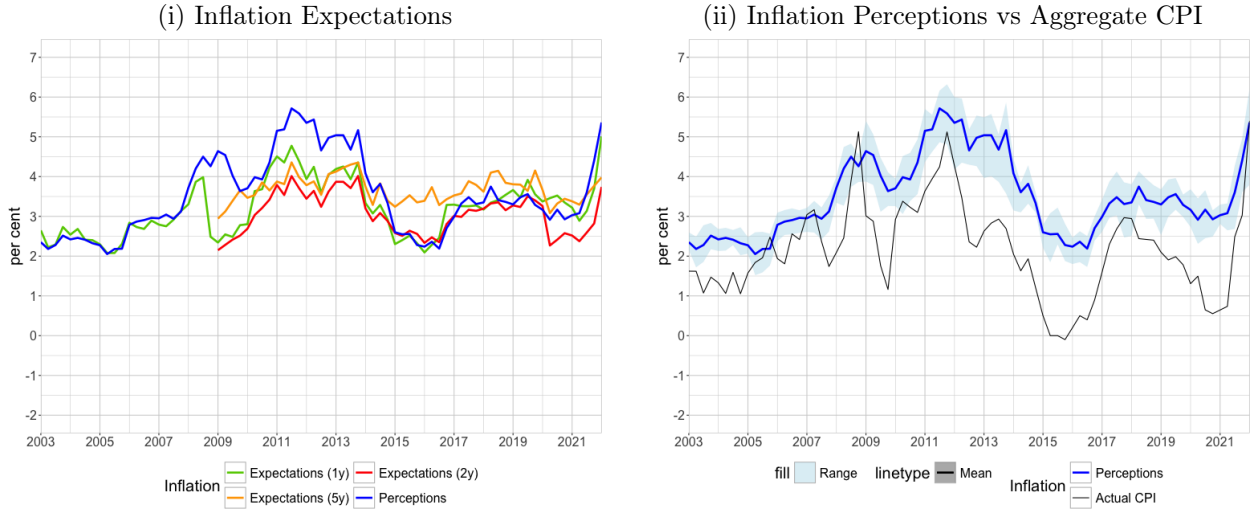
3.1 Households' perceived and expected inflation

Empirical literature studying the formation of household inflation expectations have overwhelmingly focused on 1-year ahead inflation expectations. Surprisingly little attention has been paid to longer horizon expectations, or the role that households' perceptions of *current* inflation may play in the formation of expectations about the future. Where studies have looked at inflation perceptions, they document a close link with short-horizon expectations (Weber et al., 2023; Jonung, 1981). We exploit the data available in the IAS to dig deeper into the formation of households' perceptions of inflation and its association with short-, as well as medium- and long-horizon, expectations.

Figure 2i depicts the quarterly evolution of UK households' average perceived and expected rate of inflation, at different horizons, from the IAS between 2003 Q1 and 2022 Q1. Consistent with Weber et al. (2023), we observe close co-movement between households' perceived current rate of inflation (blue line) and their short-horizon expectations for future inflation (green line), with a correlation over the sample period of 0.82. In addition, we observe that households' perceived inflation co-moves closely also with 2y- and 5y-ahead expected inflation, with correlations of 0.76 and 0.62 respectively. These observations indicate that perceptions of current inflation could be a potentially important factor in the formation of households' expectations of future inflation, at short-, medium- and long-horizons.

Focusing on households' perceived inflation, Figure 2ii depicts the same quarterly perceived inflation series (again in blue) alongside actual aggregate CPI (in black). We observe close co-movement between the two series over the sample period (correlation of 0.75), indicating that households likely do, at least to some extent, observe changes in inflation. We also observe two well-documented empirical puzzles. First, consistent with (Weber et al., 2022; Candia et al., 2021; Kumar et al., 2015), there is a persistent wedge between the two series, with households' perceived inflation rate (which averages 3.5% over the sample period) being consistently higher than actual aggregate CPI (averaging 2.2%). We observe similar sized wedges with households' 1-year (1pp, on average), 2-year (1pp, on average), and, in particular, 5-year (1.5pp, on average) ahead expectations, depicted in Figure B.1 of Appendix B.1. We refer to this as an 'upwards bias' in household expectations. Additionally, consistent with Weber et al. (2023) and Jonung (1981), we observe significant cross-sectional heterogeneity in households' perceptions of inflation, depicted by the light blue swathe which represents the min-max *range* of perceived inflation across age groups. Indeed, Weber et al. (2023) show that cross-sectional heterogeneity in perceived inflation can explain a significant proportion of the heterogeneity in inflation expectations, also depicted in Figure B.1 of Appendix B.1.

Figure 2. UK Household Inflation Expectations



Note: Figure (i) on the left depicts the quarterly evolution of UK households' average perceived (in blue) and expected inflation rates at different horizons: 1 year (in green), 2 years (in red), and 5 years (in yellow); based on data from the Bank of England's Inflation Attitudes Survey (IAS). Figure (ii) on the right shows the actual aggregate CPI inflation rate (in black) and the quarterly perceived inflation series (in blue) with the swathe for range across age groups. The data spans from 2003 Q1 - 2022 Q1, with the exception of inflation expectations at the 2-year and 5-year horizons, which are available from 2009 Q1 onwards.

Studies have proposed a number of candidate explanations for the general inaccuracy and cross-sectional heterogeneity of household inflation expectations. For instance, Lamla and Lein (2015) point to the importance of (variation in) the sources of news that households are exposed to, while Coibion et al. (2020, 2022) and D'Acunto et al. (2020) point to (variation in) the degree to which policy communication impacts expectations. However, while information that households receive about the future can vary widely, the range of possible factors contributing to heterogeneity in perceived current inflation should, in principle, be more limited. One possible contributing factor is (variation in) the degree of attentiveness across households to the state of the economy (Sims, 2010). Another possible explanation, which has attracted increasing focus in recent years, is that households might form inflation expectations based on their own personal experiences of inflation and the items that they actually purchase, rather than based on aggregate statistics.[8] To the extent that households weigh price changes in certain items more than others, this could lead to inaccurate inflation perceptions and expectations. Meanwhile, to the extent that households have different consumption baskets, this could explain heterogeneity in the cross-section.

3.2 Experienced inflation

Using our novel dataset, we are able to calculate households' actual experienced inflation rate, given the composition of their consumption basket, in each quarter between 2003 Q1 and 2022 Q1. Table 1 reports the mean and standard deviation for each demographic group's experienced inflation rate over the sample period. Column (1) reports the average 'total' inflation rates experienced by each

[8] As discussed in Section 2, the interpretation of household inflation expectations elicited from surveys depends on the precise wording of the survey questions. Certain surveys can be interpreted as eliciting expectations for 'aggregate' inflation (e.g., the Michigan Survey of Consumers), while some instead can be interpreted as eliciting information about 'personal' inflation (e.g., the Survey of Consumer Expectations). However, the observation that household inflation expectations are biased upwards relative to actual inflation is common across both sets of survey types. Thus, considering the possibility that households form expectations (whether personal or aggregate) based on their own inflation experiences could be insightful for either case.

demographic group. An individual's 'total' inflation rate is constructed by summing the inflation contributions across each component of the basket – which, in turn, are based on price changes in each component weighted by its share of expenditure in that individual's consumption basket.[9] The average contribution of each component of the basket is then provided across the odd-numbered columns starting from column (3). A greater relative contribution from a certain component for a specific demographic group reflects the fact that that component makes up a greater share of that groups' consumption bundle. We refer to a group that has a greater share of a certain component in their basket as being relatively more 'exposed' to price changes in that component. Throughout this paper, we define 'experienced inflation' not only in strict relation to a household's 'total' inflation rate, but more broadly to encompass also the relative exposure to different components of the basket.

From column (1), we see that lower income households experience higher total inflation rates than higher income households (by 0.30pp, on average) and older age groups experience higher inflation than younger cohorts (by 0.20pp, on average).[10] We see smaller differences in total experienced inflation across other demographic groups.[11] However, the average total inflation rates do not tell the full picture. Column (2) reports the standard deviation of experienced inflation across demographic groups. We see that low income and older households experience significantly more volatile inflation rates than higher income and younger households, respectively. Specifically, the standard deviation is 0.42pp greater amongst the lowest income group of households than it is for the highest income group, and 0.47pp greater for the oldest group of households than for the youngest group. This, in turn, correlates with the relative degree to which each demographic group is 'exposed' to certain components of the basket. Specifically, volatility of each groups' experienced inflation (from column (2)) is increasing in that groups' exposure to food and energy (utilities) price-driven inflation (in columns (4) and (8)). In contrast, groups that are relatively more exposed to other components of the basket, such as rent (e.g., younger age groups and renters) experience less volatile inflation. Thus, although the magnitude of the average 'total' inflation rate experienced over the sample period is relatively small, households' inflation *experience* can differ quite significantly over time – in both magnitude and volatility – given the composition of their consumption bundle.

[9] This definition is analogous to the definition of 'aggregated' inflation expectations used by Dietrich et al. (2022) – constructed by summing the expectations across different components of the basket – which they distinguish from expectations for 'aggregate' inflation.

[10] The calculated differences in experienced inflation rates across income groups are quantitatively similar to the 0.13pp and 0.26pp difference in median inflation rates found by Kaplan and Schulhofer-Wohl (2017) between households who earn <$20k and households that earn $20k-$40k and $40k-$60k, respectively, in the US. Kaplan and Schulhofer-Wohl (2017) find larger median differences – up to 0.45pp – across age groups, driven specifically by prices paid on items within the same components of the basket. Our empirical analysis in Sections 4 and 5 focuses on *changes* in experienced inflation. This abstracts from empirical discrepancies in levels across studies, and the dynamics of which are shown by Weber et al. (2023) to be explained mainly by the composition of the basket, rather than prices paid for the same basket of goods.

[11] Some studies, including Jonung (1981) and Reiche (2024), have found differences across gender with females consistently reporting higher inflation expectations compared to male. However, D'Acunto et al. (2020) noted that the gender expectations gap disappears in those households where grocery chores are more equally split. In our case, the LCFS survey captures expenditure at the household-level and any differences in expenditure between individuals within a household may not be captured.

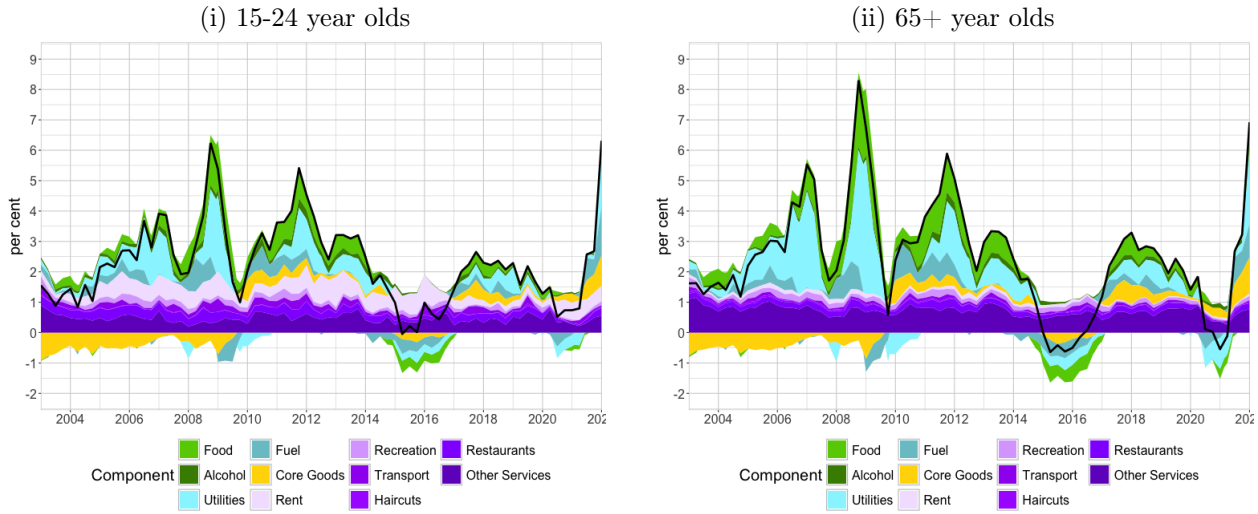
Table 1. Experienced Inflation Rates

Group	Total Inflation		Food		Alcohol		Utilities		Fuel		Core Goods		Rent		Restaurants		Recreation		Transport		Hair & Beauty		Other Services	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Age																								
15-24	2.30	1.34	0.29	0.41	0.12	0.07	0.35	0.61	0.13	0.37	-0.04	0.39	0.46	0.22	0.24	0.09	0.13	0.07	0.15	0.09	0.01	0.01	0.47	0.15
25-34	2.26	1.42	0.30	0.42	0.10	0.06	0.32	0.57	0.21	0.51	-0.03	0.46	0.25	0.12	0.24	0.08	0.15	0.06	0.13	0.08	0.02	0.01	0.55	0.13
35-44	2.26	1.52	0.34	0.47	0.11	0.06	0.35	0.62	0.22	0.55	-0.03	0.48	0.15	0.07	0.23	0.08	0.17	0.07	0.12	0.08	0.02	0.01	0.57	0.14
45-54	2.31	1.59	0.34	0.47	0.14	0.08	0.38	0.67	0.24	0.59	-0.02	0.48	0.11	0.05	0.23	0.08	0.16	0.07	0.12	0.07	0.02	0.01	0.60	0.15
55-64	2.33	1.64	0.36	0.50	0.15	0.08	0.42	0.72	0.23	0.58	-0.02	0.48	0.09	0.04	0.21	0.07	0.16	0.07	0.10	0.06	0.02	0.01	0.61	0.15
65+	2.50	1.81	0.45	0.62	0.12	0.06	0.58	1.02	0.15	0.41	-0.00	0.42	0.08	0.04	0.17	0.05	0.14	0.06	0.07	0.04	0.03	0.02	0.71	0.17
Income																								
<£10k	2.55	1.93	0.47	0.65	0.18	0.11	0.67	1.16	0.10	0.27	-0.02	0.35	0.19	0.09	0.15	0.06	0.15	0.07	0.09	0.06	0.02	0.02	0.55	0.15
£10k-£20k	2.44	1.75	0.43	0.60	0.14	0.08	0.55	0.95	0.16	0.38	-0.03	0.40	0.18	0.08	0.17	0.06	0.15	0.06	0.08	0.05	0.02	0.01	0.58	0.14
£20k-£35k	2.33	1.65	0.38	0.55	0.13	0.07	0.44	0.76	0.20	0.51	-0.03	0.44	0.17	0.08	0.20	0.07	0.15	0.06	0.08	0.05	0.02	0.01	0.59	0.14
>£35k	2.25	1.51	0.31	0.44	0.11	0.06	0.32	0.58	0.25	0.60	-0.03	0.51	0.10	0.05	0.24	0.08	0.16	0.06	0.12	0.07	0.02	0.01	0.65	0.16
House Tenure																								
Renters	2.35	1.47	0.37	0.52	0.15	0.08	0.41	0.71	0.13	0.33	-0.02	0.35	0.45	0.20	0.18	0.06	0.14	0.06	0.11	0.07	0.02	0.01	0.40	0.11
Mortgagors	2.28	1.61	0.33	0.46	0.11	0.06	0.35	0.62	0.26	0.65	-0.02	0.53	0.00	0.00	0.25	0.08	0.17	0.07	0.12	0.07	0.02	0.01	0.67	0.16
Owners	2.42	1.76	0.40	0.56	0.11	0.06	0.51	0.90	0.20	0.52	-0.01	0.47	0.00	0.00	0.20	0.06	0.15	0.06	0.08	0.05	0.03	0.02	0.74	0.19
Gender																								
Male	2.33	1.60	0.36	0.50	0.13	0.07	0.39	0.69	0.23	0.57	-0.02	0.47	0.12	0.06	0.23	0.07	0.16	0.06	0.10	0.06	0.02	0.01	0.62	0.15
Female	2.36	1.62	0.37	0.52	0.12	0.07	0.47	0.81	0.16	0.43	-0.02	0.45	0.16	0.07	0.19	0.06	0.15	0.06	0.11	0.06	0.03	0.02	0.61	0.15
Region																								
Scotland	2.34	1.49	0.35	0.49	0.11	0.06	0.37	0.65	0.19	0.48	-0.02	0.45	0.17	0.08	0.21	0.07	0.15	0.06	0.14	0.08	0.02	0.01	0.65	0.16
North & NI	2.34	1.68	0.37	0.52	0.16	0.09	0.46	0.81	0.19	0.48	-0.02	0.47	0.11	0.06	0.21	0.07	0.16	0.07	0.11	0.07	0.02	0.02	0.57	0.13
Midlands	2.36	1.67	0.37	0.52	0.14	0.08	0.46	0.82	0.21	0.53	-0.02	0.46	0.11	0.05	0.23	0.07	0.16	0.07	0.09	0.06	0.03	0.01	0.58	0.15
Wales & West	2.32	1.62	0.37	0.51	0.12	0.07	0.42	0.73	0.22	0.54	-0.02	0.47	0.12	0.06	0.20	0.07	0.15	0.06	0.08	0.05	0.02	0.01	0.62	0.15
Southeast	2.34	1.65	0.37	0.52	0.12	0.06	0.42	0.76	0.23	0.56	-0.01	0.47	0.12	0.06	0.21	0.07	0.15	0.06	0.08	0.05	0.02	0.01	0.64	0.16
Work																								
In work	2.27	1.51	0.31	0.44	0.11	0.06	0.33	0.59	0.24	0.60	-0.03	0.49	0.15	0.07	0.24	0.08	0.16	0.06	0.12	0.07	0.02	0.01	0.61	0.15
Out of work	2.45	1.78	0.44	0.61	0.15	0.08	0.56	0.97	0.15	0.39	-0.01	0.42	0.11	0.05	0.18	0.06	0.15	0.06	0.08	0.05	0.03	0.02	0.63	0.15

Note: This table reports the mean and standard deviation of experienced inflation rates for different demographic groups – age, income, house tenure, gender, region, and work status – over the sample period 2003 Q1 to 2022 Q1. Column (1) presents the average total inflation rate for each group. Columns (3)-(24) the average contributions alongside the standard deviation from each component of the consumption basket: Food, Alcohol, Utilities, Fuel, Core Goods and Rent, Recreation, Transport, Hair & Beauty, Restaurants & Catering, and Other Services.

We demonstrate the importance of this distinction in Figure 3, comparing the inflation experiences of 15-24 year olds and the over 65s by plotting the evolution of their 'total' inflation rates (black line), decomposed into the contribution of each component of the basket: Food (in green), Alcohol (in dark green), Utilities (in light blue), Fuel (in teal), Core Goods (in yellow), and each of the Services components (in different shades of purple). Table 1 above reported that the average difference in 'total' inflation experienced by these groups over the sample period was only 0.2pp. However, comparing Figures 3i and 3ii, we see that this masks significant heterogeneity in inflation experiences over time, driven by differences in exposure to different components. We observe that 15-24 year olds are relatively more exposed than the over 65s to rent prices, depicted by the relatively larger size of the light purple area in Figure 3i than in Figure 3ii. Meanwhile, the over 65s are relatively more exposed to food and energy (utilities) price-driven inflation, depicted through the larger pink and cyan areas, respectively, in Figure 3ii than in Figure 3i. In particular, we see that the greater exposure to food and utilities price-driven inflation amongst the over 65s contributed to significantly higher 'total' inflation rates amongst this group in 2008 than faced by the 15-24 year olds, by approximately 2pp – two orders of magnitude larger than the average difference in total inflation rates over the sample period.

Figure 3. Decomposition of experienced inflation by component



Note: The charts compare the inflation experiences of two demographic groups: on the left, 15-24 year-olds and on the right, individuals aged 65 and over. The black line presents the evolution of their total inflation rates. The total inflation rates are decomposed into the contributions of each component of the consumption basket: Food, Alcohol, Utilities, Fuel, Core Goods, Rent, Recreation, Transport, Hair & Beauty, Restaurants & Catering, and Other Services. The sample period is from 2003 Q1-2022 Q1.

Figure 3 also highlights that accurately estimating ones own experienced inflation rate based on personal consumption is no easy task. To do so, a household needs to weigh price changes in different components of the basket in proportion to their share in their basket. Over- or under-weighting certain components would lead to inaccurate perceptions of, and thus potentially expectations for, inflation. We examine the association between households' perceived and experienced inflation below.

3.3 Perceived vs experienced inflation

Above we have seen that households' *perceptions* of inflation are a potentially important factor in the formation of inflation *expectations*, are broadly inaccurate – consistently upwards biased relative to actual inflation – and heterogeneous in the cross-section. We have also seen that households'

experiences of inflation depends on their relative exposure to different components of the consumption basket, which also varies significantly in the cross-section. We now exploit the novel dataset we have constructed to analyse the possible association between experienced, perceived, and expected inflation.

Figure 4. Correlation between perceived inflation and component-driven inflation



Note: This figure plots the co-movement between average perceived inflation (in blue) and average food price- (in green) and services price- (in light blue) driven inflation, over the sample period from 2003 Q1-2022 Q1.

In the time series, households' aggregate perceived inflation co-moves more closely with inflation driven by certain components of the basket than others. Figure 4 depicts the co-movement between average perceived inflation (in blue) and average food price- (in pink, Figure 4i) and utilities price- (in cyan), Figure 4ii) driven inflation, over the sample period, across age groups.[12] The swathes represent the min-max range across age groups. We can see that the co-movement with food price-driven inflation (correlation of 0.63) is stronger than that with utilities price-driven inflation (correlation of 0.33). Perceived inflation also correlates strongly with alcohol-driven inflation (correlation of 0.80), although as depicted in Figure B.2 of Appendix B, the contribution of alcohol prices to inflation is very small in absolute terms. Figure B.2 also depicts weaker co-movements with core goods (correlation of 0.53), and services broadly defined (correlation of 0.32). Within services, the components that co-moves most closely with perceived inflation are Transport (0.39) and Restaurants (0.35).

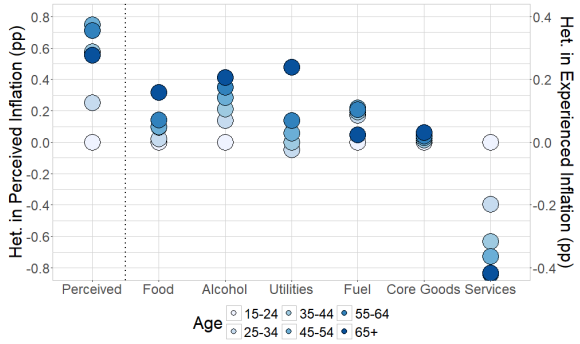
In the cross-section, heterogeneity in households' inflation perceptions is directionally consistent with heterogeneity in households' exposure to food, alcohol, and utilities price-driven inflation across most demographic characteristics. Figure 5 depicts the heterogeneity in perceived and experienced inflation across demographic groups. The left-hand axis represents the degree to which a specific demographic group's perceived inflation rate is greater than that formed by the group with the lowest perceived inflation rate, on average, over the sample. The right-hand axis represents the degree to which a specific demographic group's average exposure to a certain component of the consumption basket is greater than that of the group with the lowest exposure to that component. We depict this cross-sectional heterogeneity across age (in blue, Figure 5i), income (in green, Figure 5ii), house tenure (in red, Figure 5iii), gender (in purple, Figure 5iv), geographical region (in orange, Figure 5v), and work status (in turquoise, Figure 5vi) groups. For each cut of the data, the shade of the dot represents

[12]Each component-specific inflation series represents the average percentage point contribution of that component over time. The sum of each component-specific inflation rate at any given point in time yields the average 'total' experienced inflation rate in that period.

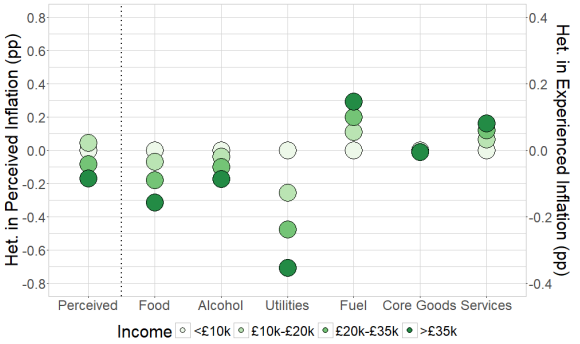
the specific demographic group. We observe that perceived inflation is broadly increasing in age and decreasing in income. In relation to experienced inflation, we observe that exposure to food, alcohol and utilities price-driven inflation is similarly increasing in age and decreasing in income, while exposure to services price-driven inflation (which here we aggregate across the different components) goes in the opposite direction across both cuts of the data. There is very little heterogeneity in exposure to core goods price-driven inflation. We see similar patterns across the other cuts of the data, albeit the degree of heterogeneity is smaller.

Figure 5. Heterogeneity in perceived and experienced inflation across demographic groups

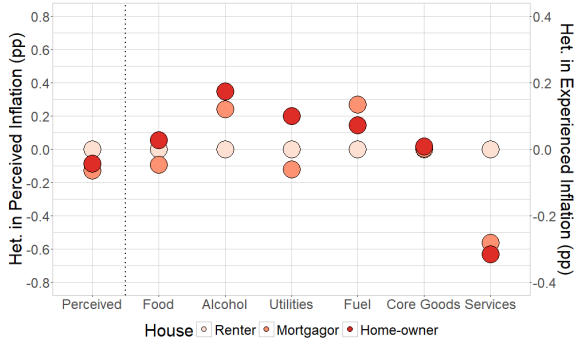
(i) Age



(ii) Income



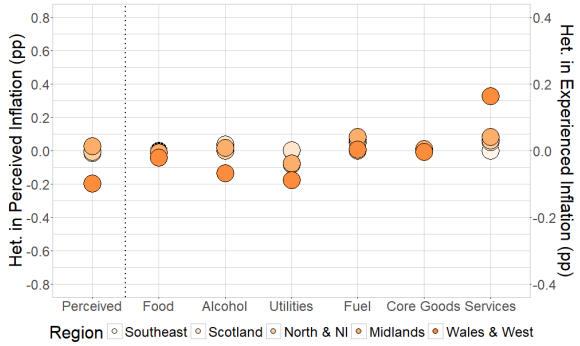
(iii) House Tenure



(iv) Gender



(v) Region



(vi) Work Status



Note: This figure illustrates the heterogeneity in perceived and experienced inflation across six demographic groups, where dot shading indicating the specific demographic group. The left-hand axis shows the extent to which a demographic group's average perceived inflation rate exceeds that of the group with the lowest perceived inflation rate over the sample period. The right-hand axis shows the extent to which a demographic group's exposure to a specific component of the consumption basket exceeds that of the group with the lowest exposure to that component.

These observations motivate the following questions: are households more sensitive to price changes in certain components of the consumption basket than others? If so, can this explain inflation expectations dynamics? Furthermore, can it rationalise the inaccuracy of household expectations, and cross-sectional heterogeneity therein? These are the questions we seek to answer in the remainder of

the paper.

4 Sensitivity of expectations to experienced inflation

In this section, we empirically test the sensitivity of households' perceived and expected inflation to changes in their experienced inflation, focusing on aggregate dynamics. We make three key findings. First, we show that food prices matter most for aggregate inflation expectations dynamics. Specifically, we find that households' inflation expectations are particularly sensitive to changes in food and alcohol prices and that this sensitivity holds for short-, medium-, and long-horizon expectations. Indeed, households are more sensitive in forming aggregate inflation expectations to changes in experienced inflation driven by these specific components of the basket than they are to changes in aggregate inflation. Sensitivity to food price-driven inflation is of particular importance for aggregate dynamics given the sizable share of total expenditure spent on food (15%-20%, on average). Meanwhile, we find little evidence of particular sensitivity to price changes in other components of the basket. Second, we show that the relationship between food price-driven inflation and inflation expectations is persistent, non-linear, and asymmetric, with – particularly long-run horizon – expectations being especially sensitive to large and inflationary food price inflation changes. Third, we document an important role for households' *perceptions* of current inflation in explaining the formation of *expectations* for future inflation, explaining a significant amount of variation in short-, medium- and long-horizon expectations, and accounting for most of the sensitivity of expectations to changes in experienced inflation.

4.1 Sensitivity to different components of the basket

We begin by testing the sensitivity of household inflation expectations to experienced inflation driven by different components of the consumption basket. We do so by estimating the statistical association, in first differences, between changes in experienced inflation driven by each respective component of the basket and households' inflation perceptions and expectations.[13] In order to estimate aggregate relationships, we employ a fixed effects panel specification capturing average associations across demographic groups over time. For the purposes of this aggregate analysis, we explicitly abstract from potential heterogeneity across demographic groups through the use of group fixed effects. We run the following regression:

$$\Delta \mathbb{E}\pi_{g,t|t+y} = \alpha + \sum_{c=1}^{C} \beta_c \Delta \pi_{c,g,t} + \gamma_g + \epsilon_{g,t} \tag{1}$$

where y $\in \{0, 1, 2, 5\}$ such that $\mathbb{E}\pi_{g,t|t+y}$ is the average 0-year (i.e., perceived level of current inflation), 1-year, 2-year, and 5-year ahead inflation expectation amongst households in demographic group g at time t.[14] $\Delta \pi_{c,g,t}$ captures the change in experienced inflation driven by each specific component of the consumption basket c in period t given the average composition of the basket for a household in demographic group g in that period. β_c are the associated coefficients and γ_g represent group fixed

[13] D'Acunto et al. (2021) employ a similar empirical strategy, also estimating *changes* in households' inflation expectations, in first differences, following *changes* in experienced inflation, also in first differences. Coibion and Gorodnichenko (2015), contrast, estimate the the sensitivity of *changes* in household inflation expectations, in differences, to (fuel) inflation, in levels. We choose to estimate sensitivity with *both* expectations and experienced inflation in first differences, as we observe significant persistence in each series.

[14] In the regression tables, for brevity, we denote $\Delta \mathbb{E}\pi_{g,t|t}$ by $\Delta 0y$, $\Delta \mathbb{E}\pi_{g,t|t+1}$ by $\Delta 1y$, and likewise for 2-year and 5-year ahead expectations.

effects. The interpretation of our estimated coefficients of interest β_c is the degree to which a 1pp change in experienced inflation driven by price changes in component c of the consumption basket is associated with a change in beliefs about inflation, holding fixed the changes in experienced inflation driven by price changes in all other components of the basket, and independent of households' exposure to that component in the basket. If households were *equally* sensitive to changes in inflation driven by each component of the basket, we would expect to see $\beta_c = \beta_{\neg c}\ \forall c$. That is, their perception of inflation would change in exactly the same proportion to an equal sized change in their experienced inflation rate regardless of which component of the basket were driving that change in inflation. If, furthermore, households were fully observant of, and sensitive to, changes in experienced inflation we would expect their perceived inflation to change 1:1 with it such that $\beta_c = 1\ \forall c$. At the other end of the spectrum, if households' perceptions of inflation were entirely insensitive to changes in experienced inflation, driven by price changes in any component of the basket, we would expect to see $\beta_c = 0\ \forall c$. For any value of $\beta_c < 1$ ($\beta_c > 1$), households under-react (over-react) to changes in their experienced inflation rate driven by component c of their consumption basket.[15]

We report the results of our baseline regressions in Tables 2 and 3, based on the panel dataset that is cut by age groups. In our baseline results, we aggregate the different services components together into a single variable, showing in Table B.1 of Appendix B.3 that results are unchanged with the full breakdown of services into the constituent components. We also show in Appendix B.4 that we obtain very similar results using instead the panel datasets cut by income (Table B.3), house tenure (Table B.4), gender (Table B.5), region (Table B.6), and work status (Table B.7), as well as various combinations of the the six characteristics including age-income (Table B.8), age-income-house tenure (Table B.10), and all six combined (Table B.12).

Column (1) in Table 2 reports the results of the regression specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. We observe that changes in households' perceived inflation rate are statistically significantly associated with changes in food and alcohol (at the 1% and 5% level, respectively), as well as services (at the 10% level) price-driven inflation. They are not significantly associated with changes in core goods or, notably, energy price-driven inflation. Comparing the magnitudes of the coefficients, we see strongest associations with food and alcohol, where a 1pp change in inflation driven by each component is associated with a 0.70pp and 1.17pp change in perceived inflation, respectively. That is, households respond nearly 1:1 with changes inflation driven by each component (slightly under in the case of food and slightly over in the case of alcohol). Meanwhile, households significantly under-react to changes in experienced inflation driven by all other components of the basket, indicated by coefficients that are significantly smaller than 1.

[15] One potential concern of a specification of this sort might relate to the risk that estimated associations capture the sensitivity of experienced inflation to inflation expectations, rather than that of expectations to experienced inflation, as we interpret it. The intuition would be that changes in aggregate inflation expectations trigger either (i) a change in the composition of the consumption basket or (ii) a change in prices (of specific goods in the consumption basket and not others). However, as explained in Section 2, the sequencing we use in merging the IAS inflation expectations data with the LCFS expenditure and CPI prices data mitigates this concern. Specifically, we elicit inflation expectations one period *after* their experienced inflation rates. That is, based on a *given* composition of their basket and based on *given* prices. We then estimate associations in first differences, further mitigating the degree to which our estimated coefficients are likely to reflect the impact of expectations on actual prices set or changes in the composition of the basket through the persistence of expectations. Moreover, we show in Figure 1 does not vary much over time, reflecting the fact that these components of the baskets are not particularly substitutable.

Table 2. Baseline Results: Inflation Perceptions

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.70***	0.64***						0.64***					
	(0.15)	(0.13)						(0.12)					
Alcohol	1.17**		1.46***						1.20**				
	(0.52)		(0.53)						(0.55)				
Energy (Utilities)	−0.04			−0.12						0.02			
	(0.07)			(0.12)						(0.09)			
Energy (Fuel)	0.10				−0.13						−0.17		
	(0.10)				(0.12)						(0.13)		
Core Goods	−0.04					−0.18						−0.41*	
	(0.22)					(0.19)						(0.22)	
Services	0.33*						0.16						0.21
	(0.18)						(0.22)						(0.23)
$\Delta\pi_{g,t}^{Total}$		0.06	0.15***	0.21**	0.19***	0.17***	0.14**						
		(0.05)	(0.05)	(0.08)	(0.06)	(0.05)	(0.06)						
$\Delta\pi_{g,t}^{CPI}$								0.09	0.19**	0.20**	0.27***	0.28***	0.18**
								(0.08)	(0.09)	(0.10)	(0.10)	(0.09)	(0.09)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	456	456	456	456	456	456	456	456	456	456	456	456	456
Adj. R^2	0.20	0.18	0.12	0.11	0.11	0.10	0.10	0.18	0.11	0.10	0.11	0.12	0.10

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by age groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

In Columns (2)-(7) we report results from a modified version of Eq. (1) in which we regress changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket *separately*, while controlling also for changes in the 'total' experienced inflation rate. We do so to test whether the associations estimated in Column (1) reflect household sensitivity to price changes in those specific components of the basket *above and beyond* changes in 'total' inflation. If changes in households' 'total' experienced inflation rate systematically correlates with the contribution from a specific component, notwithstanding price changes in other components, then the estimates in Column (1) could reflect households' sensitivity to changes in 'total' experienced inflation rate, rather than to price changes *specifically* in those components. Econometrically, however, we cannot control for households' 'total' experienced inflation in Eq. (1), as this is the sum of the constituent components and would lead to biased estimates (see Greene (2003)). We confirm in Columns (2) and (3) that households are indeed sensitive to food and alcohol price-driven inflation *independent* of changes in their 'total' experienced inflation rate, remaining statistically significant at the 1% level. In contrast, the coefficient on services price-driven inflation is no longer statistically significant - indicating no specific sensitivity to services per se - and those on energy and core goods price-driven inflation remain insignificant.[16]

[16]We show in Table B.1 that perceived inflation is also insensitive to inflation driven by each individual component of services, accounting for the change in 'total inflation'.

Table 3. Baseline Results: 1y-, 2y-, and 5y-ahead Inflation Expectations

	Dependent variable:																							
	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
$\Delta\pi_{c,g,t}$																								
Food	0.51**	0.38*						−0.02	0.61***	0.44*						0.10	0.20	0.13						−0.24
	(0.20)	(0.20)						(0.14)	(0.23)	(0.25)						(0.17)	(0.22)	(0.22)						(0.18)
Alcohol	0.88		1.18*					−0.003	0.31		0.73					−0.09	1.17*		1.45**					0.82
	(0.60)		(0.65)					(0.49)	(0.59)		(0.53)					(0.43)	(0.61)		(0.62)					(0.52)
Utilities	−0.19			−0.33**				−0.16	−0.15			−0.33**				−0.12	−0.21**			−0.34**				−0.18**
	(0.16)			(0.16)				(0.12)	(0.11)			(0.13)				(0.09)	(0.09)			(0.14)				(0.07)
Fuel	0.19*				0.12			0.11	0.17***				0.03			0.12*	0.05				0.07			−0.002
	(0.10)				(0.19)			(0.10)	(0.06)				(0.11)			(0.07)	(0.10)				(0.11)			(0.08)
Core	−0.03					0.07		−0.003	0.17					0.10		0.01	0.17					0.22		0.04
Goods	(0.26)					(0.22)		(0.17)	(0.16)					(0.22)		(0.11)	(0.19)					(0.21)		(0.14)
Services	0.30						0.12	0.06	0.31**						0.06	0.05	0.36**						0.19	0.14
	(0.19)						(0.21)	(0.12)	(0.14)						(0.19)	(0.11)	(0.15)						(0.17)	(0.11)
$\Delta\pi^{Total}_{g,t}$		0.02	0.07	0.22***	0.05	0.07	0.06			0.06	0.12**	0.26***	0.12*	0.12**	0.12**			0.004	0.01	0.16*	0.01	0.01	0.002	
		(0.08)	(0.08)	(0.07)	(0.12)	(0.09)	(0.09)			(0.05)	(0.05)	(0.07)	(0.07)	(0.06)	(0.05)			(0.04)	(0.04)	(0.09)	(0.05)	(0.04)	(0.04)	
Δ0y								0.76***								0.53***								0.46***
								(0.07)								(0.04)								(0.07)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	456	456	456	456	456	456	456	456	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312
Adj. R^2	0.09	0.03	0.02	0.06	0.02	0.01	0.01	0.49	0.15	0.11	0.07	0.12	0.07	0.07	0.07	0.44	0.04	−0.02	0.004	0.02	−0.02	−0.01	−0.01	0.20

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by age groups. Columns (1), (9) and (17) report results of our baseline regression for 1y-, 2y-, and 5y-ahead expectations, respectively. Columns (2)-(7), (10)-(15) and (18)-(23) report results of a modified version of Eq. (1), regressing changes in inflation expectations on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8), (16) and (24) present results from a modified version of Eq. (1) in which we control also for the change in households' perceptions of inflation, when estimating the sensitivity of inflation expectations to changes in experienced inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Moreover, we show in Columns (8) and (9) that changes food and alcohol price-driven inflation continue to be associated with changes in perceived inflation independent also of changes in aggregate CPI inflation. Indeed, comparing the magnitude and significance of the coefficients, we see that households are significantly *more* sensitive to changes in food (coefficient of 0.64) and alcohol (coefficient of 1.20) price-driven driven inflation than they are to changes in aggregate CPI inflation (coefficients between 0.09 and 0.19). This implies that personal experienced inflation driven by these components matters more for the formation of beliefs about aggregate inflation than actual changes in aggregate inflation.[17][18]

Columns (1), (9) and (17) in Table 3 report results from our baseline regression specification in Eq. (1) for 1y-, 2y-, and 5y-ahead expectations, respectively. We see that food and alcohol price changes are associated also with changes in inflation *expectations* at a range of horizons. Changes in food price-driven inflation are significantly associated with changes in 1y- and 2y-ahead expectations (coefficients of 0.51 and 0.61, respectively), while changes in alcohol price-driven inflation are significantly associated with changes in 5y-ahead expectations (coefficient of 1.17). As was the case for households' *perceived* inflation, each of these associations hold over and above changes in 'total' inflation, implying specific sensitivity to price changes in these components of the basket (columns (2), (3), (10), and (19)). While we see that changes in energy (fuel) price-driven inflation are correlated with changes in 1y-ahead (coefficient of 0.19) and 2y-ahead (coefficient of 0.17) inflation expectations, this does not hold over and above changes in total inflation. Likewise for price changes in each of the other components of the basket.

Taken together, then, households' inflation perceptions and expectations are most sensitive to changes in food and alcohol prices. The sensitivity to food price-driven inflation specifically is of particular importance for aggregate inflation expectations dynamics, given the sizable share of total expenditure spent on food (depicted in Figure 1 to hover between 15% and 20% on average).[19] These findings constitute a significant contribution to the literature. Previous studies have identified households' inflation expectations as being excessively sensitive to energy price inflation (Binder, 2018; Binder and Makridis, 2022; Coibion and Gorodnichenko, 2015; Trehan, 2011). However, each of these studies focus on energy prices *in isolation*.[20] Leveraging our novel dataset, we uniquely show that households are not significantly sensitive to energy price-driven inflation once one accounts for changes in experienced inflation driven by other components of the consumption basket or for changes in 'total' experienced inflation. The same is true for all components of the basket with the exclusive exception of food and alcohol.

Table 3 also allows us to glean insights into the *mechanisms* through which experienced inflation

[17] As discussed in Section 2, the precise wording used in the survey to elicit households inflation expectations may determine the degree to which households base responses on experienced versus aggregate inflation. Nevertheless, these results indicate that households' experienced inflation is important, motivating the rest of the analysis.

[18] Weber et al. (2025) show that the degree of attention that households pay to different sources of information about inflation depends on the economic environment and, specifically, the level of inflation. Our sample period spans 2003 Q1 - 2022 Q1, during which time inflation remained below 4% in all but five quarters. That is, our sample spans a period of generally low inflation, and we do not test the time-varying nature of households' attention.

[19] We depict in Figure B.2ii of Appendix B that alcohol, which constitutes a significantly smaller fraction of the consumption basket (just below 5% on average) contributes significantly less, in absolute terms, to households' experienced inflation rate. Thus, while our results reveal an acute sensitivity to price changes therein, alcohol price changes are less likely to materially influence aggregate inflation expectations dynamics to the same degree as food price changes.

[20] Coibion and Gorodnichenko (2015) do seek to control for food prices, through the World Bank's food price index. Our results indicate that one needs to control for food prices at a more granular level to fully account for their effect on households' inflation expectations.

might influence households' inflation expectations. Perceptions are a key driver of short-, medium-, and long-horizon expectations. Columns (8), (16) and (24) present results from a modified version of Eq. (1) in which we control also for the change in households' perceptions of inflation, when estimating the sensitivity of inflation expectations to changes in experienced inflation. We do so in order to test whether changes in experienced current inflation influence households' expected inflation *independent* of resulting changes in perceived inflation. We see that households' perceived inflation is crucial in explaining these dynamics: most statistically significant coefficients in columns (1), (9), and (17) lose their significance in columns (8), (16), and (24).[21] Indeed, perceived inflation is highly associated with each of 1y-, 2y-, and 5y-ahead expected inflation (estimated coefficients of 0.79, 0.53, and 0.46, respectively), and explains a significant amount of the variation at each horizon; increasing the adjusted R^2 from 9%, 15% and 4% in columns (1), (9) and (17), respectively, to over 40% in columns (8) and (16) and to 20% in column (24). As such, households' inflation perceptions are not only a key factor in understanding the formation of short-horizon expectations – consistent with Weber et al. (2022, 2023) – but also medium- and long-horizon expectations too.

4.2 Persistent, non-linear, and asymmetric sensitivity

We now run modified versions of the baseline regression specification in Eq. (1) to test for persistence, non-linearities, and asymmetries in the sensitivity of household inflation perceptions and expectations to changes in experienced inflation. We find evidence supporting the presence of each in relation to, specifically, food price-driven inflation.

To test for persistence, we augment Eq. (1) by including the *lagged* change in experienced inflation for each respective component of the consumption basket, $\Delta\pi_{c,g,t-h}$. A finding that households' beliefs about inflation are sensitive to both their experienced inflation rate in the current period, t, as well as that in the previous periods, $t-h$, would indicate that experienced inflation has a persistent association with inflation perceptions or expectations. To test for non-linearities, we augment Eq. (1) by including the *squared* change in experienced inflation driven by each respective component of the basket, $[\Delta\pi_{c,g,t}]^2$. This tests whether households' sensitivity is increasing in the size of the change of experienced inflation, with perceptions and expectations responding more to larger changes. Finally, to test for asymmetries, we augment Eq. (2) by including interaction terms $\Delta\pi_{c,g,t} \times \Uparrow_{c,t}$ for each component of the basket where $\Uparrow_{c,t}$ is a dummy variable that takes the value of 1 if price changes in component c at time t contribute to an increase in the experienced inflation, and 0 if they contribute to a decrease.

Table 4 presents the results for each of these augmented regression specifications, focusing on the coefficients related to food price-driven inflation. We report the full regression table with coefficients also for the other components of the basket in B.2 of Appendix B, for which we do not find systematic evidence of persistent, non-linear, or asymmetric relationships with inflation expectations.

[21] The exception is the association with energy (fuel) price-driven inflation. However, we see from the lack of significance of the coefficient in Column (13) that this association reflects a sensitivity of 2-year ahead expectations to changes in the current 'total' rate of experienced inflation, with which, in turn, energy price-driven inflation correlates.

Table 4. Persistence, Non-linearity, Asymmetry Results: Food

	Dependent variable:																					
	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
$\Delta\pi_{Food,g,t}$	0.70***	0.69***	0.71***	0.63***	0.51**	0.56***	0.58***	0.04	0.39	−0.09	0.61***	0.61***	0.75***	0.21*	0.09	−0.17	0.20	0.25	0.37**	−0.10	−0.35	−0.59**
	(0.15)	(0.16)	(0.15)	(0.22)	(0.20)	(0.16)	(0.19)	(0.12)	(0.35)	(0.25)	(0.23)	(0.15)	(0.16)	(0.12)	(0.25)	(0.20)	(0.22)	(0.18)	(0.19)	(0.16)	(0.31)	(0.27)
$\Delta\pi_{Food,g,t-1}$		0.14				−0.03						−0.13						0.04				
		(0.17)				(0.17)						(0.15)						(0.21)				
$\Delta\pi_{Food,g,t-2}$		0.23*				0.20						−0.09						0.17				
		(0.14)				(0.17)						(0.21)						(0.21)				
$[\Delta\pi_{Food,g,t}]^2$			0.01				0.37	0.36*					0.82***	0.61***					0.76***	0.58***		
			(0.26)				(0.36)	(0.19)					(0.22)	(0.17)					(0.27)	(0.22)		
$\Delta\pi_{Food,g,t} \times \Uparrow_{c,t}$				−0.14					0.16	0.26					1.05***	0.70**					1.18***	0.86**
				(0.40)					(0.56)	(0.35)					(0.40)	(0.33)					(0.45)	(0.39)
Δ0y								0.77***		0.77***				0.51***		0.51***				0.45***		0.46***
								(0.07)		(0.07)				(0.04)		(0.04)				(0.07)		(0.07)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control for other components	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	456	444	456	456	456	444	456	456	456	456	312	312	312	312	312	312	312	312	312	312	312	312
Adjusted R^2	0.20	0.23	0.21	0.24	0.09	0.17	0.10	0.51	0.14	0.52	0.15	0.22	0.22	0.47	0.24	0.48	0.04	0.09	0.07	0.21	0.09	0.24

Note: This table presents the results from augmented regression specifications of Eq. (1), focusing on the coefficients related to food price-driven inflation. Columns (1), (5), (9), and (13) report the coefficients from the baseline regression specification for 0-year, 1-year, 2-year, and 5-year ahead expected inflation. Columns (2), (6), (10), and (14) report the coefficients for the regression that includes the lagged changes in experienced inflation driven by each respective component of the basket. Columns (3), (7), (11), and (15) report coefficients from the regression that includes the square of changes in experienced inflation driven by each respective component of the basket. Columns (4), (8), (12), and (16) report coefficients from the regression testing for asymmetries. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Columns (1), (5), (11), and (17) report the coefficients from the baseline regression specification in Eq. (2) for 0-year, 1-year, 2-year, and 5-year ahead expected inflation, as presented in Table 2. Columns (2), (6), (12), and (18) report the coefficients for the regression that includes the lagged changes in experienced inflation driven by each respective component of the basket. From row (1), we see that a contemporaneous 1pp change in food price-driven inflation in period t continues to be significantly associated with a change in perceived inflation, which on average changes by 0.69pp in response. As before, the contemporaneous change in food price-driven inflation is also significantly associated with a change in 1y-ahead (coefficient of 0.56) and 2y-ahead (coefficient of 0.61) expected inflation, but this falls in both significance and magnitude (coefficient of 0.25) at the 5-year ahead horizon. However, from rows (2) and (3) we see that one- and two-quarter lagged changes in food price-driven inflation, respectively, are also positively associated with changes in perceived inflation (column (2)). This association is statistically significant for changes in food price-driven inflation two quarters earlier (coefficient of 0.23), indicating that households are *persistently* sensitive in their formation of perceived inflation to changes in food price-driven inflation. This does not seem to extend, however, to households' expectations for future inflation, which are not themselves significantly associated with food price changes in previous periods.

We also document evidence of a non-linear relationship between food price-driven inflation and households' inflation expectations at short, medium- *and* long-horizons. Columns (3), (7), (13), and (19) report coefficients from the regression that includes the square of changes in experienced inflation driven by each respective component of the basket. We see that both 2-year and 5-year ahead inflation expectations are significantly more sensitive to larger changes in food price-driven inflation than they are to smaller changes.[22] The sensitivity of 5-year ahead expectations to squared changes in food price-driven inflation is particularly notable, as focusing only on linear price changes (column (17)) does not reveal the underlying sensitivity at this longer horizon. Indeed, we show in columns (14) and (20) that the sensitivity of expectations to larger changes in food price-driven inflation holds independent of changes in perceived inflation – indicating that large food price changes trigger a response in households' expected future inflation over and above perceptions of current inflation. Accounting for changes in perceived inflation also reveals a non-linear relationship at the 1-year ahead horizon (column (8)).

Finally, we find evidence of asymmetric sensitivity to increases in food price-driven inflation, relative to decreases, for medium- and long-horizon expectations. We report coefficients from the regression testing for asymmetries in columns (4), (9), (15), and (21). We see that 2- and 5-year ahead expectations increase by 1.05pp and 1.18pp more, respectively, following an increase in food price-driven inflation than they do following a decrease. These associations also hold independent of changes in perceived inflation (columns (16) and (22)).

Taken together, these findings uncover sensitivity to food prices for the formation of short-, medium- *and* long-horizon expectations. In particular, longer horizon expectations are especially sensitive to changes in food price-driven inflation when these changes are *large* and *positive*. Moreover, in the face of such shocks, households' medium- and long- horizon expectations for inflation change independently of their perceptions of current inflation; indicating that this triggers a belief among households that inflationary pressures will actively strengthen over the subsequent years.

[22] We confirm in Table C.1 of Appendix C that the estimated non-linear association holds independently of the *asymmetric* association – a special case of non-linearity – for 2-year ahead expected inflation by including both terms in the same regression specification for each component

4.3 Implications for aggregate dynamics, upwards bias of expectations and households' 'supply-side' view of the economy

The combination of findings presented in this section imply that household inflation expectations are most likely to rise materially in response to shocks that impact food prices, and disproportionately so when these shocks are large (owing to the non-linear sensitivity) and inflationary (owing to the asymmetric sensitivity). The response of households' expectations to such a shock may also be persistent and slower to fall once the shock has subsided (owing to a combination of persistent and asymmetric sensitivity). Household inflation expectations may thus be most likely to contribute to amplified and persistent aggregate inflationary dynamics in the face of large and inflationary shocks to, specifically, food prices. A monetary authority seeking to maintain price stability may consequently wish to respond more aggressively than they otherwise would to such a shock, even if the shock is temporary in nature.

Moreover, our findings can help to shed light on two well-documented empirical puzzles. First, as noted in Section 3, households' perceptions of and expectations for inflation are generally inaccurate and, specifically, consistently biased upwards relative to both aggregate and experienced inflation (Weber et al., 2022; Candia et al., 2021; Kumar et al., 2015). The inaccuracy of households' beliefs about aggregate inflation is consistent with our findings that households place more weight on price changes in certain components of the basket, namely food and alcohol, than both price changes in other components (e.g., energy, core goods and services), as well as aggregate inflation itself. Furthermore, the fact that households' expectations for inflation are consistently upwards biased relative to actual experienced inflation or central banks' target rate of inflation is consistent with our findings that expectations respond asymmetrically strongly to increases in food price-driven inflation than decreases, at least for medium- and long-horizon expectations. Specifically, as depicted in Figure B.1 of Appendix B.1, the wedge between 2-year and 5-year ahead expectations and actual aggregate CPI inflation averaged 1pp and 1.5pp over our sample period, respectively. The regression results reported in columns (15) and (21) of Table 4 estimate that 2-year and 5-year ahead expectations for inflation increase by 1.05pp and 1.18pp more, respectively, following a 1pp increase in food price-driven inflation than they do following a decrease in food price-driven inflation. As such, this asymmetric sensitivity can feasibly explain a significant portion of the observed wedge in expectations.[23]

Second, a growing body of survey evidence has identified that, in a number of developed economies, households typically associate increases in inflation with increases in unemployment or decreases in GDP (Coibion et al., 2023; Candia et al., 2020). This implies that households expect the economic dynamics to be driven in that period mainly by supply-side disturbances (Ferreira and Pica, 2024). In this paper, we uncover that household beliefs about inflation are most sensitive to specifically food and alcohol price-driven inflation. In turn, food price increases are typically associated with supply- rather than demand-side shocks; (Adjemian et al., 2024) find that supply-side factors make up the dominant portion, around 70-80%, of contributions to food price changes over time. If, then, households predominantly adjust their inflation expectations in response to food price-driven inflation fluctuations, as we find, they may consequently be more cognisant of changes in inflation when they originate from supply-side shocks; potentially rationalising their predominantly supply-side view of

[23] Our findings leave space also for other drivers of this wedge between beliefs about aggregate inflation and actual aggregate inflation, in particular in relation to perceived and short-horizon expected inflation, where we do not find evidence of asymmetric sensitivity.

economic shocks.

5 Heterogeneity across demographic groups

In the section above, we tested the sensitivity of expectations to experienced inflation in the aggregate. We saw in Section 3.2, however, that there is significant heterogeneity in experienced inflation across demographic groups and, specifically, in the degree to which different groups are *exposed* to different components of the consumption basket. We now exploit the richness of our dataset to test for heterogeneity in households' *sensitivity* to price changes in different components of the consumption basket across demographic groups, given these differences in exposure. We do so by cutting our panel datasets by each demographic group of interest to obtain a time series for each group. Our time series specifications are given by:

$$\Delta \mathbb{E}\pi^{g}_{t|t+y} = \alpha + \beta_g \Delta \pi^{g}_{c,t} + \epsilon_t \tag{2}$$

for each demographic group g^d, where d denotes the demographic variable across which we are cutting the data: $d \in \{\text{Age, Income, House Tenure, Gender, Region, Work Status}\}$. To test for heterogeneity across 'Age' groups, we split households by ages: $g^a \in \{15{-}24,\ 25{-}34,\ 35{-}44, 45{-}54,\ 55{-}64,\ 65{+}\}$. For 'House Tenure', $g^h \in \{\text{Renters, Mortgagors, Owners}\}$; for 'Gender', $g^g \in \{\text{Male Female}\}$; for 'Region', $g^r \in \{\text{Scotland, North and Northern Ireland, Midlands, Wales and West, and South East}\}$; and for 'Work Status', $g^w \in \{\text{In Work, Out of Work}\}$. Finally, 'Income' is slightly trickier as the income buckets within the IAS household survey change over time. Thus, there are an unavoidable set of decisions to take in constructing the income group time series. We opt for an approach that seeks to minimise overlap between different groups at different points in time, such that, between 2003 and 2022: $g^i \in \{< 9500,\ 9500{-}17499,\ 17500{-}24999,\ \geq 25000\}$, and since 2022: $g^i \in \{< 9999,\ 10000{-}19999,\ 20000{-}34999,\ \geq 35000\}$. The lower bound for the highest income group, then, typically lies around or just below the median income level in the UK, while the bounds for the second highest income group span approximately the second quartile of the income distribution.[24]

Table 5 reports the regression results from Eq. (2) for households' perceived inflation, while Tables B.14, B.16, and B.18 in Appendix B.5 report the results for 1-year, 2-year, and 5-year ahead expected inflation.

5.1 Sensitivity to food prices

Strikingly, we find that households' sensitivity to food prices holds across *all* age, income, house tenure, gender, region, and work status groups. We see this across Tables 5, B.14, and B.16 with positive and significant associations between changes in food price-driven inflation and changes in perceived, 1-year, and / or 2-year ahead expected inflation for all cuts of the data.[25] While all demographic groups, then, are sensitive to food prices, there are notable differences in the *degree* of sensitivity across groups.

[24] See statistics compiled by the https://www.gov.uk/government/statistics/percentile-points-from-1-to-99-for-total-income-before-and-after-tax (ONS). According to ONS, median household income in the UK before taxes and benefits was approximately £27,000 in the financial year ending 2022.

[25] The In Table 5, there is one group of households, in the Wales & West region of the UK, where sensitivity of perceptions to food price-driven inflation is not statistically significant; the coefficient is positive (0.58) with a p-value of 0.11. Nevertheless, we identify sensitivity to food price-driven inflation among this group for 1- and 2-year ahead expected inflation in Tables B.14 and B.16

Table 5. Demographic Group Results (Perceptions)

	Dependent variable:																				
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
$\Delta\pi_{c,g,t}$																						
Food	0.79***	0.99***	0.61***	0.62**	0.72***	0.52***	0.37***	0.60***	0.83***	0.73***	0.61***	0.62***	0.59***	0.70***	0.57***	0.58**	0.81*	0.74***	0.41**	0.58	0.86***	0.42***
	(0.25)	(0.19)	(0.22)	(0.31)	(0.20)	(0.13)	(0.11)	(0.14)	(0.20)	(0.23)	(0.19)	(0.18)	(0.18)	(0.17)	(0.18)	(0.25)	(0.46)	(0.14)	(0.17)	(0.36)	(0.21)	(0.14)
Alcohol	0.96	−1.09	1.40	2.10***	1.09	2.70**	0.83**	0.77	0.26	3.14*	1.53**	2.47**	1.49	1.66*	2.02**	1.94*	2.23***	2.11***	0.52	2.58*	1.16	1.92***
	(0.61)	(0.83)	(1.92)	(0.70)	(0.72)	(1.06)	(0.40)	(0.64)	(1.07)	(1.71)	(0.68)	(1.25)	(1.26)	(0.91)	(0.81)	(1.11)	(0.66)	(0.71)	(1.18)	(1.37)	(1.05)	(0.67)
Utilities	−0.22**	−0.04	0.005	0.08	−0.05	−0.01	0.04	−0.04	−0.03	−0.07	−0.01	−0.01	−0.03	−0.01	−0.05	0.01	−0.07	−0.04	0.01	−0.07	−0.08	0.0003
	(0.09)	(0.12)	(0.10)	(0.12)	(0.11)	(0.08)	(0.05)	(0.08)	(0.09)	(0.11)	(0.08)	(0.11)	(0.07)	(0.08)	(0.08)	(0.12)	(0.12)	(0.06)	(0.11)	(0.15)	(0.11)	(0.06)
Fuel	0.11	0.12	0.20*	0.01	0.14	0.04	−0.17	−0.07	0.25*	0.14	−0.03	0.14	0.13	0.10	0.10	0.07	−0.19	0.09	0.13	0.07	0.13	0.02
	(0.11)	(0.15)	(0.12)	(0.11)	(0.10)	(0.17)	(0.24)	(0.15)	(0.14)	(0.09)	(0.15)	(0.10)	(0.12)	(0.10)	(0.14)	(0.14)	(0.29)	(0.13)	(0.14)	(0.17)	(0.09)	(0.16)
Core Goods	0.05	−0.02	−0.07	−0.24	0.07	0.13	−0.14	0.23	−0.33	−0.08	−0.04	−0.17	0.004	0.03	−0.22	−0.15	−0.07	0.11	0.06	−0.29	−0.16	0.03
	(0.24)	(0.27)	(0.28)	(0.36)	(0.28)	(0.31)	(0.38)	(0.32)	(0.22)	(0.26)	(0.29)	(0.26)	(0.29)	(0.24)	(0.29)	(0.30)	(0.44)	(0.30)	(0.36)	(0.38)	(0.24)	(0.32)
Services	0.23	0.06	0.35	0.41	0.81**	0.35	0.14	0.32	0.43	0.51**	0.18	0.56**	0.59*	0.41	0.45	0.14	0.68*	0.32	0.79**	0.82*	0.37*	0.53*
	(0.15)	(0.29)	(0.23)	(0.30)	(0.36)	(0.31)	(0.23)	(0.33)	(0.38)	(0.23)	(0.24)	(0.25)	(0.33)	(0.27)	(0.28)	(0.27)	(0.40)	(0.26)	(0.38)	(0.44)	(0.22)	(0.31)
Dem. Group	15-24	25-34	35-44	45-54	55-64	65+	<£10k	£10k-£20k	£20k-£35k	>£35k	Renters	Mort.	Owners	Male	Female	South-east	Scotland	North & NI	Mid-lands	Wales & West	In work	Out of work
Observations	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Adjusted R^2	0.12	0.18	0.17	0.23	0.24	0.20	0.13	0.17	0.25	0.26	0.23	0.23	0.19	0.31	0.20	0.14	0.09	0.23	0.15	0.12	0.27	0.24

Note: This table reports the regression results from Eq. (2) for households' perceived inflation. Columns (1)-(6) compares across age groups, columns (7)-(10) across income groups, columns (11)-(13) across house tenure, columns (14)-(15) across gender, column (16)-(20) across regions and (21)-(22) across work status. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Comparing across income groups in columns (7)-(10) of Table 5, we see that households earning above £20k (i.e., above the second quartile of the income distribution) are estimated as being approximately twice as sensitive (coefficients of 0.83 for the £20k-£35k group, and 0.73 for the >£35k group) as the lowest income group (coefficient of 0.37). The difference between the £20k-£35k group and lowest income group is statistically significant in a t-test.[26] The magnitude of the coefficients imply that the higher income groups respond nearly 1:1 in their perceptions of inflation following a 1pp change in inflation driven by food prices. In contrast, the lowest income group under-react, on average. We see similar heterogeneity for 1- and 2-year ahead expectations in Tables B.14 and B.16. This heterogeneity in sensitivity is notable as the lowest income group are relatively more *exposed* to food price changes in their consumption basket – pointing to the importance of distinguishing between sensitivity and exposure to certain components; which we return to in Section 6. The greater sensitivity we identify amongst higher income households is consistent with the mechanism proposed by Broer et al. (2021) whereby the value of information rises with wealth, leading to greater attentiveness amongst wealthier households.[27]

Comparing the coefficients across columns (1)-(6) of Table 5, we also see evidence of heterogeneity across age groups, with particular sensitivity amongst 25-34 year-olds (coefficient of 0.99). Motivated by this, we exploit the richness of our dataset to compare sensitivity by both income *and* age. A summary of the coefficients are reported in Table 6. Again, we see evidence of sensitivity to food across nearly all age-income combinations, with positive coefficients across the board, the majority of which are statistically significant. Comparing the magnitude of the coefficients, we see that across (nearly) all age groups households above the bottom quartile of the income distribution (i.e., above £20k) are more sensitive than households in the lower income groups, with coefficients relatively close to 1 broadly across the board. Exploiting the granularity of our dataset further, we compare sensitivity by income, age, *and* house tenure too, with coefficients reported in Table B.11. We observe consistent sensitivity to food prices amongst home-owners in the £20k-£35k income group, and renters, mortgagors and home-owners in the >£35k income group, across a range of age groups. Coefficients are particularly large for 55-64 year-old renters (1.68) and 25-34 year-old home-owners (2.05) in the >£35k income group, implying that they *over-react* in their perceptions of inflation to a 1pp change in food price-driven inflation.

[26] We report in Table B.13 a modified version of Eq. (2) in which we normalise the changes in experienced inflation rates and inflation perceptions by the mean and variance across the distribution. We confirm that these differences in sensitivity between these income groups remains statistically significant in a t-test.

[27] While we do not, in this paper, seek to identify the behavioural mechanism underlying this heterogeneity in sensitivity, there are also a number of other potential explanations. One other possible explanation is that, relative to households with income <£10k, those in the second quartile of the income distribution and above may be more able to substitute away from (e.g., higher quality to lower quality) items when prices increase, influencing their sensitivity to such price changes. A further candidate explanation could be the role of financial or economic literacy in translating price changes into changes in experienced inflation *rates*. Future research could investigate these possible underlying mechanisms further.

Table 6. Age x Income Group Summary: Food

	Dependent variable: Δ0y					
	(1)	(2)	(3)	(4)	(5)	(6)
Income Group						
<£10k	0.33*	0.60***	0.12	0.57**	0.03	0.31
	(0.19)	(0.22)	(0.29)	(0.28)	(0.31)	(0.22)
£10k-£20k	0.09	0.58**	0.63**	0.48*	0.56	0.41**
	(0.28)	(0.26)	(0.30)	(0.29)	(0.41)	(0.18)
£20k-£35k	1.04**	0.70***	0.40	0.67**	0.86***	0.92***
	(0.48)	(0.25)	(0.30)	(0.31)	(0.19)	(0.22)
>£35k	0.74*	1.05***	0.77**	0.67*	0.86***	0.48
	(0.41)	(0.29)	(0.35)	(0.37)	(0.26)	(0.32)
Age Group:	15-24	25-34	35-44	45-54	55-64	65+

Note: This table reports the estimated coefficients for the sensitivity of inflation perceptions to changes in food price inflation, across the full set of possible age-income combinations. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

We also find variation in the magnitude of coefficients across other demographic groups in Table 5, although none are statistically significant in a t-test. This is more notable across genders, where studies have reported differences in the formation of expectations between males and females related specifically to frequency of grocery shopping (D'Acunto et al., 2020). We observe from Tables B.14 and B.16 that the size of the coefficient on the sensitivity of 1- and 2-year ahead expectations is larger for females (0.54 and 0.70, respectively) than males (0.47 and 0.42, respectively), although these differences are also not statistically significant in a t-test. One potential explanation for the lack of significance is that, as discussed in Section 3.2, our expenditure data is at the household, rather than individual, level, which could mask the degree of heterogeneity identified across genders.

5.2 Sensitivity to other components

While sensitivity to food price-driven inflation is present across all demographic groups, evidence of sensitivity to other components is less universal and either less consistent across groups at different horizons (as in the case of alcohol, fuel, core goods, and services), or non-existent across any group at any horizon (as in the case of utilities). In relation to alcohol, we observe marked heterogeneity in sensitivity across groups. In particular, we see the greatest degree of sensitivity among above-median income households, for whom a 1pp change in alcohol-driven inflation is associated with a 3.14pp change in perceived inflation and 2.56pp change in 1y-ahead expectations. We also observe a high degree of sensitivity of perceptions among the over 65s (coefficient of 2.70), and identify in Table B.9 of Appendix B even more striking degree of sensitivity amongst the above-median income over 65s (coefficient of 3.98). This implies that households in this demographic group, on average, significantly over-react (or, put differently, are excessively sensitive) to alcohol price changes; responding by *considerably* more than 1:1 with changes in inflation driven by alcohol. We obtain significant associations among other demographic groups too, but generally not consistently so across different horizons. The exception is the 15-24 year old cohort, whose sensitivity to alcohol-price driven inflation *increases* in magnitude at

1y- (coefficient of 1.43), 2y- (coefficient of 1.76), and 5y- (coefficient of 2.56) ahead horizons. Indeed, we see a similar phenomenon amongst this cohort in relation to fuel, with the magnitude of their sensitivity also increasing at 1y- (0.29), 2y- (0.56), and 5y- (0.86) ahead expectations, where the latter holds over and above changes in total inflation; implying that this group associate alcohol and fuel price changes with *long-run* economic dynamics.

We also obtain significant associations with fuel price-driven inflation among other groups, at 1y- and 2y-ahead horizons, consistent with the aggregate findings presented in Table 3. This is particularly the case among older cohorts (55-64, and over 65s) and households in the £20k-£35k income group.[28] However, for each of these groups, these associations do not hold if we control for changes in total inflation (akin to the regression specification presented in columns (5) and (13) of Table 3), implying no specific sensitivity to fuel prices per se. Likewise, while we obtain significant associations among certain groups with core goods (for instance, 45-54 year olds) and services (for instance, age groups over 55) price-driven inflation, particularly at 2y- and 5y-ahead horizons, we confirm that these do not broadly hold once we account for changes in total inflation. The exceptions are the associations between services price-driven inflation and 5y-ahead expectations amongst households in Scotland, the Midlands, and those out of work. Digging into the different services components across Tables B.15, B.17, and B.19 we confirm that this is driven by price changes in recreation services, transport, and, in particular, hair & beauty services.

5.3 Perceptions drive expectations

A striking feature of Tables B.14, B.16, and B.18 is that, across *all* demographic groups, changes in perceived inflation are a key driver of expected inflation at short-, medium- *and* long-horizons; remaining statistically significantly associated with expectations across all specifications, groups, and horizons. We observe that a 1pp change in inflation perceptions is associated with between 0.65pp-0.91pp change in 1y-ahead expectations, 0.41pp-0.71pp change in 2y-ahead expectations, and 0.21pp-0.93pp change in 5y-ahead inflation expectations. Moreover, based on the adjusted R^2, inflation perceptions consistently explain 30-50% of the variation in 1y- ahead inflation expectations, 20-30% of variation in 2y-ahead expectations, and 10-30% of variation in 5y-ahead expectations across a range of demographic groups. We see particular importance of inflation perceptions in explaining long-horizon expectations amongst households in the £10k-£20k income group, explaining nearly 50% of variation, and being associated with a 0.93pp change in 5y-ahead expectations following a 1pp change in perceptions.

6 Disentangling *Exposure* from *Sensitivity*

A unique advantage of our dataset is that we are able to estimate households' *sensitivity* to price changes in each component of the consumption basket, across the entire basket, while explicitly accounting for households' *exposure* to each component, given its weight in their basket. These two concepts are distinct and we demonstrate in this section the importance of distinguishing between them. We also use these concepts to discuss what implications can be drawn from our findings for observed cross-sectional heterogeneity in households' inflation expectations.

[28] These results are broadly consistent with those of Coibion and Gorodnichenko (2015) who also find greater sensitivity to fuel prices amongst higher income households. Albeit we show that this does not hold over and above changes in total inflation, indicating that it does not reflect specific sensitivity to fuel prices per se.

6.1 Importance of distinguishing between the two

A household's 'exposure' to price changes in a certain component of the basket relates to the share of that households' expenditure on that component. The more a household spends on a certain component, relative to its total expenditure, the more that household's experienced inflation rate will change with price changes in that component of the basket; the more it is 'exposed' to that component. 'Sensitivity' to price changes in a certain component of the basket, on the other hand, relates to how much a household's beliefs about inflation (perceived or expected) change following a *given* increase in its experienced inflation rate driven by price changes in that component. The more a household's beliefs about inflation shift for a given change in its experienced inflation rate driven by a specific component, the more a household is 'sensitive' to it.

To date, however, the majority of studies seeking to test the 'sensitivity' of households' inflation expectations to price changes conflate the two concepts. To the best of our knowledge, only D'Acunto et al. (2021) and Coibion and Gorodnichenko (2015) have explicitly sought to distinguish between the two, doing so based on a small subset of the consumption basket.[29] With our novel dataset combining household inflation expectations with household expenditure data, we are uniquely able to do this across the entire consumption basket. We show that failing to account for households' exposure to specific components of the basket results in biased estimates of their sensitivity to them.

We test the importance of distinguishing between 'sensitivity' and 'exposure' by running two different versions of Eq. (2). The first version is that used in our baseline analysis, whereby we define changes in experienced inflation as $\Delta\pi^{g}_{c,t}$, which captures the change in inflation experienced by demographic group g from price changes in component c at time t given the composition of g's consumption basket. That is, we exploit the richness of our dataset to abstract from variation in exposure to specific components of the consumption basket across demographic groups, and cleanly estimate their *sensitivity* to price changes in each component. We compare the estimates obtained with an alternative version of Eq. (2) in which we do not account for differences in the composition of different demographic groups' consumption baskets, and instead define changes in experienced inflation as $\Delta\pi^{rep}_{c,t}$, based on a representative basket of goods (and averaged CPI weights). Table 7 presents results from this exercise, focusing on the coefficients on food price- and alcohol price-driven inflation, across income groups. We report the full regression table, including across age, gender, house tenure, region, and work status groups in Table B.20 in Appendix B.

[29] D'Acunto et al. (2021) test sensitivity to grocery price inflation, based on individual-level expectations and (time-varying) expenditures across non-durable goods, which comprise approximately 25% of the consumption basket. Meanwhile, (Coibion and Gorodnichenko, 2015) test sensitivity to fuel price inflation, considering average fuel expenditure shares across income groups calculated at a single point in time. We test sensitivity based on average expectations and (time-varying) average expenditure shares at the demographic-group level, across the entire basket of goods.

Table 7. Individual vs Average Expenditure Shares (Income)

	Dependent variable: Δ0y							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta\pi_{Food,g,t}$		0.37***		0.60***		0.83***		0.73***
		(0.11)		(0.14)		(0.20)		(0.23)
$\Delta\pi_{Food,g,t}$	0.42***		0.62***		0.83***		0.59***	
	(0.13)		(0.17)		(0.19)		(0.19)	
$\Delta\pi_{Alcohol,g,t}$		0.83**		0.77		0.26		3.14*
		(0.40)		(0.64)		(1.07)		(1.71)
$\Delta\pi_{Alcohol,g,t}$	1.56**		1.01		−0.12		1.68	
	(0.77)		(0.95)		(0.94)		(1.21)	
Consumption Basket	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind
Income Group	<£10k	<£10k	£10k-£20k	£10k-£20k	£20k-£35k	£20k-£35k	>£35k	>£35k
Observations	76	76	76	76	76	76	76	76
Adjusted R^2	0.16	0.13	0.16	0.17	0.25	0.25	0.23	0.26

Note: This table presents results from testing the importance of distinguishing between 'sensitivity' and 'exposure' by running two different versions of Eq. (2), focusing on the coefficients on food price- and alcohol price-driven inflation, across income groups. The first rows of each component show results of capturing the change in inflation experienced, whereas the second rows use a representative basket of goods (and averaged CPI weights). *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Rows (1) and (3) report the same estimated coefficients as those presented in columns (7)-(10) of Table 5, based on the demographic-specific basket of goods. As we saw above, in relation to alcohol price-driven inflation (row (3)), this yields an estimated coefficient on households in in the >£35k income group of 3.14. This is both statistically significantly different from 0, and statistically significantly larger than that of all other income groups. In contrast, in row (4) we report results based on a representative consumption basket of goods across demographic groups, based on average CPI weights. We see that the coefficient is nearly half as large (1.68) and not statistically significant. This reflects the fact that higher income households are relatively less *exposed* to alcohol than other groups (as depicted in Figure 5), with it comprising a relatively smaller proportion of their basket. Not accounting for this results in an *under-estimate* of their sensitivity to alcohol price-driven changes in their experienced inflation. In contrast, the degree of sensitivity to alcohol is *over-estimated* amongst households who earn <£10k, with the coefficient being adjusted downwards from 1.56 to 0.83 once we account for their (relatively higher) degree of exposure to alcohol in the consumption basket.

We also see adjustments in the estimates on food price-driven inflation. Although these are smaller in absolute terms than those in relation to alcohol price-driven inflation – reflecting less heterogeneity in exposure to this component of the basket across income groups – they are still qualitatively important. In particular, absent accounting for differences in exposure, we would not uncover the heterogeneity in sensitivity between the £20k-£35k and <£10k income groups; based on representative baskets (row (2)), the coefficient on the former group (0.83) is not statistically significantly different from that on the latter group (0.42) in a t-test, while it is statistically significantly larger than the 0.37 coefficient obtained using individualised baskets (row (1)).

We observe very similar patterns across all demographic groups in Table B.20: estimates based on representative baskets systematically under-estimate households' sensitivity to components that they are less exposed to (such as younger cohorts and in-work households to food) and over-estimate

sensitivities to components that they are more exposed to (such as younger cohorts, renters and out-of-work households to alcohol).

6.2 Implications for Cross-Sectional Heterogeneity

The distinction between 'sensitivity' and 'exposure' is helpful also for reflecting on what insights we can glean from our empirical findings in relation to the observed cross-sectional heterogeneity in households' beliefs about inflation. These insights are descriptive and aim to motivate future research.

We saw in Figure 5 in Section 3 that cross-sectional heterogeneity in households' perceived inflation rate, in levels, was directionally consistent with cross-sectional heterogeneity in *exposure* to food and alcohol price-driven inflation. Both were increasing in age and decreasing in income. Meanwhile exposure to services price-driven inflation was decreasing in age and increasing income. We subsequently identified households as being particularly *sensitive* to changes in food and alcohol price-driven inflation when forming perceptions of inflation. Intuitively, these observations appear to be consistent with one another: households that are more exposed to those components of the basket that households are also most sensitive to price changes in form higher perceived inflation rates.[30] Put differently, taken together, cross-sectional heterogeneity in households' *exposure* to food and alcohol price-driven inflation coupled with households' particular *sensitivity* to those components in the basket is *consistent* with some degree of cross-sectional heterogeneity in perceived inflation rates.

Moreover, comparing the magnitudes of the heterogeneities, we observe approximately a 0.2pp difference in perceived inflation rates, on average, across the lowest and highest income groups, which compares with just less than 0.2pp and 0.1pp differences in exposure to food and alcohol price-driven inflation, respectively, over our sample. As such, differences in exposure to these components could feasibly explain a significant proportion of the heterogeneity in perceived inflation between income groups. Across age groups, the difference in perceived inflation rates is significantly larger (0.8pp) than that in exposure to food (0.2pp) and alcohol (0.2pp) price-driven inflation, leaving open the possibility of other sources and determinants of heterogeneity in perceived inflation rates. One possible explanation is differences in lifetime experiences of inflation, which Malmendier and Nagel (2016) show matter across generations. Another possible determinant is the fact that (particularly) food price-driven inflation is also one of the more volatile components in the basket, as reported in Table 1. Although we don't observe particular sensitivity, as such, to energy (utilities) price-driven inflation, which is also volatile, it is possible that greater exposure to these more volatile items could also feasibly generate higher perceived inflation rates, in levels. Future research could seek to explore these mechanisms further.[31]

[30] While we capture *sensitivity* to different components through a regression specification in first differences, we descriptively compare heterogeneity in *exposure* in levels. As such, we do not seek to utilise the magnitudes of the estimated coefficients on sensitivity for the purposes of this descriptive discussion; focusing instead only on whether or not households are sensitive to different components.

[31] It is also worth noting that we focus, exclusively, on systematic heterogeneity in expectations *between* demographic groups. We argue that it is this type of heterogeneity – that is systematically correlated with certain characteristics – that is likely to be particularly relevant for macroeconomic dynamics. However, there is *also* significant heterogeneity in expectations that may be unrelated to demographic characteristics (i.e., within groups), which we do not seek to rationalise in this paper and which future research could explore further.

7 Conclusion

In this paper, we study whether households are more sensitive to price changes in certain components of the consumption basket, and how that may drive inflation expectations dynamics. To do so, we construct a novel dataset that combines UK household data on personal expenditure with granular CPI inflation rate – to calculate households' 'experienced' inflation rates – and with UK household data on inflation expectations. This allows us to uniquely test the sensitivity of household inflation expectations to changes in their own experienced inflation rate, given the composition of their consumption basket, across the entire basket of goods.

Our key finding is that food prices matter most for aggregate inflation expectations dynamics. In particular, we document sensitivity to food price-driven inflation for short-, medium-, *and* long-horizon inflation expectations, and show that these associations are persistent, non-linear, and asymmetric; with disproportionate sensitivity – especially for longer horizon expectations – to *large* and inflationary shocks. Exploiting cross-sectional information in our dataset, we show that sensitivity to food price-driven inflation is present across nearly all age, income, gender, work status, UK geographical region, and house tenure groups, with evidence of greater sensitivity among households above the second quartile of the income distribution.

We use these findings to rationalise a number of empirical puzzles relating to household inflation expectations. First, the fact that households are more sensitive to inflation driven by certain components of the basket than others is consistent with the broad inaccuracy of household inflation perceptions and expectations identified in the literature. In particular, our finding that households are asymmetrically sensitive to *increases* in food price-driven inflation in forming medium- and long-horizon expectations is consistent with the well-documented upwards bias in households' expectations relative to actual inflation and central banks' target rate of inflation. Specifically, our empirical estimates show that 2y- and 5y-ahead exepctations change by approximately 1pp more following a rise in food price-driven inflation than they do following a fall, implying that this asymmetry could explain a significant amount of the observed wedge between 2y- (1pp, on average) and 5y- (1.5pp, on average) expected and actual inflation over the sample period. Second, cross-sectional heterogeneity in the degree to which households are exposed to food and alcohol price-driven inflation – the components of the basket that households are most sensitive to – can feasibly rationalise a significant fraction of the cross-sectional heterogeneity in perceived inflation across, in particular, income and age groups. Perceived inflation, in turn, is shown by Weber et al. (2023) to explain a significant amount of the well-documented cross-sectional heterogeneity in inflation *expectations*. Finally, our results can also rationalise an increasingly well-documented empirical puzzle that households seem to have a 'supply-side' view of shocks to the economy; consistent with being particularly sensitive to changes in inflation when they are driven by increases in food prices, which are in turn typically associated with supply-side rather than demand-side shocks Adjemian et al. (2024).

On the policy implications, our findings indicate that household expectations may be most likely to become elevated and contribute to persistent inflationary dynamics in the face of shocks to, specifically, food prices and especially when those shocks are large and inflationary. A monetary authority may wish to respond more aggressively than otherwise to such shocks, in order to reduce the risk of inflationary pressures persisting and propagating, even if the shock is temporary by nature.

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Appendix A Data details

A.1 Bank of England Inflation Attitudes Survey

The questions on inflation expectations in the Bank of England Inflation Attitudes Survey (IAS) cover households' perceived inflation and inflation expectations at 1, 2 and 5 year ahead horizon. Questions on perceived inflation and 1 year ahead inflation expectations began in 2001 Q1, and questions on 2 and 5 year ahead inflation expectations began in 2009 Q1. As inflation move overtime to being below 1% or above 5% , the survey expanded its choices of answer buckets to ensure that it captures the distribution of households inflation expectations correctly. We use all the answer buckets, including those extensions, and excluded "Don't know". For our analysis, we create average inflation expectations of different groups: age groups, gender, house tenure, income, work status and region. Our sample period is from 2003 Q1 to 2022 Q1.

Survey Questions

Question 1 *Which of these options best describes how prices have changed over the last 12 months?*

Question 2 *How much would you expect prices in the shops generally to change over the next 12 months?*

Question 3 *And how about the 12 months after that?*

Question 4 *And how about the longer term, say in five years time How much would you expect prices in the shops generally to change over a year then?*

Choices of answers:

- Go down
- Not change
- Up by 1% or less
- Up by 1% but less than 2%
- Up by 2% but less than 3%
- Up by 3% but less than 4%
- Up by 4% but less than 5%
- Up by 5% or more
- Don't know

Extension Question i. *You say that prices have gone down over the last 12 months. By how much do you think they have gone down? (asked since 2009Q1)*

- Down by 1% or less
- Down by 1% but less than 2%
- Down by 2% but less than 3%
- Down by 3% but less than 4%
- Down by 4% but less than 5%
- Down by 5% or more

Extension Question ii. *You say you expect prices will rise by 5% or more over the next 12 months. By how much do you think they will rise? (asked since 2008Q3)*

- Up by 5% but less than 6%
- Up by 6% but less than 7%

- Up by 7% but less than 8%
- Up by 8% but less than 9%
- Up by 9% but less than 10%
- Up by 10% or more

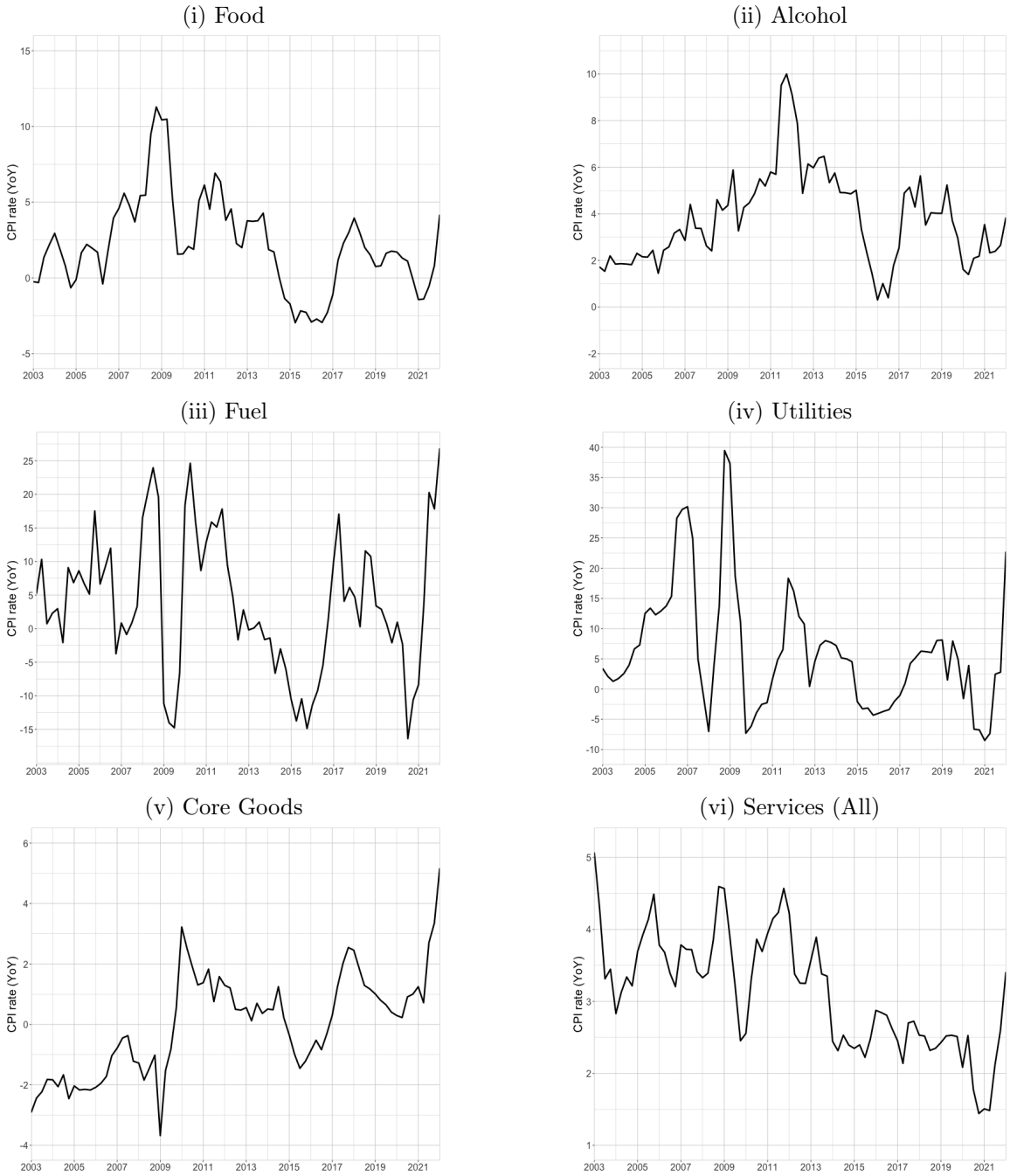
A.2 Consumer Price Index - 85 Class-level Categories

Table A.1. CPI Components

Goods				Services			
	Food		Core Goods		Rent		Other Services
01.1.1	Bread and cereals	03.1.2	Garments	4.1	Actual rentals for housing	03.1.4	Cleaning,repair and hire of clothing
01.1.2	Meat	03.1.3	Other clothing and clothing accessories*		Restaurants	04.3.2	Services for maintenance and repair
01.1.3	Fish	3.2	Footwear including repairs*	11.1.1	Restaurants & cafes	04.4.3	Sewerage collection
01.1.4	Milk, cheese and eggs	04.3.1	Materials for maintenance and repair	11.1.2	Canteens	05.3.3	Repair of household appliances
01.1.5	Oils and fats	04.4.1	Water supply		Hotels	05.6.2	Domestic services and household services
01.1.6	Fruit	05.1.1	Furniture and furnishings	11.2	Accommodation services	06.2.1	Medical services and paramedical services
01.1.7	Vegetables including potatoes and tubers	05.1.2	Carpets and other floor coverings		Haircut	06.2.2	Dental services
01.1.8	Sugar, jam, syrups, chocolate and confectionery	5.2	Household textiles	12.1.1	Hairdressing and personal grooming establishments	6.3	Hospital services
01.1.9	Food products nec	05.3.1/2	Major appliances and small electric goods		Transport	07.2.4	Other services
01.2.1	Coffee, tea and cocoa	5.4	Glassware, tableware and household utensils	07.3.1	Passenger transport by railway	8.1	Postal services
01.2.2	Mineral waters, soft drinks and juices	5.5	Tools and equipment for house and garden	07.3.2	Passenger transport by road	08.2/3	Telephone and telefax equipment and services
	Alcohol	05.6.1	Non-durable household goods	07.3.3	Passenger transport by air	09.1.5	Repair of audio-visual equipment & related products
02.1.1	Spirits	06.1.1	Pharmaceutical products	07.3.4	Passenger transport by sea and inland waterway	10	Education
02.1.2	Wine	06.1.2/3	Other medical and therapeutic equipment			12.4	Social protection
02.1.3	Beer	07.1.1A	New cars	9.6	Package holidays	12.5.2	House contents insurance
2.2	Tobacco	07.1.1B	Second hand cars			12.5.3	Health insurance
	Utilities	07.1.2	Motorcycles and bicycles	09.4.1	Recreational and sporting services	12.5.4	Transport insurance
04.5.1	Electricity	07.2.1	Spare parts and accessories	09.4.2	Cultural services	12.6.2	Other financial services nec
04.5.2	Gas	07.2.3	Maintenance and repairs			12.7	Other services nec
04.5.3	Liquid Fuels	09.1.1	Reception and reproduction of sound and pictures				
04.5.4	Solid Fuels	09.1.2	Photographic, cinematographic and optical equipment				
	Fuel	09.1.3	Data processing equipment				
07.2.2	Fuels and lubricants / petrol	09.1.4	Recording media				
		09.2.1/2	Major durables for in/outdoor recreation				
		09.3.1	Games, toys and hobbies				
		09.3.2	Equipment for sport and open-air recreation				
		09.3.3	Gardens, plants and flowers				
		09.3.4	Pets, related products and services				
		09.5.1	Books				
		09.5.2	Newspapers and periodicals				
		09.5.3	Misc printed matter, stationery, drawing materials				
		12.1.2/3	Appliances and products for personal care				
		12.3.1	Jewellery, clocks and watches				
		12.3.2	Other personal effects				

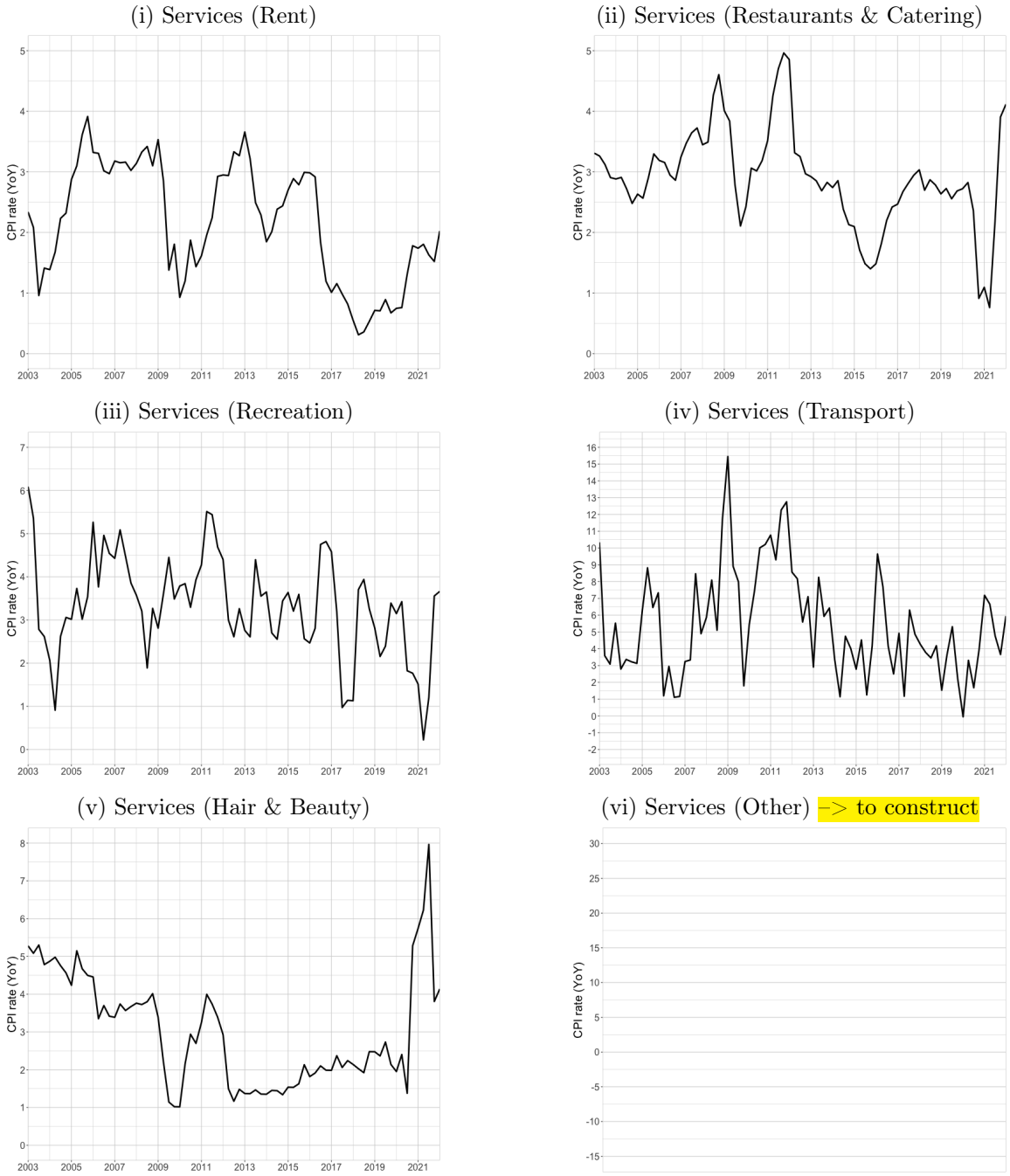
Note: This table provides the detail of CPI 85 class-level categories defined in the Classification of Individual Consumption According to Purpose (COICOP).

Figure A.1. CPI rate data across components



Note: This figure plots year-on-year inflation rates for six aggregated components / categories – Food, Alcohol, Fuel, Utilities, Core goods, and Services – calculated using data from the UK Consumer Prices Index (CPI). Inflation rates are derived from item-level price indices, aggregated into the specified categories. Sample period is 2003 Q1-2022 Q1.

Figure A.2. CPI rate data across Services components



Note: This figure plots year-on-year inflation rates for the six components within the Services category – Rent, Restaurants & Catering, Recreation, Transport, Hair & Beauty, and Other services – calculated using data from the UK Consumer Prices Index (CPI). Inflation rates are derived from item-level price indices, aggregated into the specified categories. Sample period is 2003 Q1-2022 Q1.

A.3 Merging Survey Data

We merge our datasets together at the demographic group level based on common demographic characteristics across the IAS and LCFS datasets: age, income, house tenure, gender, region and work status.

Table A.2. Demographic Characteristics Aggregation

Demographic	**IAS**	**LCFS**	**Common Aggregation**
Age	6 groups: (15-24), (25-34), (35-44), (45-54), (55-64), (65-75); but two changes over the years with (16-24) and (65+)	Ages from 3-102	Create 6 age groups: 15-24; 25-34, 35-44; 45-54; 55-64; 65+
Income	<£,9500; £9,500-17,499; £17,500-24,999; >£25,000 (option to 2016 Q1); £25,000-39,999 (option added 2016 Q1); >£40,000 (option added 2016 Q1); <£9,999; £10,000-19,999; £20,000-34,999 £35,000-44,999; >45,000	Reported gross weekly income	Create 4 income groups: <£10k; £10k-£20k; £20k-£35k; >£35k
House Tenure	4 groups: Owned Outright; Mortgage; Council Rent; Other (incl. private rent pre-2016)	8 groups: LA; Housing Association; Private Rented (Unfurnished); Private Rented (Furnished); Owned with Mortgage; Owned by Rental Purchase; Owned Outright; Rent Free	Create 3 house tenure groups: Rent; Mortgage; Owned;
Gender	4 groups: Male; Female; In another way; Prefer not to answer	2 groups: Male; Female	Keep 2 LCFS gender groups: Male; Female
Work Status	2 groups: full or part time; not working	7 groups: self-employed; full time, part time, unemployed, work related govt training program; Ret unoc over min NI age; Unoc - under min NI age	Merge to 2 IAS work status groups: In work; Out of Work
Region	5 groups: Scotland; North and Northern Ireland; Midlands; Wales and West; South East	12 groups: North East; North West and Merseyside; Yorkshire and the Humber; East Midlands; West Midlands; Eastern; London; South East; South West; Wales; Scotland; Northern Ireland	Merge to 5 IAS region groups: Scotland; North and Northern Ireland; Midlands; Wales and West; South East
Education	3 groups: Low (GCSE); Medium (A-level); High (Degree)	N/A	N/A
Class	4 social grade groups	Socio-economic groups	N/A

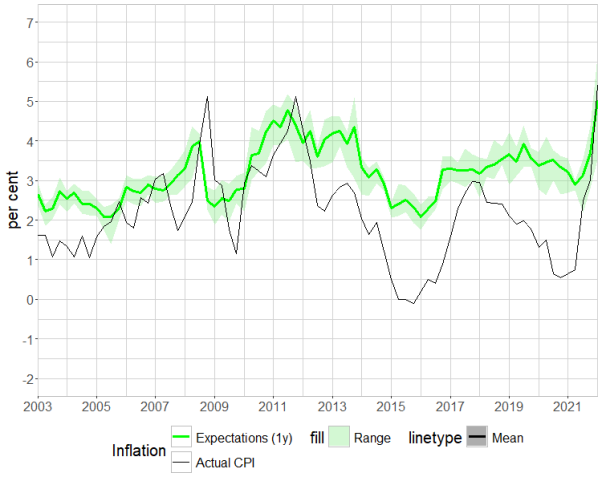
Note: This table provides the detail of the demographics in IAS and LCFS, and shows how they are defined and/or classified differently in the two surveys. The last column shows the harmonisation of the groups for our novel dataset.

Appendix B Auxiliary Results

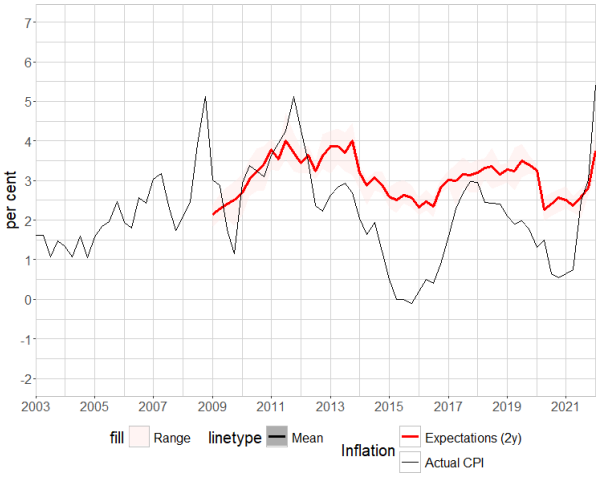
B.1 Inflation Expectations vs Aggregate CPI

Figure B.1. UK Household Inflation Expectations vs Aggregate CPI

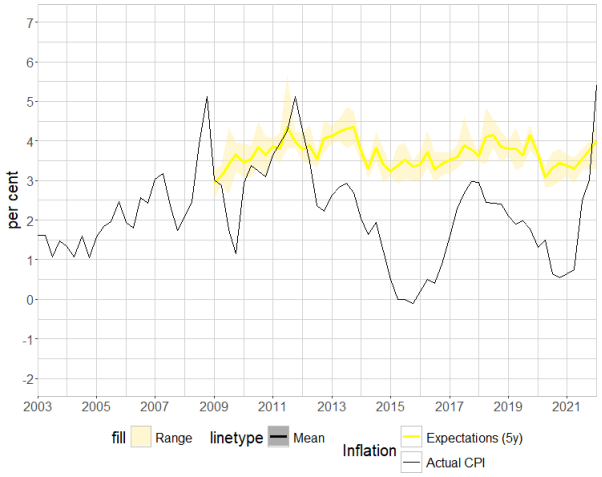
(i) Inflation Expectations 1 Year



(ii) Inflation Expectations 2 Year



(iii) Inflation Expectations 5 Year



Note: The figures show the actual aggregate CPI inflation rate (in black) and the quarterly series for 1-, 2-, and 5-year ahead inflation expectations (in green, red and yellow, respectively) with the swathe for range across age groups. The data spans from 2003 Q1 - 2022 Q1, with the exception of inflation expectations at the 2-year and 5-year horizons, which are available from 2009 Q1 onwards.

B.2 Correlations between expected and experienced inflation

Figure B.2. Correlation between perceived inflation and component-driven inflation



Note: This figure plots the co-movement between average perceived inflation (in blue) and average food price- (in pink), alcohol price- (in dark pink), utilities price- (in cyan), fuel price- (in dark cyan), core goods price- (in gold), and services price- (in purple) driven inflation, over the sample period from 2003 Q1-2022 Q1.

Figure B.3. Correlation between 1 year-ahead expected inflation and component-driven inflation



Note: This figure plots the co-movement between average 1 year-ahead expected inflation (in green) and average food price- (in pink), alcohol price- (in dark pink), utilities price- (in cyan), fuel price- (in dark cyan), core goods price- (in gold), and services price- (in purple) driven inflation, over the sample period from 2003 Q1-2022 Q1.

Figure B.4. Correlation between 2 year-ahead expected inflation and component-driven inflation



Note: This figure plots the co-movement between average 2 year-ahead expected inflation (in red) and average food price- (in pink), alcohol price- (in dark pink), utilities price- (in cyan), fuel price- (in dark cyan), core goods price- (in gold), and services price- (in purple) driven inflation, over the sample period from 2003 Q1-2022 Q1.

Figure B.5. Correlation between 5 year-ahead expected inflation and component-driven inflation



Note: This figure plots the co-movement between average 5 year-ahead expected inflation (in yellow) and average food price- (in pink), alcohol price- (in dark pink), utilities price- (in cyan), fuel price- (in dark cyan), core goods price- (in gold), and services price- (in purple) driven inflation, over the sample period from 2003 Q1-2022 Q1.

TO DO: AMEND VARIABLE NAMES FOR CONSISTENCY WITH MAIN RESULTS ABOVE.

TO DO: ADD NOTES TO EACH TABLE

B.3 Supplementary Analysis

B.3.1 Baseline results with Services basket decomposed

Table B.1. Baseline Results: Services de-composed

	Dependent variable:																	
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
$\Delta\pi_{c,g,t}$																		
Food	0.71***	0.66***											0.55***	0.005	0.62***	0.12	0.24	−0.19
	(0.16)	(0.13)											(0.21)	(0.15)	(0.23)	(0.16)	(0.22)	(0.17)
Alcohol	1.12**		1.49***										0.94	0.08	0.40	0.02	1.46**	1.14**
	(0.49)		(0.53)										(0.60)	(0.48)	(0.57)	(0.45)	(0.60)	(0.54)
Utilities	−0.02			−0.10									−0.20	−0.18	−0.14	−0.13	−0.19**	−0.18***
	(0.08)			(0.12)									(0.17)	(0.12)	(0.12)	(0.08)	(0.09)	(0.07)
Fuel	0.09				−0.13								0.20*	0.13	0.11	0.08	−0.05	−0.08
	(0.11)				(0.12)								(0.11)	(0.10)	(0.07)	(0.07)	(0.10)	(0.08)
Core Goods	−0.04					−0.18							−0.06	−0.03	0.22	0.06	0.26	0.13
	(0.22)					(0.19)							(0.27)	(0.17)	(0.18)	(0.13)	(0.20)	(0.15)
Rent	−0.06						−0.15						−0.04	0.01	−0.18	−0.14	0.03	0.06
	(0.26)						(0.30)						(0.30)	(0.21)	(0.26)	(0.21)	(0.31)	(0.29)
Restaurants	0.73							1.11					−0.23	−0.79*	0.48	−0.05	−0.14	−0.60
	(0.68)							(0.71)					(0.57)	(0.45)	(1.08)	(0.88)	(0.86)	(0.66)
Recreation	0.44								−0.13				0.12	−0.22	0.80	0.39	1.88**	1.53**
	(0.69)								(0.73)				(0.83)	(0.52)	(0.71)	(0.46)	(0.96)	(0.74)
Transport	0.71*									0.44			0.46	−0.09	0.93**	0.42	1.31**	0.87**
	(0.37)									(0.36)			(0.42)	(0.30)	(0.42)	(0.31)	(0.51)	(0.40)
Haircuts	0.84										1.12		0.25	−0.40	2.73	2.49	2.71*	2.50
	(1.55)										(2.20)		(2.44)	(1.72)	(1.99)	(1.68)	(1.60)	(1.54)
Other Services	0.08											−0.22	0.49*	0.43**	0.01	−0.06	−0.04	−0.10
	(0.23)											(0.32)	(0.29)	(0.21)	(0.31)	(0.22)	(0.28)	(0.21)
$\Delta\pi_{g,t}^{Total}$		0.05	0.14***	0.20**	0.18***	0.17***	0.15***	0.14***	0.15***	0.15***	0.15***	0.16***						
		(0.05)	(0.05)	(0.08)	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.06)						
Δ0y														0.77***		0.52***		0.45***
														(0.07)		(0.04)		(0.06)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	456	456	456	456	456	456	456	456	456	456	456	456	456	456	312	312	312	312
Adjusted R^2	0.20	0.18	0.11	0.10	0.10	0.10	0.09	0.11	0.09	0.10	0.09	0.09	0.08	0.50	0.17	0.44	0.06	0.22

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by age groups, with further breakdown of the Services basket. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(12) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (13), (15) and (17) reports the results based on the baseline specification for the 1-, 2- and 5-year ahead inflation expectations. The adjacent columns control for the change in households' perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.3.2 Persistence, Non-linearity, Asymmetry Results (Full)

Table B.2. Persistence, Non-linearity, Asymmetry Results (Full)

	Dependent variable:																					
	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
$\Delta\pi_{Food,g,t}$	0.70***	0.69***	0.71***	0.63***	0.51**	0.56***	0.58***	0.04	0.39	−0.09	0.61***	0.61***	0.75***	0.21*	0.09	−0.17	0.20	0.25	0.37**	−0.10	−0.35	−0.59**
	(0.15)	(0.16)	(0.15)	(0.22)	(0.20)	(0.16)	(0.19)	(0.12)	(0.35)	(0.25)	(0.23)	(0.15)	(0.16)	(0.12)	(0.25)	(0.20)	(0.22)	(0.18)	(0.19)	(0.16)	(0.31)	(0.27)
$\Delta\pi_{Food,g,t-1}$		0.14				−0.03						−0.13						0.04				
		(0.17)				(0.17)						(0.15)						(0.21)				
$\Delta\pi_{Food,g,t-2}$		0.23*				0.20						−0.09						0.17				
		(0.14)				(0.17)						(0.21)						(0.21)				
$[\Delta\pi_{Food,g,t}]^2$			0.01				0.37	0.36*					0.82***	0.61***					0.76***	0.58***		
			(0.26)				(0.36)	(0.19)					(0.22)	(0.17)					(0.27)	(0.22)		
$\Delta\pi_{Food,g,t} \times \Uparrow_{c,t}$				−0.14					0.16	0.26					1.05***	0.70**					1.18***	0.86**
				(0.40)					(0.56)	(0.35)					(0.40)	(0.33)					(0.45)	(0.39)
$\Delta\pi_{Alc,g,t}$	1.17**	0.84	1.24**	−0.30	0.88	0.43	0.62	−0.32	−0.10	0.13	0.31	0.61	0.42	−0.06	0.70	1.07	1.17*	0.83	1.15*	0.73	3.25**	3.58**
	(0.52)	(0.61)	(0.54)	(0.98)	(0.60)	(0.67)	(0.64)	(0.48)	(1.20)	(0.73)	(0.59)	(0.57)	(0.55)	(0.36)	(1.07)	(0.75)	(0.61)	(0.71)	(0.64)	(0.51)	(1.46)	(1.27)
$\Delta\pi_{Alc,g,t-1}$		−0.62				−1.98**						0.12						−0.37				
		(0.66)				(0.83)						(0.66)						(0.67)				
$\Delta\pi_{Alc,g,t-2}$		1.02				0.63						0.34						0.53				
		(0.65)				(0.74)						(0.53)						(0.57)				
$[\Delta\pi_{Alc,g,t}]^2$			2.09				−7.87	−9.47***					−0.79	−4.18					−7.66	−10.61		
			(5.30)				(5.71)	(3.41)					(5.25)	(3.50)					(8.22)	(6.77)		
$\Delta\pi_{Alc,g,t} \times \Uparrow_{c,t}$				0.07					−1.57	−1.62					−0.35	−0.90					−1.74	−2.23
				(1.51)					(1.77)	(1.18)					(1.16)	(0.90)					(1.77)	(1.52)
$\Delta\pi_{Util,g,t}$	−0.04	−0.09	−0.05	−0.12	−0.19	−0.18	−0.20	−0.16*	−0.28***	−0.19**	−0.15	−0.14	−0.18**	−0.13**	−0.30***	−0.21***	−0.21**	−0.21***	−0.27***	−0.22**	−0.12	−0.05
	(0.07)	(0.08)	(0.07)	(0.08)	(0.16)	(0.15)	(0.13)	(0.10)	(0.10)	(0.08)	(0.11)	(0.11)	(0.09)	(0.06)	(0.10)	(0.07)	(0.09)	(0.06)	(0.07)	(0.06)	(0.14)	(0.12)
$\Delta\pi_{Util,g,t-1}$		−0.06				−0.27***						−0.12						−0.15				
		(0.08)				(0.09)						(0.13)						(0.12)				
$\Delta\pi_{Util,g,t-2}$		−0.01				−0.001						0.03						−0.14*				
		(0.07)				(0.07)						(0.05)						(0.08)				
$[\Delta\pi_{Util,g,t}]^2$			−0.002				−0.06	−0.06					0.09**	0.06					−0.05	−0.08*		
			(0.05)				(0.12)	(0.09)					(0.04)	(0.04)					(0.05)	(0.04)		
$\Delta\pi_{Util,g,t} \times \Uparrow_{c,t}$				0.07					−0.01	−0.06					0.28*	0.20					−0.13	−0.20
				(0.16)					(0.35)	(0.26)					(0.17)	(0.15)					(0.19)	(0.16)
$\Delta\pi_{Fuel,g,t}$	0.10	0.13	0.12	−0.11	0.19*	0.03	0.19**	0.10	0.13	0.21	0.17***	0.10	0.20***	0.10*	−0.11	−0.11	0.05	0.03	0.12	0.03	−0.15	−0.15
	(0.10)	(0.10)	(0.10)	(0.16)	(0.10)	(0.10)	(0.10)	(0.09)	(0.17)	(0.13)	(0.06)	(0.09)	(0.07)	(0.06)	(0.24)	(0.15)	(0.10)	(0.08)	(0.09)	(0.07)	(0.23)	(0.17)
$\Delta\pi_{Fuel,g,t-1}$		0.16*				0.14						−0.22*						−0.24*				
		(0.10)				(0.13)						(0.13)						(0.13)				
$\Delta\pi_{Fuel,g,t-2}$		0.12				0.15						−0.06						0.07				
		(0.08)				(0.09)						(0.09)						(0.09)				
$[\Delta\pi_{Fuel,g,t}]^2$			0.18				−0.10	−0.23**					0.16	0.10					−0.04	−0.09		
			(0.12)				(0.11)	(0.11)					(0.12)	(0.09)					(0.12)	(0.08)		
$\Delta\pi_{Fuel,g,t} \times \Uparrow_{c,t}$				0.52**					0.22	−0.19					0.61**	0.40**					0.27	0.09
				(0.22)					(0.24)	(0.17)					(0.26)	(0.20)					(0.21)	(0.17)
$\Delta\pi_{CG,g,t}$	−0.04	0.11	−0.07	−0.46	−0.03	0.15	−0.15	−0.10	−0.07	0.28	0.17	0.12	0.01	−0.25**	−0.52	−0.87	0.17	0.23	0.38	0.16	0.46	0.14
	(0.22)	(0.23)	(0.21)	(0.39)	(0.26)	(0.24)	(0.21)	(0.15)	(0.40)	(0.26)	(0.16)	(0.16)	(0.16)	(0.12)	(0.72)	(0.59)	(0.19)	(0.20)	(0.26)	(0.23)	(0.71)	(0.62)
$\Delta\pi_{CG,g,t-1}$		0.10				0.25						0.49**						0.22				
		(0.19)				(0.23)						(0.22)						(0.19)				
$\Delta\pi_{CG,g,t-2}$		−0.13				0.16						0.14						−0.16				
		(0.20)				(0.24)						(0.16)						(0.19)				
$[\Delta\pi_{CG,g,t}]^2$			0.002				0.88	0.87*					−0.66	0.16					−0.88	−0.16		
			(0.57)				(0.65)	(0.45)					(0.45)	(0.35)					(0.70)	(0.63)		
$\Delta\pi_{CG,g,t} \times \Uparrow_{c,t}$				0.15					0.23	0.11					−0.04	0.60					−0.62	−0.05
				(0.57)					(0.64)	(0.38)					(0.72)	(0.62)					(0.80)	(0.69)
$\Delta\pi_{Serv,g,t}$	0.33*	0.25	0.30*	0.42	0.30	0.28	0.29	0.06	0.17	−0.16	0.31**	0.44***	0.35**	0.05	0.45	−0.01	0.36**	0.48***	0.47***	0.20	0.82**	0.41
	(0.18)	(0.19)	(0.17)	(0.45)	(0.19)	(0.20)	(0.19)	(0.12)	(0.50)	(0.24)	(0.14)	(0.15)	(0.14)	(0.10)	(0.40)	(0.23)	(0.15)	(0.16)	(0.15)	(0.13)	(0.39)	(0.30)
$\Delta\pi_{Serv,g,t}$		−0.05				0.03						0.42*						0.49*				
		(0.17)				(0.19)						(0.23)						(0.25)				
$\Delta\pi_{Serv,g,t}$		0.21				0.30						0.14						−0.04				
		(0.17)				(0.22)						(0.16)						(0.18)				
$[\Delta\pi_{Serv,g,t}]^2$			0.07				0.66	0.60					0.14	0.19					0.21	0.25		
			(0.53)				(0.70)	(0.56)					(0.43)	(0.31)					(0.46)	(0.37)		
$\Delta\pi_{Serv,g,t} \times \Uparrow_{c,t}$				−0.11					0.60	0.68					−0.05	0.10					−0.05	0.09
				(0.52)					(0.65)	(0.48)					(0.50)	(0.36)					(0.54)	(0.43)
Δ0y								0.77***		0.77***				0.51***		0.51***				0.45***		0.46***
								(0.07)		(0.07)				(0.04)		(0.04)				(0.07)		(0.07)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	456	444	456	456	456	444	456	456	456	456	312	312	312	312	312	312	312	312	312	312	312	312
Adj. R^2	0.20	0.23	0.21	0.24	0.09	0.17	0.10	0.51	0.14	0.52	0.15	0.22	0.22	0.47	0.24	0.48	0.04	0.09	0.07	0.21	0.09	0.24

Note: This table presents the results from augmented regression specifications of Eq. (1) for the components of the basket, across age groups. Columns (1), (5), (11), and (17) report the coefficients from the baseline regression specification in Eq. (1) for 0-year, 1-year, 2-year, and 5-year ahead expected inflation. Columns (2), (6), (12), and (18) report the coefficients for the regression that includes the lagged changes in experienced inflation driven by each respective component of the basket. Columns (3), (7), (13), and (19) report coefficients from the regression that includes the square of changes in experienced inflation driven by each respective component of the basket. Columns (8), (14), and (20) also control for changes in perceived inflation. Columns (4), (9), (15), and (21) report coefficients from the regression testing for asymmetries. Columns (10), (16), and (22) report the same and also control for changes in perceived inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4 Baseline results from other cuts of the data

B.4.1 Income

Table B.3. Baseline Results: Income

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.60***	0.57***						0.47***	0.02	0.53***	0.07	0.11	−0.24
	(0.13)	(0.12)						(0.16)	(0.11)	(0.20)	(0.17)	(0.16)	(0.15)
Alcohol	0.94**		1.25***					0.66	−0.04	0.24	−0.11	1.11*	0.84
	(0.44)		(0.47)					(0.50)	(0.49)	(0.43)	(0.42)	(0.57)	(0.58)
Utilities	−0.01			−0.14				−0.11	−0.10	−0.11	−0.08	−0.14**	−0.12**
	(0.06)			(0.12)				(0.13)	(0.10)	(0.10)	(0.08)	(0.07)	(0.06)
Fuel	0.11				−0.11			0.21*	0.13	0.17**	0.09	−0.01	−0.08
	(0.12)				(0.12)			(0.12)	(0.11)	(0.08)	(0.08)	(0.13)	(0.12)
Core Goods	−0.10					−0.21		−0.05	0.02	0.25	0.12	0.33	0.23
	(0.24)					(0.20)		(0.32)	(0.21)	(0.21)	(0.17)	(0.20)	(0.17)
Services	0.33						0.16	0.19	−0.06	0.32	0.003	0.45**	0.20
	(0.25)						(0.30)	(0.25)	(0.14)	(0.21)	(0.14)	(0.22)	(0.15)
$\Delta\pi^{Total}_{g,t}$		0.05	0.13***	0.22**	0.16***	0.16***	0.13**						
		(0.05)	(0.05)	(0.09)	(0.05)	(0.05)	(0.06)						
Δ0y									0.74***		0.56***		0.43***
									(0.07)		(0.07)		(0.07)
Income FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	304	304	304	304	304	304	304	304	304	208	208	208	208
Adjusted R^2	0.21	0.19	0.13	0.12	0.11	0.11	0.11	0.09	0.48	0.15	0.42	0.05	0.19

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by income groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.2 House Tenure

Table B.4. Baseline Results: House Tenure

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.62***	0.59***						0.46**	−0.04	0.58**	0.10	0.12	−0.29*
	(0.16)	(0.14)						(0.21)	(0.15)	(0.24)	(0.19)	(0.19)	(0.16)
Alcohol	1.70**		2.14***					1.46*	0.09	0.11	−0.51	1.40*	0.87
	(0.76)		(0.73)					(0.82)	(0.77)	(0.65)	(0.59)	(0.72)	(0.61)
Utilities	−0.02			−0.11				−0.20	−0.18	−0.14	−0.11	−0.19*	−0.16**
	(0.08)			(0.13)				(0.17)	(0.13)	(0.13)	(0.09)	(0.10)	(0.07)
Fuel	0.11				−0.12			0.20*	0.10	0.15**	0.09	−0.04	−0.10
	(0.11)				(0.12)			(0.11)	(0.10)	(0.08)	(0.07)	(0.11)	(0.08)
Core Goods	−0.08					−0.20		−0.09	−0.03	0.18	0.04	0.25	0.13
	(0.25)					(0.21)		(0.29)	(0.18)	(0.17)	(0.13)	(0.17)	(0.14)
Services	0.40*						0.18	0.35	0.02	0.31	−0.004	0.45**	0.18
	(0.23)						(0.29)	(0.27)	(0.15)	(0.23)	(0.15)	(0.20)	(0.15)
$\Delta\pi_{g,t}^{Total}$		0.06	0.15***	0.21**	0.19***	0.18***	0.14**						
		(0.05)	(0.05)	(0.09)	(0.06)	(0.05)	(0.07)						
$\overline{\Delta 0y}$									0.81***		0.54***		0.47***
									(0.08)		(0.07)		(0.08)
House FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	228	228	228	228	228	228	228	228	228	156	156	156	156
Adjusted R^2	0.24	0.21	0.17	0.13	0.13	0.13	0.13	0.10	0.53	0.17	0.46	0.07	0.30

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by house tenure groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.3 Gender

Table B.5. Baseline Results: Gender

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.63***	0.62***						0.50**	−0.02	0.56**	0.09	0.14	−0.23
	(0.16)	(0.14)						(0.22)	(0.15)	(0.24)	(0.19)	(0.19)	(0.18)
Alcohol	1.83**		2.27***					1.14	−0.36	−0.04	−0.73	0.90	0.37
	(0.75)		(0.73)					(0.85)	(0.82)	(0.66)	(0.55)	(0.70)	(0.64)
Utilities	−0.03			−0.11				−0.20	−0.17	−0.15	−0.11	−0.20**	−0.18***
	(0.08)			(0.12)				(0.17)	(0.13)	(0.13)	(0.10)	(0.09)	(0.07)
Fuel	0.10				−0.13			0.19	0.10	0.13*	0.07	−0.02	−0.07
	(0.11)				(0.12)			(0.12)	(0.11)	(0.07)	(0.08)	(0.11)	(0.10)
Core Goods	−0.10					−0.21		−0.08	0.002	0.22	0.08	0.26	0.15
	(0.25)					(0.20)		(0.29)	(0.18)	(0.17)	(0.13)	(0.17)	(0.14)
Services	0.43*						0.22	0.31	−0.04	0.38	0.02	0.55***	0.26*
	(0.25)						(0.31)	(0.29)	(0.16)	(0.26)	(0.18)	(0.21)	(0.16)
$\Delta\pi^{Total}_{g,t}$		0.06	0.14***	0.21**	0.18***	0.17***	0.13**						
		(0.05)	(0.05)	(0.09)	(0.06)	(0.05)	(0.06)						
Δ0y									0.82***		0.55***		0.43***
									(0.09)		(0.08)		(0.10)
Gender FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	152	152	152	152	152	152	152	152	152	104	104	104	104
Adjusted R^2	0.27	0.24	0.19	0.15	0.15	0.15	0.14	0.10	0.52	0.20	0.49	0.08	0.26

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by gender. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.4 Region

Table B.6. Baseline Results: Region

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.63***	0.65***						0.45**	−0.02	0.46*	−0.07	0.13	−0.35***
	(0.18)	(0.16)						(0.22)	(0.14)	(0.24)	(0.14)	(0.17)	(0.12)
Alcohol	1.93***		2.07***					1.52**	0.06	0.53	−0.54	1.54***	0.55
	(0.52)		(0.53)					(0.63)	(0.60)	(0.40)	(0.34)	(0.41)	(0.45)
Utilities	−0.04			−0.07				−0.21	−0.18	−0.11	−0.07	−0.22**	−0.18***
	(0.08)			(0.13)				(0.17)	(0.12)	(0.13)	(0.09)	(0.09)	(0.06)
Fuel	0.05				−0.20			0.12	0.08	0.04	0.03	0.02	0.01
	(0.12)				(0.13)			(0.12)	(0.10)	(0.08)	(0.07)	(0.10)	(0.09)
Core Goods	−0.10					−0.27		0.01	0.08	0.25	0.10	0.21	0.08
	(0.27)					(0.25)		(0.29)	(0.17)	(0.19)	(0.13)	(0.18)	(0.13)
Services	0.54**						0.33	0.42	0.02	0.44	−0.01	0.58***	0.16
	(0.23)						(0.29)	(0.28)	(0.16)	(0.27)	(0.20)	(0.20)	(0.14)
$\Delta\pi_{g,t}^{Total}$		0.05	0.14**	0.19**	0.20***	0.18***	0.12*						
		(0.06)	(0.06)	(0.09)	(0.07)	(0.06)	(0.06)						
Δ0y									0.75***		0.60***		0.55***
									(0.06)		(0.09)		(0.08)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	380	380	380	380	380	380	380	380	380	260	260	260	260
Adjusted R^2	0.16	0.12	0.10	0.07	0.08	0.07	0.07	0.07	0.54	0.06	0.44	0.04	0.36

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by region. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.5 Work Status

Table B.7. Baseline Results: Work Status

	Dependent variable:												
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ2y	Δ2y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$\Delta\pi_{c,g,t}$													
Food	0.56***	0.56***						0.45**	−0.02	0.50**	0.01	0.05	−0.30**
	(0.15)	(0.13)						(0.20)	(0.14)	(0.22)	(0.17)	(0.17)	(0.15)
Alcohol	1.70**		2.06***					1.23	−0.20	0.26	−0.52	1.36**	0.81
	(0.70)		(0.68)					(0.86)	(0.79)	(0.61)	(0.54)	(0.62)	(0.54)
Utilities	−0.02			−0.11				−0.17	−0.15	−0.11	−0.08	−0.15*	−0.12**
	(0.07)			(0.12)				(0.15)	(0.11)	(0.11)	(0.08)	(0.08)	(0.06)
Fuel	0.09				−0.13			0.18	0.10	0.12*	0.07	−0.03	−0.07
	(0.11)				(0.12)			(0.11)	(0.11)	(0.07)	(0.08)	(0.10)	(0.09)
Core Goods	−0.08					−0.21		−0.06	0.01	0.22	0.06	0.26*	0.15
	(0.25)					(0.21)		(0.29)	(0.19)	(0.17)	(0.13)	(0.16)	(0.13)
Services	0.46*						0.28	0.30	−0.09	0.40*	−0.02	0.52**	0.23
	(0.24)						(0.30)	(0.27)	(0.16)	(0.24)	(0.17)	(0.22)	(0.17)
$\Delta\pi^{Total}_{g,t}$		0.06	0.14***	0.20**	0.18***	0.17***	0.12**						
		(0.05)	(0.05)	(0.09)	(0.06)	(0.05)	(0.06)						
$\overline{\Delta 0y}$									0.84***		0.61***		0.43***
									(0.09)		(0.08)		(0.10)
Work Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	152	152	152	152	152	152	152	152	152	104	104	104	104
Adjusted R^2	0.26	0.23	0.18	0.15	0.15	0.15	0.15	0.10	0.55	0.20	0.53	0.08	0.26

Note: This table reports the results of the baseline regression specification, based on the panel dataset that is cut by work status. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.6 Age x Income

Table B.8. Baseline Results: Age x Income

	Dependent variable:																													
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
$\Delta\pi_{c,g,t}$																															
Food	0.57***	0.49***						0.42***	0.35**						0.07	0.49**	0.33						0.17	0.07	0.03						−0.22*
	(0.12)	(0.11)						(0.15)	(0.15)						(0.11)	(0.19)	(0.21)						(0.15)	(0.16)	(0.15)						(0.13)
Alcohol	0.10		0.08					0.21		0.21					0.15	0.14		0.06					0.14	0.59**		0.57**					0.60**
	(0.20)		(0.23)					(0.30)		(0.31)					(0.23)	(0.18)		(0.20)					(0.17)	(0.24)		(0.26)					(0.23)
Energy (Utilities)	0.05			−0.07				−0.08			−0.20*				−0.11	−0.09			−0.31***				−0.12*	−0.10*			−0.20**				−0.13***
	(0.05)			(0.08)				(0.12)			(0.11)				(0.09)	(0.08)			(0.08)				(0.07)	(0.05)			(0.09)				(0.04)
Energy (Fuel)	0.07				−0.11			0.09				0.03			0.05	0.16**				0.07			0.13*	0.02				0.05			−0.004
	(0.08)				(0.08)			(0.08)				(0.15)			(0.08)	(0.07)				(0.08)			(0.07)	(0.10)				(0.09)			(0.10)
Core Goods	0.10					−0.06		0.09					0.09		0.04	0.25					0.15		0.08	0.17					0.17		0.02
	(0.18)					(0.16)		(0.25)					(0.19)		(0.18)	(0.19)					(0.21)		(0.14)	(0.22)					(0.20)		(0.17)
Services	0.15						−0.02	0.15						0.02	0.06	0.28**						0.09	0.19**	0.15						0.05	0.07
	(0.13)						(0.16)	(0.13)						(0.13)	(0.08)	(0.11)						(0.14)	(0.09)	(0.14)						(0.16)	(0.11)
$\Delta\pi_{g,t}^{Total}$		0.07*	0.15***	0.18***	0.17***	0.15***	0.15***		0.01	0.07	0.17***	0.06	0.06	0.07			0.06	0.11**	0.26***	0.10	0.10*	0.10*			−0.002	−0.004	0.10	−0.01	−0.01	−0.003	
		(0.04)	(0.04)	(0.07)	(0.05)	(0.04)	(0.05)		(0.07)	(0.07)	(0.06)	(0.09)	(0.07)	(0.08)			(0.06)	(0.05)	(0.06)	(0.06)	(0.05)	(0.05)			(0.04)	(0.04)	(0.07)	(0.04)	(0.03)	(0.04)	
Δ0y															0.60***								0.43***								0.40***
															(0.04)								(0.05)								(0.04)
Age x Income FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233
Adjusted R^2	0.06	0.06	0.03	0.04	0.04	0.03	0.03	0.01	0.01	−0.004	0.01	−0.004	−0.004	−0.005	0.32	0.03	0.01	0.002	0.02	0.003	0.003	0.003	0.20	−0.01	−0.02	−0.02	−0.01	−0.02	−0.02	−0.02	0.10

Note: This table reports the results of the baseline regression specification, based on the panel dataset that combines Age and Income groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.9. Age x Income Group Summary: Alcohol

	Dependent variable: $\Delta 0y$					
	(1)	(2)	(3)	(4)	(5)	(6)
Income Group						
<£10k	-0.18	-1.69***	0.14	2.46***	-0.22	2.05***
	(0.30)	(0.50)	(0.58)	(0.74)	(0.61)	(0.69)
£10k-£20k	1.12	0.48	-0.59	0.14	-0.68	0.98
	(0.80)	(0.55)	(0.60)	(0.86)	(0.87)	(1.09)
£20k-£35k	-1.17	-4.05***	-1.23	-0.23	-0.54	3.15
	(2.14)	(1.04)	(2.17)	(1.25)	(0.60)	(2.03)
>£35k	-1.64	2.97	2.39	2.16*	2.87**	3.98**
	(1.44)	(2.22)	(3.00)	(1.11)	(1.28)	(1.65)
Age Group:	15-24	25-34	35-44	45-54	55-64	65+

Note: This table reports the estimated coefficients for the sensitivity of inflation perceptions to changes in alcohol price inflation, across the full set of possible age-income combinations. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.4.7 Age x Income x House Tenure

Table B.10. Baseline Results: Age x Income x House Tenure

	Dependent variable:																													
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
$\Delta\pi_{c,g,t}$																															
Food	0.37***	0.30**						0.26**	0.15						0.04	0.49***	0.36***						0.23**	−0.12	−0.23**						−0.36***
	(0.12)	(0.12)						(0.11)	(0.10)						(0.07)	(0.12)	(0.13)						(0.10)	(0.09)	(0.11)						(0.08)
Alcohol	0.41**		0.33*					0.15		0.10					−0.09	0.26*		0.25					0.06	0.26		0.14					0.10
	(0.19)		(0.19)					(0.16)		(0.16)					(0.14)	(0.15)		(0.16)					(0.15)	(0.28)		(0.25)					(0.31)
Energy (Utilities)	0.10***			0.02				−0.08			−0.17**				−0.14	−0.08			−0.26**				−0.11	−0.06			−0.18*				−0.08
	(0.04)			(0.07)				(0.10)			(0.09)				(0.10)	(0.10)			(0.11)				(0.09)	(0.07)			(0.10)				(0.07)
Energy (Fuel)	0.07				−0.11			0.13***				0.09			0.08*	0.19***				0.09			0.18***	0.11				0.12			0.10
	(0.06)				(0.08)			(0.05)				(0.10)			(0.04)	(0.06)				(0.08)			(0.05)	(0.08)				(0.10)			(0.07)
Core Goods	−0.07					−0.23		−0.14					−0.13		−0.10	0.08					−0.005		−0.04	−0.0003					−0.03		−0.07
	(0.16)					(0.16)		(0.21)					(0.20)		(0.16)	(0.18)					(0.19)		(0.14)	(0.18)					(0.20)		(0.15)
Services	0.15						−0.01	0.21*						0.14	0.12*	0.16						−0.02	0.02	0.29**						0.25*	0.18
	(0.10)						(0.10)	(0.11)						(0.11)	(0.07)	(0.12)						(0.14)	(0.09)	(0.12)						(0.14)	(0.11)
$\Delta\pi_{g,t}^{Total}$		0.09***	0.12***	0.12**	0.15***	0.14***	0.13***		0.02	0.04	0.12**	0.02	0.05	0.03			0.05	0.10*	0.22***	0.08	0.10*	0.11*			0.05	0.02	0.10*	−0.01	0.02	−0.01	
		(0.03)	(0.03)	(0.05)	(0.04)	(0.03)	(0.03)		(0.07)	(0.07)	(0.05)	(0.09)	(0.07)	(0.07)			(0.06)	(0.05)	(0.05)	(0.07)	(0.06)	(0.06)			(0.05)	(0.04)	(0.06)	(0.05)	(0.05)	(0.05)	
Δ0y															0.60***								0.45***								0.37***
															(0.02)								(0.04)								(0.05)
Age x Income x House FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,308	4,308	4,308	4,308	4,308	4,308	4,308	4,308	2,847	2,847	2,847	2,847	2,847	2,847	2,847	2,847	2,834	2,834	2,834	2,834	2,834	2,834	2,834	2,834
Adjusted R^2	0.002	0.0003	−0.002	−0.003	−0.002	−0.002	−0.003	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	0.35	−0.01	−0.01	−0.02	−0.01	−0.02	−0.02	−0.02	0.20	−0.02	−0.02	−0.02	−0.02	−0.02	−0.02	−0.02	0.09

Note: This table reports the results of the baseline regression specification, based on the panel dataset that combines Age, Income and House Tenure groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.11. Age x Income x House (Renters) Group Summary: Food

	Dependent variable: $\Delta 0y$					
	(1)	(2)	(3)	(4)	(5)	(6)
Income Group: <£10k						
Renters	0.40**	0.59***	-0.27	0.64***	0.32	0.39
	(0.20)	(0.22)	(0.25)	(0.23)	(0.34)	(0.40)
Mortgagors	NA	NA	NA	-1.04	NA	NA
				(0.84)		
Owners	NA	NA	NA	0.78	-0.18	0.11
				(0.60)	(0.55)	(0.26)
Income Group: £10k-£20k						
Renters	0.01	0.61**	0.41	0.23	0.03	0.66**
	(0.27)	(0.26)	(0.35)	(0.40)	(0.54)	(0.33)
Mortgagors	NA	0.87**	0.69	0.16	0.25	0.58
		(0.43)	(0.69)	(0.33)	(0.54)	(0.84)
Owners	NA	NA	NA	-0.04	0.67*	0.27
				(0.44)	(0.39)	(0.19)
Income Group: £20k-£35k						
Renters	1.24***	0.30	-0.08	0.57	-0.06	-0.45
	(0.39)	(0.36)	(0.31)	(0.60)	(0.75)	(0.81)
Mortgagors	NA	0.51	0.93***	-0.03	1.06*	NA
		(0.59)	(0.34)	(0.35)	(0.62)	
Owners	NA	NA	NA	1.22**	0.98***	0.86***
				(0.48)	(0.29)	(0.33)
Income Group: >£35k						
Renters	0.71	0.76**	0.86	1.36**	1.68**	0.75
	(0.82)	(0.36)	(0.53)	(0.55)	(0.74)	(1.05)
Mortgagors	0.15	1.15***	0.80**	0.48	0.43	0.96
	(0.50)	(0.33)	(0.33)	(0.42)	(0.51)	(0.78)
Owners	NA	2.05***	0.28	0.90**	1.07***	0.40
		(0.64)	(0.43)	(0.44)	(0.34)	(0.32)
Age Group:	15-24	25-34	35-44	45-54	55-64	65+

Note: This table reports the estimated coefficients for the sensitivity of inflation perceptions to changes in food price inflation, across the full set of possible age, income and house tenure combinations. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust. 'NA' indicates there does not exist an observation for this combination of age, income, and house tenure characteristics in every period of the sample.

B.4.8 Fully merged

Table B.12. Baseline Results: Fully Merged Dataset

	Dependent variable:																													
	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ0y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ1y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ2y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y	Δ5y
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
$\Delta\pi_{c,g,t}$																															
Food	0.35	0.30						0.20**	0.17**						0.20**	0.41***	0.32**						0.40***	0.23	0.23**						0.23
	(0.37)	(0.44)						(0.10)	(0.08)						(0.10)	(0.14)	(0.13)						(0.14)	(0.15)	(0.11)						(0.15)
Alcohol	0.27		0.10					−0.04		−0.06					−0.04	0.02		−0.08					0.01	−0.04		−0.04					−0.04
	(0.79)		(0.79)					(0.10)		(0.09)					(0.10)	(0.17)		(0.17)					(0.17)	(0.23)		(0.23)					(0.23)
Energy (Utilities)	0.28			0.31				0.002			−0.04				0.0002	0.08*			−0.01				0.08*	−0.06			−0.08				−0.06
	(0.28)			(0.37)				(0.06)			(0.05)				(0.06)	(0.05)			(0.06)				(0.05)	(0.05)			(0.08)				(0.05)
Energy (Fuel)	−0.13				−0.42			0.06				0.02			0.06	0.05				−0.10			0.05	−0.02				−0.04			−0.02
	(0.34)				(0.33)			(0.04)				(0.08)			(0.04)	(0.04)				(0.08)			(0.04)	(0.06)				(0.06)			(0.06)
Core Goods	−0.31					−0.59		−0.03					−0.06		−0.03	0.18*					0.03		0.18*	0.19					0.18		0.19
	(0.84)					(0.98)		(0.13)					(0.10)		(0.13)	(0.10)					(0.11)		(0.10)	(0.12)					(0.13)		(0.12)
Services	0.26						0.08	0.01						−0.04	0.01	0.11						−0.04	0.10	0.01						−0.05	0.01
	(0.35)						(0.35)	(0.06)						(0.05)	(0.06)	(0.07)						(0.06)	(0.07)	(0.10)						(0.09)	(0.10)
$\Delta\pi_{g,t}^{Total}$		0.11	0.15	0.02	0.25	0.20	0.14		0.02	0.04	0.05	0.03	0.04	0.04			0.08***	0.12***	0.13***	0.15***	0.12***	0.13***			−0.02	0.01	0.04	0.02	0.003	0.02	
		(0.17)	(0.15)	(0.19)	(0.15)	(0.19)	(0.15)		(0.05)	(0.05)	(0.04)	(0.06)	(0.05)	(0.05)			(0.03)	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)			(0.04)	(0.04)	(0.06)	(0.04)	(0.04)	(0.04)	
Δ0y															0.01***								0.01**								0.01**
															(0.001)								(0.003)								(0.002)
All groups FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	13,106	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,377	7,377	7,377	7,377	7,377	7,377	7,377	7,377
Adjusted R^2	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.06	−0.05	−0.08	−0.07	−0.08	−0.08	−0.08	−0.08	−0.08	−0.07	−0.08	−0.08	−0.08	−0.08	−0.08	−0.08	−0.08	−0.08

Note: This table reports the results of the baseline regression specification, based on the panel dataset that combines all demographic groups. Column (1) reports the results based on specification in Eq. (1) for perceived (or, '0-year ahead expected') inflation. Columns (2)-(7) report results of a modified version of Eq. (1), regressing changes in perceived inflation on changes in experienced inflation driven by each respective component of the consumption basket separately, while controlling also for changes in the 'total' experienced inflation rate. Columns (8)-(13) show similar regressions, but control for CPI inflation instead. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.5 Demographic group results

Table B.13. Demographic Group Results (Perceptions, Normalised)

	Dependent variable: Δ0y																					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
$\Delta\pi_{c,g,t}$																						
Food	0.44***	0.55***	0.34***	0.34**	0.40***	0.29***	0.24***	0.39***	0.54***	0.47***	0.38***	0.38***	0.36***	0.45***	0.45***	0.27**	0.38*	0.35***	0.19**	0.27	0.59***	0.29***
	(0.14)	(0.11)	(0.12)	(0.17)	(0.11)	(0.07)	(0.07)	(0.09)	(0.13)	(0.15)	(0.12)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.22)	(0.07)	(0.08)	(0.17)	(0.14)	(0.10)
Alcohol	0.10	−0.11	0.14	0.21***	0.11	0.27**	0.10**	0.09	0.03	0.38*	0.15**	0.24**	0.14	0.16*	0.16**	0.17*	0.19***	0.18***	0.04	0.22*	0.12	0.20***
	(0.06)	(0.08)	(0.19)	(0.07)	(0.07)	(0.11)	(0.05)	(0.08)	(0.13)	(0.21)	(0.07)	(0.12)	(0.12)	(0.09)	(0.08)	(0.10)	(0.06)	(0.06)	(0.10)	(0.12)	(0.11)	(0.07)
Utilities	−0.25**	−0.04	0.01	0.09	−0.05	−0.01	0.06	−0.05	−0.04	−0.10	−0.02	−0.01	−0.04	−0.02	−0.02	0.01	−0.07	−0.04	0.01	−0.07	−0.12	0.001
	(0.11)	(0.14)	(0.11)	(0.14)	(0.13)	(0.09)	(0.08)	(0.12)	(0.14)	(0.16)	(0.11)	(0.14)	(0.10)	(0.12)	(0.11)	(0.12)	(0.12)	(0.06)	(0.11)	(0.15)	(0.16)	(0.09)
Fuel	0.10	0.10	0.17*	0.01	0.12	0.04	−0.14	−0.06	0.20*	0.11	−0.03	0.13	0.12	0.10	0.10	0.05	−0.14	0.06	0.09	0.05	0.12	0.02
	(0.09)	(0.13)	(0.10)	(0.10)	(0.09)	(0.15)	(0.19)	(0.12)	(0.11)	(0.08)	(0.14)	(0.09)	(0.11)	(0.09)	(0.13)	(0.10)	(0.20)	(0.09)	(0.10)	(0.12)	(0.09)	(0.15)
Core	0.02	−0.01	−0.03	−0.11	0.03	0.06	−0.06	0.10	−0.14	−0.04	−0.02	−0.08	0.002	0.02	0.02	−0.05	−0.03	0.04	0.02	−0.10	−0.08	0.01
Goods	(0.11)	(0.12)	(0.13)	(0.16)	(0.12)	(0.14)	(0.16)	(0.14)	(0.09)	(0.11)	(0.13)	(0.12)	(0.14)	(0.12)	(0.15)	(0.11)	(0.16)	(0.11)	(0.13)	(0.14)	(0.12)	(0.16)
Services	0.11	0.03	0.16	0.19	0.38**	0.16	0.06	0.14	0.19	0.22**	0.08	0.25**	0.26*	0.19	0.19	0.05	0.23*	0.11	0.27**	0.28*	0.17*	0.25*
	(0.07)	(0.13)	(0.11)	(0.14)	(0.16)	(0.14)	(0.10)	(0.14)	(0.16)	(0.10)	(0.11)	(0.11)	(0.15)	(0.12)	(0.13)	(0.09)	(0.14)	(0.09)	(0.13)	(0.15)	(0.10)	(0.14)
Dem. Group	15-24	25-34	35-44	45-54	55-64	65+	<£10k	£10k-£20k	£20k-£35k	>£35k	Renters	Mort.	Owners	Male	Female	South-east	Scotland	North & NI	Mid-lands	Wales & West	In work	Out of work
Obs.	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Adj. R^2	0.12	0.18	0.17	0.23	0.24	0.20	0.13	0.17	0.25	0.26	0.23	0.23	0.19	0.31	0.31	0.14	0.09	0.23	0.15	0.12	0.27	0.24

Note: This table reports the regression results from Eq. (2) for households' perceived inflation. Columns (1)-(6) compares across age groups, columns (7)-(10) across income groups, columns (11)-(13) across house tenure, columns (14)-(15) across gender, column (16)-(20) across regions and (21)-(22) across work status. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.14. Demographic Group Results (1-year ahead expectations)

	Dependent variable: $\Delta 1y$																																							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta\pi_{c,g,t}$																																											
Food	0.40	−0.16	0.84***	0.19	0.54**	0.06	0.42	−0.12	0.61*	0.05	0.36**	−0.03	0.41**	0.14	0.47***	−0.03	0.55***	−0.05	0.53	−0.06	0.56***	0.08	0.51	−0.05	0.35	−0.10	0.47**	−0.14	0.54**	0.09	0.50*	0.09	0.23	−0.39**	0.50***	−0.02	0.29	−0.0002	0.76*	0.28	0.59**	−0.13	0.40**	0.04
	(0.29)	(0.15)	(0.17)	(0.13)	(0.26)	(0.18)	(0.38)	(0.22)	(0.31)	(0.30)	(0.15)	(0.15)	(0.18)	(0.15)	(0.14)	(0.11)	(0.17)	(0.13)	(0.37)	(0.27)	(0.19)	(0.11)	(0.32)	(0.25)	(0.23)	(0.17)	(0.22)	(0.15)	(0.24)	(0.16)	(0.26)	(0.18)	(0.32)	(0.18)	(0.19)	(0.19)	(0.23)	(0.18)	(0.41)	(0.21)	(0.26)	(0.18)	(0.19)	(0.13)
Alcohol	1.43**	0.75	−1.48*	−0.77	0.47	−0.64	1.82*	−0.01	0.39	−0.47	1.55	−0.49	0.57	−0.03	0.34	−0.29	1.01	0.82	1.64	−0.90	0.62	−0.59	1.06	−1.17	2.56**	1.41*	1.15	−0.29	1.16	−0.46	1.55	0.17	1.73**	0.001	0.87	−0.60	1.58	1.21	2.13	0.001	1.06	0.08	1.23	−0.40
	(0.73)	(0.59)	(0.90)	(0.79)	(1.63)	(1.17)	(1.03)	(0.82)	(0.93)	(0.61)	(1.30)	(0.97)	(0.51)	(0.51)	(0.91)	(0.67)	(0.98)	(0.94)	(1.08)	(1.16)	(0.74)	(0.63)	(1.17)	(1.13)	(1.15)	(0.77)	(0.72)	(0.81)	(1.06)	(0.87)	(1.04)	(1.09)	(0.77)	(0.66)	(0.92)	(0.90)	(1.39)	(0.93)	(1.45)	(1.31)	(0.77)	(0.78)	(0.87)	(0.67)
Utilities	−0.24*	−0.09	−0.37*	−0.34**	−0.13	−0.13	−0.09	−0.15	−0.26	−0.22	−0.14	−0.14	−0.06	−0.09	−0.12	−0.09	−0.13	−0.11	−0.30	−0.25	−0.13	−0.12	−0.25	−0.24	−0.21	−0.19	−0.23	−0.21	−0.18	−0.14	−0.14	−0.15	−0.15	−0.10	−0.23*	−0.20	−0.12	−0.13	−0.36	−0.30*	−0.28	−0.21	−0.13	−0.13
	(0.13)	(0.09)	(0.19)	(0.16)	(0.20)	(0.15)	(0.21)	(0.16)	(0.22)	(0.16)	(0.13)	(0.09)	(0.10)	(0.09)	(0.13)	(0.09)	(0.17)	(0.14)	(0.22)	(0.18)	(0.13)	(0.10)	(0.23)	(0.15)	(0.16)	(0.12)	(0.20)	(0.16)	(0.13)	(0.09)	(0.20)	(0.17)	(0.17)	(0.12)	(0.14)	(0.12)	(0.16)	(0.11)	(0.24)	(0.16)	(0.21)	(0.16)	(0.12)	(0.09)
Fuel	0.29**	0.22*	0.07	−0.01	0.30**	0.14	0.07	0.05	0.27***	0.16*	0.16	0.13	0.31	0.43*	0.02	0.08	0.36***	0.18	0.18*	0.07	0.09	0.11	0.19*	0.07	0.24**	0.14*	0.16	0.07	0.24*	0.16	0.23*	0.18*	−0.17	−0.02	0.17	0.11	0.19	0.10	0.10	0.04	0.19*	0.09	0.16	0.15
	(0.15)	(0.12)	(0.15)	(0.12)	(0.12)	(0.09)	(0.12)	(0.10)	(0.10)	(0.10)	(0.16)	(0.12)	(0.29)	(0.24)	(0.16)	(0.11)	(0.13)	(0.14)	(0.11)	(0.09)	(0.17)	(0.14)	(0.10)	(0.09)	(0.12)	(0.09)	(0.12)	(0.08)	(0.14)	(0.13)	(0.14)	(0.09)	(0.32)	(0.19)	(0.10)	(0.09)	(0.14)	(0.10)	(0.16)	(0.11)	(0.11)	(0.09)	(0.13)	(0.12)
Core Goods	−0.005	−0.04	0.03	0.04	−0.0001	0.06	0.13	0.34*	−0.16	−0.21	−0.06	−0.16	−0.07	0.03	0.20	0.02	−0.30	−0.07	−0.04	0.02	0.03	0.06	−0.04	0.11	−0.19	−0.20	0.02	−0.01	−0.18	−0.01	−0.10	0.005	0.27	0.32	−0.16	−0.24	0.04	0.002	0.02	0.26	−0.13	0.01	0.01	−0.01
	(0.25)	(0.25)	(0.25)	(0.18)	(0.32)	(0.18)	(0.29)	(0.19)	(0.37)	(0.26)	(0.40)	(0.23)	(0.62)	(0.46)	(0.41)	(0.21)	(0.29)	(0.21)	(0.30)	(0.18)	(0.32)	(0.20)	(0.29)	(0.16)	(0.34)	(0.19)	(0.31)	(0.17)	(0.30)	(0.16)	(0.29)	(0.18)	(0.47)	(0.29)	(0.37)	(0.25)	(0.34)	(0.21)	(0.35)	(0.18)	(0.26)	(0.14)	(0.37)	(0.19)
Services	0.35**	0.19*	0.14	0.10	−0.09	−0.37**	0.27	−0.09	0.66*	0.02	0.59*	0.33	−0.09	−0.19	0.53*	0.27**	0.08	−0.23	0.34	−0.07	0.21	0.06	0.29	−0.21	0.53	0.07	0.28	−0.07	0.33	−0.02	−0.04	−0.14	0.82**	0.30	0.50*	0.28	0.39	−0.16	0.46	−0.21	0.27	−0.04	0.39	−0.07
	(0.14)	(0.11)	(0.25)	(0.16)	(0.24)	(0.16)	(0.35)	(0.18)	(0.38)	(0.17)	(0.34)	(0.23)	(0.25)	(0.18)	(0.27)	(0.13)	(0.36)	(0.19)	(0.29)	(0.16)	(0.25)	(0.13)	(0.26)	(0.17)	(0.32)	(0.19)	(0.28)	(0.12)	(0.31)	(0.17)	(0.27)	(0.18)	(0.42)	(0.29)	(0.28)	(0.17)	(0.32)	(0.19)	(0.51)	(0.31)	(0.26)	(0.14)	(0.30)	(0.15)
$\Delta 0y$		0.71***		0.65***		0.79***		0.87***		0.79***		0.76***		0.71***		0.81***		0.72***		0.81***		0.79***		0.91***		0.77***		0.87***		0.80***		0.72***		0.77***		0.70***		0.71***		0.82***		0.84***		0.85***
		(0.10)		(0.08)		(0.07)		(0.08)		(0.13)		(0.10)		(0.13)		(0.08)		(0.06)		(0.11)		(0.06)		(0.10)		(0.11)		(0.12)		(0.07)		(0.09)		(0.06)		(0.09)		(0.05)		(0.10)		(0.09)		(0.08)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10--20k	10--20k	20--35k	20--35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	−0.01	76	76	76	76	76	76	76	76	76	76	76
Adj. R^2	0.06	0.41	0.12	0.49	0.08	0.54	0.03	0.48	0.07	0.45	0.06	0.48	0.04	0.36	0.08	0.61	0.08	0.48	0.05	0.44	0.09	0.55	0.04	0.52	0.09	0.51	0.07	0.50	0.08	0.52	0.06	0.48	0.61	0.07	0.46	0.02	0.44	0.06	0.56	0.08	0.52	0.07	0.55

Note: This table reports the regression results from Eq. (2) for households' 1 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.15. Demographic Group Results (1-year ahead expectations, Services Breakdown)

	Dependent variable: $\Delta 1y$																																							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta\pi_{c,g,t}$																																											
Food	0.48*	−0.08	0.87***	0.21	0.62**	0.11	0.61*	0.03	0.83***	0.16	0.37*	−0.06	0.41**	0.14	0.49***	0.01	0.57***	−0.07	0.53	−0.02	0.62***	0.08	0.62**	0.02	0.50**	−0.01	0.51**	−0.13	0.59**	0.14	0.45	0.11	0.23	−0.37*	0.57***	0.01	0.39*	0.05	0.78*	0.21	0.68**	−0.08	0.45**	0.06
	(0.27)	(0.15)	(0.19)	(0.15)	(0.29)	(0.20)	(0.34)	(0.21)	(0.29)	(0.29)	(0.19)	(0.15)	(0.18)	(0.14)	(0.13)	(0.11)	(0.19)	(0.14)	(0.35)	(0.29)	(0.21)	(0.13)	(0.29)	(0.25)	(0.23)	(0.17)	(0.24)	(0.19)	(0.24)	(0.15)	(0.28)	(0.21)	(0.29)	(0.19)	(0.19)	(0.19)	(0.24)	(0.19)	(0.47)	(0.22)	(0.26)	(0.19)	(0.21)	(0.13)
Alcohol	0.80	0.30	−1.40	−0.63	0.97	−0.52	1.97*	−0.13	0.43	−0.42	2.00	−0.20	1.50***	0.83*	0.84	0.03	0.94	0.81	1.54	−1.15	0.83	−0.42	1.24	−0.97	2.49**	1.45**	1.53*	−0.16	1.36	−0.26	1.28	0.40	1.56*	0.05	1.00	−0.59	1.95	1.17	3.64***	1.24	1.19	−0.04	1.41*	−0.14
	(0.70)	(0.60)	(0.88)	(0.80)	(1.46)	(0.83)	(1.02)	(0.98)	(1.00)	(0.59)	(1.33)	(0.98)	(0.49)	(0.48)	(1.00)	(0.70)	(1.16)	(1.06)	(1.04)	(1.27)	(0.74)	(0.56)	(1.29)	(1.18)	(1.00)	(0.71)	(0.87)	(0.88)	(1.07)	(0.89)	(1.04)	(1.14)	(0.83)	(0.60)	(0.95)	(0.83)	(1.58)	(1.03)	(1.40)	(1.32)	(0.86)	(0.70)	(0.85)	(0.64)
Energy (Utilities)	−0.22*	−0.09	−0.41**	−0.37***	−0.17	−0.14	−0.11	−0.18	−0.30	−0.27*	−0.12	−0.14*	−0.08	−0.10*	−0.12	−0.11	−0.14	−0.13	−0.29	−0.25	−0.12	−0.11	−0.30	−0.28**	−0.27*	−0.24**	−0.26	−0.23*	−0.16	−0.15*	−0.12	−0.20	−0.09	−0.06	−0.23*	−0.21*	−0.18	−0.14	−0.37*	−0.31***	−0.30	−0.22*	−0.14	−0.17**
	(0.12)	(0.09)	(0.17)	(0.14)	(0.18)	(0.13)	(0.20)	(0.15)	(0.24)	(0.14)	(0.12)	(0.07)	(0.08)	(0.06)	(0.13)	(0.08)	(0.17)	(0.14)	(0.22)	(0.15)	(0.13)	(0.08)	(0.22)	(0.14)	(0.16)	(0.11)	(0.19)	(0.13)	(0.14)	(0.09)	(0.20)	(0.16)	(0.19)	(0.11)	(0.14)	(0.11)	(0.15)	(0.10)	(0.21)	(0.12)	(0.21)	(0.13)	(0.12)	(0.07)
Energy (Fuel)	0.28*	0.21*	0.08	−0.01	0.32**	0.19**	0.13	0.12	0.32***	0.18*	0.14	0.14	0.27	0.40**	−0.004	0.05	0.37***	0.19	0.23*	0.12	0.10	0.11	0.24*	0.09	0.21*	0.13	0.17	0.07	0.27	0.20	0.25*	0.18*	−0.18	−0.01	0.16	0.12	0.27	0.15	0.12	0.09	0.22	0.12	0.17	0.12
	(0.14)	(0.12)	(0.18)	(0.13)	(0.13)	(0.09)	(0.13)	(0.10)	(0.11)	(0.11)	(0.18)	(0.14)	(0.20)	(0.18)	(0.16)	(0.12)	(0.14)	(0.14)	(0.14)	(0.10)	(0.19)	(0.13)	(0.13)	(0.10)	(0.12)	(0.08)	(0.12)	(0.08)	(0.17)	(0.15)	(0.14)	(0.09)	(0.35)	(0.19)	(0.10)	(0.10)	(0.17)	(0.10)	(0.15)	(0.12)	(0.13)	(0.09)	(0.15)	(0.14)
Core Goods	0.02	−0.01	−0.02	0.02	0.05	−0.05	−0.01	0.22	−0.06	−0.13	−0.06	−0.27	−0.25	−0.13	0.32	0.06	−0.28	−0.08	−0.17	−0.03	−0.02	0.06	−0.05	0.14	−0.05	−0.14	−0.05	0.002	−0.29	−0.11	−0.22	−0.06	0.29	0.39	−0.05	−0.20	−0.18	−0.11	0.06	0.28	−0.18	−0.01	−0.02	−0.06
	(0.26)	(0.25)	(0.25)	(0.18)	(0.32)	(0.19)	(0.31)	(0.15)	(0.38)	(0.27)	(0.47)	(0.26)	(0.57)	(0.38)	(0.41)	(0.22)	(0.32)	(0.25)	(0.32)	(0.19)	(0.37)	(0.22)	(0.30)	(0.18)	(0.35)	(0.21)	(0.35)	(0.20)	(0.34)	(0.18)	(0.29)	(0.16)	(0.53)	(0.29)	(0.40)	(0.29)	(0.37)	(0.25)	(0.36)	(0.20)	(0.28)	(0.16)	(0.42)	(0.22)
Rent	0.03	0.02	0.03	0.22	0.18	0.20	−1.44	−0.50	0.15	0.55	−0.65	−1.32	−1.01	−0.90*	0.49	0.27	0.34	0.03	−3.37	−0.22	0.31	0.35	4.21	−3.19	−91.21***	−37.91*	−1.41	−0.09	−1.35	−0.96	−1.90**	−0.87	0.66	0.89	1.50	0.79	−1.75	−0.31	0.93	1.13	−0.91	0.18	−1.09	−1.36*
	(0.24)	(0.20)	(0.69)	(0.46)	(1.56)	(0.93)	(2.13)	(1.17)	(2.38)	(1.55)	(2.06)	(1.01)	(0.66)	(0.50)	(0.86)	(0.55)	(1.07)	(0.60)	(2.07)	(1.80)	(0.45)	(0.36)	(11.14)	(7.76)	(23.69)	(21.24)	(1.92)	(1.27)	(0.97)	(0.79)	(0.96)	(0.64)	(0.86)	(0.65)	(1.79)	(1.07)	(1.18)	(0.97)	(1.28)	(1.17)	(1.43)	(1.06)	(1.64)	(0.75)
Restaurants & Catering	1.36	0.92	0.05	−0.12	−2.20*	−1.86**	−1.71	−2.55***	−2.39***	−3.49***	−0.52	−1.38	−3.60***	−3.56***	−0.66	−1.12	−0.38	−0.91	−0.26	−1.31*	−0.52	−1.04	−1.61	−1.96***	−1.61	−2.76***	−0.77	−1.85***	−1.48	−2.03***	0.13	−1.33	1.09	−1.20	−1.16	−1.53**	−0.66	−1.73**	−2.50*	−3.01**	−0.94	−1.69***	−1.25	−2.45***
	(0.94)	(0.70)	(1.05)	(0.63)	(1.22)	(0.75)	(1.33)	(0.87)	(0.85)	(0.77)	(1.15)	(1.08)	(1.13)	(1.08)	(1.16)	(0.77)	(1.00)	(0.78)	(0.78)	(0.77)	(1.40)	(0.87)	(1.00)	(0.64)	(1.19)	(0.90)	(0.79)	(0.61)	(1.35)	(0.75)	(0.94)	(0.85)	(1.60)	(1.09)	(0.94)	(0.74)	(0.97)	(0.76)	(1.41)	(1.20)	(1.06)	(0.49)	(1.04)	(0.87)
Recreation Services	0.20	−0.15	0.23	−0.03	0.34	−0.90*	−0.14	−0.39	0.78	1.00	0.12	−0.35	1.51	0.69	0.79	0.47	0.06	−0.84	−0.71	−0.76	0.46	−0.25	0.12	−0.22	1.11	0.84	0.07	−0.27	0.07	−0.36	−0.57	0.57	1.82	0.14	0.54	−0.59	−1.12	−0.97*	1.43	−0.48	0.12	−0.62	0.24	0.15
	(0.86)	(0.70)	(0.88)	(0.65)	(0.99)	(0.53)	(1.08)	(0.64)	(1.14)	(0.68)	(1.30)	(0.99)	(0.93)	(0.68)	(1.02)	(0.74)	(1.06)	(0.76)	(1.29)	(0.74)	(0.85)	(0.54)	(1.08)	(0.56)	(1.10)	(0.83)	(0.99)	(0.56)	(0.96)	(0.59)	(1.16)	(0.65)	(1.57)	(1.05)	(0.85)	(0.73)	(1.20)	(0.56)	(1.05)	(0.63)	(1.07)	(0.54)	(0.97)	(0.67)
Transport	0.31	0.20	0.16	0.16	−0.39	−1.34***	0.67	−0.28	1.76***	−0.01	1.79*	0.74	−0.61	−0.64	2.01***	0.96*	0.54	−0.48	0.83	−0.74	−0.02	−0.69	0.81	−0.17	2.24***	0.40	0.50	−0.73	0.90	0.05	0.27	−0.27	−0.03	−0.29	1.03	0.44	1.19	−0.23	0.99	−0.96	0.49	−0.55	1.23*	−0.08
	(0.43)	(0.40)	(0.63)	(0.40)	(0.56)	(0.35)	(0.82)	(0.60)	(0.63)	(0.50)	(1.03)	(0.82)	(0.68)	(0.56)	(0.75)	(0.49)	(1.05)	(0.75)	(0.54)	(0.61)	(0.68)	(0.48)	(0.53)	(0.55)	(0.77)	(0.65)	(0.60)	(0.47)	(0.58)	(0.40)	(0.42)	(0.37)	(0.79)	(0.77)	(0.75)	(0.51)	(1.11)	(0.89)	(1.30)	(0.89)	(0.56)	(0.46)	(0.73)	(0.44)
Hair & Beauty	2.54	0.77	−2.91	0.72	7.03	−0.70	−5.78	−6.81***	−4.16	−2.13	3.41	0.87	−0.89	−2.35	6.67	3.50	−0.50	1.57	−5.15	−3.77	−3.21	2.74	−1.83	−0.48	2.64	2.06	2.54	2.96	−2.81	−2.40	−4.16	−2.68	0.05	3.94	3.01	1.67	−4.82	−4.40**	7.18	4.73	−1.49	−1.22	1.33	1.72
	(2.39)	(1.95)	(3.54)	(2.55)	(7.46)	(4.22)	(4.63)	(2.50)	(3.30)	(2.76)	(3.86)	(2.53)	(3.92)	(3.00)	(5.18)	(3.35)	(2.63)	(1.86)	(4.14)	(2.57)	(6.95)	(5.20)	(3.96)	(2.56)	(3.25)	(2.19)	(4.45)	(2.47)	(3.28)	(2.05)	(3.18)	(2.01)	(3.52)	(4.20)	(5.51)	(3.86)	(3.42)	(1.98)	(5.83)	(4.64)	(4.76)	(2.41)	(3.42)	(2.08)
Other Services	0.45*	0.39	0.62	0.35	0.34	0.23	0.71	0.54	0.92*	0.74**	0.57**	0.83***	0.39	0.20	0.36	0.61**	0.13	0.16	0.72*	0.49*	0.38	0.35	0.67	0.28	0.58**	0.58**	0.76**	0.58**	0.75*	0.55**	0.42	0.53**	0.30	0.05	0.36	0.54*	0.86**	0.20	0.88*	0.44	0.75*	0.47	0.59**	0.64***
	(0.27)	(0.25)	(0.40)	(0.26)	(0.37)	(0.26)	(0.46)	(0.39)	(0.54)	(0.33)	(0.28)	(0.23)	(0.25)	(0.23)	(0.47)	(0.28)	(0.47)	(0.39)	(0.41)	(0.29)	(0.45)	(0.30)	(0.46)	(0.29)	(0.27)	(0.25)	(0.36)	(0.29)	(0.41)	(0.25)	(0.36)	(0.23)	(0.61)	(0.46)	(0.34)	(0.32)	(0.39)	(0.23)	(0.51)	(0.30)	(0.43)	(0.29)	(0.28)	(0.19)
$\Delta 0y$		0.70***		0.65***		0.84***		0.91***		0.83***		0.80***		0.69***		0.82***		0.74***		0.84***		0.84***		0.90***		0.80***		0.91***		0.79***		0.74***		0.81***		0.73***		0.71***		0.85***		0.89***		0.89***
		(0.10)		(0.08)		(0.07)		(0.08)		(0.12)		(0.11)		(0.11)		(0.08)		(0.06)		(0.14)		(0.06)		(0.11)		(0.13)		(0.13)		(0.08)		(0.09)		(0.07)		(0.08)		(0.07)		(0.08)		(0.10)		(0.09)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10-20k	10-20k	20-35k	20-35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Adj. R^2	0.03	0.39	0.08	0.46	0.06	0.57	0.02	0.53	0.07	0.50	0.01	0.50	0.12	0.44	0.07	0.61	0.02	0.45	0.05	0.44	0.03	0.56	0.01	0.52	0.10	0.54	0.03	0.52	0.10	0.55	0.06	0.49	−0.10	0.59	0.02	0.46	0.02	0.44	0.04	0.59	0.05	0.54	0.04	0.59

Note: This table reports the regression results from Eq. (2) for households' 1 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.16. Demographic Group Results (2y-ahead Expectations)

	Dependent variable: $\Delta 2y$																																											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta\pi_{c,g,t}$																																												
Food	0.77**	0.15	0.61***	0.06	0.74**	0.37*	0.54	−0.07	0.51*	−0.09	0.59***	0.26	0.41	0.15	0.67***	0.11	0.60***	−0.07	0.57	0.12	0.64***	0.08	0.69**	0.24	0.46*	0.02	0.42*	−0.06	0.70***	0.21	0.66**	0.34	0.08	−0.71***	0.59*	0.10	0.29	−0.09	0.79**	0.29	0.74**	0.02	0.41**	0.06
	(0.37)	(0.21)	(0.18)	(0.15)	(0.34)	(0.22)	(0.45)	(0.31)	(0.28)	(0.29)	(0.18)	(0.23)	(0.28)	(0.26)	(0.23)	(0.20)	(0.20)	(0.14)	(0.36)	(0.25)	(0.24)	(0.17)	(0.34)	(0.24)	(0.26)	(0.22)	(0.25)	(0.22)	(0.26)	(0.21)	(0.32)	(0.22)	(0.26)	(0.24)	(0.32)	(0.34)	(0.29)	(0.29)	(0.40)	(0.22)	(0.32)	(0.20)	(0.20)	(0.17)
Alcohol	1.76**	1.23**	−1.99**	−1.12	−1.04	−1.75*	0.75	−0.36	−0.02	−0.32	0.26	−0.83	0.84	0.45	−0.71	−0.95*	−1.10	−0.46	0.70	−0.87	−0.22	−0.58	−1.20	−2.56***	1.26	0.62	−0.08	−0.66	0.10	−0.76	0.57	−0.22	1.25**	−0.34	−0.07	−0.90	0.42	0.30	0.06	−1.46	−0.83	−1.24**	0.61	−0.15
	(0.86)	(0.56)	(0.95)	(0.86)	(1.18)	(0.97)	(1.05)	(0.82)	(0.75)	(0.57)	(0.96)	(0.68)	(0.55)	(0.51)	(0.60)	(0.56)	(1.05)	(1.02)	(0.94)	(0.81)	(0.87)	(0.64)	(0.97)	(0.94)	(0.91)	(0.79)	(0.59)	(0.69)	(0.84)	(0.60)	(0.88)	(1.01)	(0.60)	(0.68)	(0.73)	(0.67)	(1.36)	(0.98)	(1.49)	(1.14)	(0.90)	(0.63)	(0.58)	(0.44)
Utilities	−0.30	−0.09	−0.12	−0.08	−0.16	−0.17	0.01	−0.17	−0.25	−0.15	−0.19**	−0.19***	−0.06	−0.07	−0.17**	−0.13**	−0.12	−0.05	−0.12	−0.09	−0.12	−0.06	−0.19	−0.19	−0.12	−0.09	−0.10	−0.07	−0.20	−0.16*	−0.11	−0.12	0.03	0.03	−0.17	−0.14	−0.10	−0.02	−0.29	−0.20	−0.25	−0.16	−0.08	−0.07
	(0.19)	(0.14)	(0.13)	(0.10)	(0.19)	(0.16)	(0.21)	(0.17)	(0.18)	(0.16)	(0.09)	(0.07)	(0.09)	(0.09)	(0.08)	(0.06)	(0.14)	(0.10)	(0.17)	(0.12)	(0.12)	(0.09)	(0.21)	(0.16)	(0.11)	(0.08)	(0.13)	(0.09)	(0.12)	(0.10)	(0.18)	(0.12)	(0.16)	(0.13)	(0.17)	(0.16)	(0.19)	(0.16)	(0.23)	(0.17)	(0.19)	(0.13)	(0.08)	(0.06)
Fuel	0.56***	0.45***	0.10	0.08	0.12	0.03	−0.07	−0.06	0.30**	0.21*	0.30**	0.30***	0.27	0.37	0.03	0.05	0.40***	0.18*	0.09	0.03	0.01	0.03	0.19**	0.09	0.19**	0.14*	0.06	−0.003	0.25**	0.20**	0.13	0.15	−0.54	−0.13	0.15	0.07	0.09	−0.07	0.25	0.14	0.15**	0.06	0.14	0.11
	(0.21)	(0.17)	(0.12)	(0.11)	(0.09)	(0.09)	(0.09)	(0.09)	(0.13)	(0.11)	(0.12)	(0.10)	(0.39)	(0.32)	(0.14)	(0.14)	(0.12)	(0.10)	(0.08)	(0.09)	(0.12)	(0.12)	(0.10)	(0.06)	(0.09)	(0.09)	(0.06)	(0.07)	(0.10)	(0.09)	(0.11)	(0.11)	(0.48)	(0.26)	(0.10)	(0.10)	(0.15)	(0.13)	(0.19)	(0.17)	(0.07)	(0.06)	(0.10)	(0.08)
Core	−0.29	−0.30	0.22	0.05	0.25	0.14	0.42*	0.29*	0.03	−0.29	0.39**	0.13	−0.02	−0.13	0.90***	0.38**	0.13	0.14	0.13	0.04	0.41	0.20	0.04	−0.02	0.25	0.04	0.27*	0.12	0.15	0.03	0.29	0.19	0.68	0.37	0.02	−0.21	0.56*	0.40*	−0.25	−0.22	0.11	0.04	0.34*	0.11
Goods	(0.25)	(0.21)	(0.18)	(0.15)	(0.23)	(0.18)	(0.25)	(0.16)	(0.23)	(0.22)	(0.18)	(0.14)	(0.58)	(0.48)	(0.27)	(0.19)	(0.26)	(0.22)	(0.17)	(0.15)	(0.26)	(0.20)	(0.23)	(0.16)	(0.19)	(0.15)	(0.14)	(0.11)	(0.20)	(0.13)	(0.20)	(0.16)	(0.51)	(0.24)	(0.29)	(0.27)	(0.34)	(0.24)	(0.35)	(0.27)	(0.18)	(0.12)	(0.18)	(0.12)
Services	0.09	−0.10	0.29	0.18	0.16	−0.06	0.14	−0.01	0.83**	0.06	0.58*	0.33	0.29	0.08	0.54*	0.20	0.15	−0.25	0.18	−0.13	0.34*	0.11	0.17	−0.29	0.33	−0.09	0.33	−0.04	0.45*	0.09	−0.12	−0.23	1.27**	0.83*	0.74**	0.50**	0.47	−0.22	0.04	−0.92**	0.25	−0.12	0.59**	0.17
	(0.19)	(0.18)	(0.25)	(0.17)	(0.21)	(0.17)	(0.39)	(0.25)	(0.33)	(0.26)	(0.30)	(0.24)	(0.20)	(0.19)	(0.30)	(0.23)	(0.35)	(0.19)	(0.26)	(0.17)	(0.20)	(0.18)	(0.28)	(0.20)	(0.32)	(0.23)	(0.27)	(0.18)	(0.24)	(0.15)	(0.24)	(0.17)	(0.54)	(0.48)	(0.32)	(0.23)	(0.40)	(0.30)	(0.48)	(0.37)	(0.24)	(0.14)	(0.26)	(0.21)
$\Delta 0y$		0.65***		0.46***		0.49***		0.71***		0.55***		0.41***		0.51***		0.66***		0.59***		0.49***		0.63***		0.60***		0.49***		0.53***		0.58***		0.42***		0.66***		0.51***		0.56***		0.70***		0.68***		0.51***
		(0.10)		(0.10)		(0.06)		(0.12)		(0.09)		(0.10)		(0.09)		(0.10)		(0.09)		(0.11)		(0.14)		(0.09)		(0.07)		(0.10)		(0.10)		(0.08)		(0.12)		(0.12)		(0.13)		(0.09)		(0.07)		(0.09)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10--20k	10--20k	20--35k	20--35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Adj R^2	0.16	0.50	0.10	0.36	0.15	0.45	0.06	0.48	0.11	0.36	0.27	0.43	0.06	0.22	0.24	0.54	0.09	0.44	0.08	0.39	0.18	0.49	0.08	0.44	0.15	0.43	0.10	0.44	0.23	0.50	0.18	0.40	0.04	0.57	0.12	0.31	0.07	0.33	−0.01	0.55	0.13	0.55	0.25	0.48

Note: This table reports the regression results from Eq. (2) for households' 2 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.17. Demographic Group Results (2y-ahead Expectations, Services Breakdown)

	Dependent variable: $\Delta_8 y$																																										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta \pi_{c,g,t}$																																												
Food	0.72***	0.09	0.66***	0.10	0.72**	0.34	0.58	−0.05	0.70***	0.03	0.68***	0.27	0.38	0.10	0.61***	0.17	0.51*	−0.25	0.52	0.07	0.67***	0.09	0.66*	0.17	0.55**	0.11	0.45	−0.06	0.73***	0.23	0.65*	0.38*	−0.001	−0.67***	0.62*	0.13	0.41	−0.04	0.82*	0.20	0.72**	−0.02	0.50**	0.09
	(0.25)	(0.20)	(0.23)	(0.19)	(0.36)	(0.26)	(0.44)	(0.28)	(0.25)	(0.27)	(0.22)	(0.24)	(0.24)	(0.23)	(0.16)	(0.16)	(0.26)	(0.17)	(0.35)	(0.24)	(0.26)	(0.18)	(0.35)	(0.27)	(0.28)	(0.23)	(0.28)	(0.23)	(0.27)	(0.24)	(0.34)	(0.21)	(0.24)	(0.25)	(0.33)	(0.33)	(0.26)	(0.28)	(0.43)	(0.22)	(0.33)	(0.21)	(0.23)	(0.19)
Alcohol	1.78**	1.55***	−1.83*	−0.83	−0.57	−1.68*	0.59	−0.75	0.23	0.03	0.89	−0.36	1.14	0.70	0.05	−0.47	−0.69	0.29	0.41	−1.28	−0.14	−0.35	−1.50	−2.47**	1.63*	0.97	0.24	−0.41	0.12	−0.74	−0.06	−0.47	1.47	−0.39	−0.18	−1.04	0.94	0.60	0.36	−1.15	−0.93	−1.24**	0.93	0.15
	(0.77)	(0.56)	(1.00)	(0.95)	(1.23)	(0.98)	(1.10)	(0.81)	(0.71)	(0.42)	(0.93)	(0.78)	(0.72)	(0.61)	(0.61)	(0.63)	(0.85)	(0.75)	(0.90)	(0.85)	(1.07)	(0.84)	(1.31)	(1.01)	(0.89)	(0.73)	(0.71)	(0.69)	(0.85)	(0.69)	(0.82)	(0.83)	(1.12)	(0.78)	(1.01)	(0.92)	(1.73)	(1.23)	(1.62)	(1.22)	(0.90)	(0.61)	(0.59)	(0.46)
Energy	−0.23	−0.05	−0.17	−0.14*	−0.19	−0.20	−0.01	−0.21	−0.22	−0.17	−0.20**	−0.19***	0.0000	−0.02	−0.10	−0.11**	−0.08	−0.06	−0.10	−0.09	−0.12	−0.10	−0.19	−0.21	−0.10	−0.11	−0.09	−0.08	−0.14	−0.15	−0.10	−0.15	0.21	0.08	−0.07	−0.09	−0.13	−0.03	−0.36	−0.31**	−0.20	−0.16	−0.09	−0.09
(Utilities)	(0.19)	(0.17)	(0.12)	(0.08)	(0.18)	(0.14)	(0.21)	(0.18)	(0.19)	(0.16)	(0.09)	(0.06)	(0.09)	(0.06)	(0.06)	(0.04)	(0.12)	(0.07)	(0.17)	(0.11)	(0.12)	(0.08)	(0.19)	(0.14)	(0.11)	(0.08)	(0.13)	(0.08)	(0.13)	(0.09)	(0.17)	(0.11)	(0.20)	(0.13)	(0.15)	(0.14)	(0.19)	(0.14)	(0.24)	(0.15)	(0.19)	(0.12)	(0.08)	(0.06)
Energy	0.44**	0.37**	0.07	0.03	−0.002	−0.004	−0.01	0.03	0.16	0.08	0.16	0.22	0.12	0.28	−0.17	−0.07	0.29**	−0.05	0.11	0.09	−0.14	−0.08	0.14	0.02	0.05	0.03	−0.004	−0.07	0.15*	0.16	0.19	0.19	−1.01	−0.14	0.07	0.03	0.08	−0.13	0.14	0.12	0.12	0.05	−0.005	−0.02
(Fuel)	(0.21)	(0.19)	(0.12)	(0.10)	(0.10)	(0.10)	(0.12)	(0.09)	(0.14)	(0.11)	(0.16)	(0.14)	(0.33)	(0.27)	(0.12)	(0.13)	(0.14)	(0.10)	(0.11)	(0.10)	(0.10)	(0.10)	(0.11)	(0.07)	(0.13)	(0.12)	(0.09)	(0.07)	(0.08)	(0.10)	(0.13)	(0.13)	(0.68)	(0.35)	(0.10)	(0.11)	(0.16)	(0.13)	(0.20)	(0.18)	(0.08)	(0.07)	(0.13)	(0.11)
Core	−0.35	−0.32	0.18	0.02	0.48**	0.19	0.31	0.17	0.31	−0.03	0.62**	0.21	0.17	−0.01	1.23***	0.68***	0.25	0.31*	0.06	−0.02	0.59**	0.33	0.09	0.06	0.47*	0.21	0.34*	0.23*	0.26	0.08	0.22	0.15	1.12	0.41	0.30	−0.02	0.53	0.51	−0.16	−0.20	0.13	0.08	0.51**	0.22
Goods	(0.24)	(0.20)	(0.18)	(0.12)	(0.21)	(0.19)	(0.28)	(0.20)	(0.32)	(0.27)	(0.30)	(0.24)	(0.44)	(0.35)	(0.23)	(0.20)	(0.25)	(0.17)	(0.24)	(0.21)	(0.28)	(0.22)	(0.23)	(0.20)	(0.25)	(0.19)	(0.19)	(0.13)	(0.21)	(0.17)	(0.23)	(0.21)	(0.69)	(0.33)	(0.33)	(0.36)	(0.38)	(0.32)	(0.34)	(0.28)	(0.20)	(0.16)	(0.24)	(0.18)
Rent	−0.39*	−0.27**	0.12	0.03	0.78	0.30	−0.82	0.52	1.82	1.62	2.09	0.23	0.18	−0.19	1.34	0.69	0.70	0.77	−1.71	0.34	0.19	0.17	−11.44	−10.48	−59.15***	−11.70	0.14	0.64	0.04	−0.12	−0.74	−0.17	0.10	0.58	2.54	1.48	−1.17	−0.67	−0.34	−0.58	−0.62	0.43	1.43	−0.09
	(0.21)	(0.13)	(0.70)	(0.50)	(1.05)	(0.85)	(2.22)	(1.45)	(1.95)	(1.64)	(1.77)	(1.03)	(0.79)	(0.77)	(0.89)	(0.52)	(1.03)	(0.79)	(1.39)	(0.91)	(0.52)	(0.38)	(10.33)	(10.16)	(17.79)	(35.74)	(1.61)	(0.82)	(0.80)	(0.67)	(0.80)	(0.47)	(1.01)	(0.79)	(1.75)	(1.23)	(1.39)	(1.41)	(1.46)	(1.01)	(1.02)	(0.59)	(1.34)	(0.92)
Restaurants &	0.15	−0.43	0.09	−0.29	0.12	0.59	0.64	−0.01	−0.69	−1.56	−0.83	−0.74	−0.58	−0.92	−0.37	−0.45	1.70	0.28	0.58	−0.01	0.75	0.04	0.39	−0.23	−1.32	−1.77	−0.27	−1.16	0.42	0.39	0.02	−0.74	1.46	−0.54	0.56	0.14	−0.69	−1.47	0.70	0.06	0.65	−0.36	−0.57	−0.82
Catering	(0.80)	(0.54)	(1.56)	(1.10)	(1.78)	(1.46)	(2.03)	(1.60)	(1.25)	(1.06)	(1.71)	(1.32)	(1.90)	(1.43)	(2.03)	(1.42)	(1.84)	(1.59)	(1.15)	(1.11)	(2.30)	(1.61)	(1.61)	(1.31)	(1.50)	(1.37)	(1.29)	(1.02)	(2.23)	(1.80)	(1.37)	(1.16)	(1.95)	(1.73)	(1.72)	(1.61)	(1.69)	(1.62)	(1.29)	(1.01)	(1.61)	(1.14)	(1.68)	(1.46)
Recreation	1.59	1.40	1.54*	1.05	1.64**	−0.12	−0.57	−0.66	2.01	1.81**	1.03	−0.15	2.43**	1.21	2.72**	1.62*	0.87	1.86***	−0.87	−1.21	1.56	0.43	0.48	0.17	1.83	1.33	0.65	0.61	1.42	0.26	−1.49*	−0.57	6.35**	1.07	1.87*	0.67	−0.84	−0.25	1.66	−0.15	0.22	−0.27	1.89*	1.13
Services	(1.14)	(1.00)	(0.89)	(0.91)	(0.76)	(0.73)	(1.32)	(0.88)	(1.63)	(0.92)	(1.66)	(1.28)	(1.03)	(0.99)	(1.20)	(0.92)	(1.04)	(0.44)	(1.28)	(0.88)	(1.37)	(1.01)	(0.81)	(0.39)	(1.33)	(1.04)	(1.08)	(0.58)	(0.90)	(0.97)	(0.88)	(0.93)	(2.80)	(1.04)	(1.08)	(1.06)	(1.66)	(1.33)	(1.52)	(1.14)	(0.90)	(0.52)	(1.07)	(0.78)
Transport	0.84	0.58	0.60	0.52	0.69	−0.06	0.55	−0.02	2.20***	0.78	0.71	0.20	−0.001	−0.04	2.67***	1.76**	0.16	−0.92	0.84**	−0.56	1.30*	0.56	0.61	−0.33	1.59*	0.46	0.46	−0.43	1.30**	0.47	0.004	−0.34	1.94*	0.33	1.53	1.29	1.93**	0.58	1.33	−1.19	1.04*	−0.15	1.41*	0.57
	(0.59)	(0.55)	(0.63)	(0.48)	(0.45)	(0.38)	(0.76)	(0.51)	(0.73)	(0.74)	(0.99)	(0.98)	(0.80)	(0.65)	(0.98)	(0.79)	(1.02)	(0.71)	(0.36)	(0.38)	(0.76)	(0.52)	(0.44)	(0.42)	(0.84)	(0.61)	(0.62)	(0.35)	(0.63)	(0.47)	(0.38)	(0.33)	(1.04)	(0.73)	(1.12)	(0.87)	(0.97)	(0.90)	(1.72)	(1.00)	(0.55)	(0.32)	(0.79)	(0.61)
Hair &	3.08	1.50	0.99	3.72*	7.90*	3.82	−5.21	−5.19	7.72**	7.91***	6.16**	4.38**	−5.49	−6.03	4.92	2.88	2.55	7.48***	−1.73	−1.28	5.72	10.57*	1.63	3.69	4.21*	4.19**	4.98*	6.62***	0.01	0.35	−2.51	−1.51	5.23	6.52	2.64	2.12	0.46	2.18	4.73	5.55	−0.50	2.14	4.10**	4.28**
Beauty	(2.26)	(1.60)	(2.26)	(2.00)	(4.14)	(3.68)	(5.17)	(4.45)	(3.10)	(2.49)	(2.49)	(2.08)	(5.89)	(5.80)	(3.19)	(2.56)	(2.28)	(1.24)	(2.97)	(2.27)	(8.11)	(5.43)	(3.02)	(3.12)	(2.21)	(1.78)	(2.71)	(2.22)	(2.60)	(2.12)	(2.34)	(2.43)	(4.18)	(4.70)	(2.76)	(2.79)	(2.68)	(2.37)	(6.68)	(5.69)	(2.55)	(2.46)	(2.08)	(1.67)
Other	−0.58*	−0.68**	0.58	0.49	−0.11	−0.08	−0.04	0.07	0.13	−0.09	0.33	0.36	0.22	0.05	−0.66	−0.44*	−0.45	−0.47*	−0.02	−0.04	0.04	0.10	−0.11	−0.21	−0.07	−0.10	0.26	0.13	−0.15	−0.13	−0.12	−0.08	0.02	0.68	−0.56	−0.36	0.21	−0.28	0.20	−0.22	−0.22	−0.23	0.30	0.25
Services	(0.35)	(0.29)	(0.61)	(0.41)	(0.36)	(0.28)	(0.53)	(0.36)	(0.44)	(0.30)	(0.30)	(0.25)	(0.49)	(0.48)	(0.43)	(0.27)	(0.49)	(0.25)	(0.42)	(0.27)	(0.59)	(0.33)	(0.41)	(0.25)	(0.35)	(0.25)	(0.43)	(0.27)	(0.41)	(0.26)	(0.36)	(0.22)	(0.72)	(0.63)	(0.47)	(0.34)	(0.62)	(0.41)	(0.44)	(0.25)	(0.54)	(0.29)	(0.30)	(0.24)
$\Delta_8 y$		0.62***		0.47***		0.48***		0.73***		0.55***		0.45***		0.49***		0.55***		0.68***		0.54***		0.63***		0.61***		0.49***		0.57***		0.56***		0.42***		0.70***		0.51***		0.55***		0.66***		0.71***		0.53***
		(0.07)		(0.10)		(0.06)		(0.11)		(0.11)		(0.10)		(0.11)		(0.08)		(0.08)		(0.13)		(0.10)		(0.10)		(0.08)		(0.10)		(0.10)		(0.08)		(0.12)		(0.13)		(0.13)		(0.10)		(0.08)		(0.09)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10-20k	10-20k	20-35k	20-35k	>35k	>35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Adj. R^2	0.19	0.52	0.04	0.32	0.12	0.40	−0.03	0.43	0.10	0.37	0.21	0.39	0.04	0.19	0.36	0.57	0.05	0.51	0.03	0.33	0.16	0.48	−0.01	0.39	0.13	0.42	−0.004	0.43	0.19	0.45	0.11	0.34	0.05	0.51	0.06	0.25	0.01	0.30	−0.08	0.45	0.08	0.52	0.18	0.46

Note: This table reports the regression results from Eq. (2) for households' 2 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.18. Demographic Group Results (5-year ahead expectations)

	Dependent variable: Δ5y																																							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta\pi_{e,g,t}$																																											
Food	0.80	0.13	−0.01	−0.34	0.34	−0.05	0.29	−0.02	0.36	−0.40	−0.25	−0.46*	0.20	0.0004	0.21	−0.58**	−0.06	−0.46	0.10	−0.18	0.45*	0.02	−0.18	−0.47***	0.02	−0.47**	−0.04	−0.35	0.30	−0.14	0.04	−0.15	0.04	−0.78***	0.02	−0.56*	0.23	−0.17	0.26	−0.13	0.19	−0.28	−0.01	−0.29*
	(0.50)	(0.41)	(0.21)	(0.26)	(0.31)	(0.28)	(0.27)	(0.29)	(0.31)	(0.43)	(0.25)	(0.24)	(0.24)	(0.24)	(0.32)	(0.28)	(0.19)	(0.31)	(0.23)	(0.20)	(0.23)	(0.19)	(0.19)	(0.17)	(0.28)	(0.23)	(0.20)	(0.21)	(0.22)	(0.17)	(0.41)	(0.42)	(0.34)	(0.23)	(0.29)	(0.32)	(0.22)	(0.21)	(0.47)	(0.46)	(0.26)	(0.24)	(0.17)	(0.15)
Alcohol	2.58**	2.01**	0.26	0.80	1.05	0.29	1.02	0.44	0.26	−0.13	1.06	0.35	0.90	0.61	0.25	−0.09	1.22	1.59	1.63**	0.65	0.82	0.54	2.18***	1.29*	1.36	0.66	1.12	0.74	0.85	0.07	2.31*	1.86	1.18**	−0.46	1.73**	0.75*	0.80	0.67	3.34**	2.15	1.96**	1.69**	0.71	0.10
	(1.30)	(1.02)	(1.15)	(1.04)	(1.81)	(1.69)	(0.77)	(0.75)	(1.05)	(0.94)	(1.04)	(0.89)	(0.83)	(0.77)	(0.88)	(0.74)	(1.17)	(1.25)	(0.66)	(0.63)	(0.87)	(0.70)	(0.83)	(0.76)	(0.95)	(0.92)	(0.76)	(0.83)	(0.81)	(0.69)	(1.30)	(1.48)	(0.57)	(0.64)	(0.72)	(0.44)	(1.41)	(1.09)	(1.65)	(1.50)	(0.82)	(0.84)	(0.64)	(0.58)
Utilities	−0.56**	−0.33*	−0.14	−0.12	−0.10	−0.11	−0.24	−0.33**	−0.40**	−0.28*	−0.08	−0.08	−0.11	−0.12	−0.12	−0.08	−0.23**	−0.19**	−0.19	−0.17	−0.28***	−0.24***	−0.08	−0.08	−0.18	−0.15	−0.05	−0.03	−0.34***	−0.31***	−0.02	−0.02	−0.23	−0.23*	−0.10	−0.07	−0.50***	−0.42***	−0.16	−0.09	−0.25	−0.19	−0.14**	−0.13***
	(0.23)	(0.19)	(0.10)	(0.09)	(0.15)	(0.12)	(0.18)	(0.16)	(0.18)	(0.15)	(0.11)	(0.11)	(0.09)	(0.09)	(0.15)	(0.12)	(0.10)	(0.09)	(0.13)	(0.11)	(0.10)	(0.08)	(0.12)	(0.10)	(0.13)	(0.10)	(0.09)	(0.07)	(0.11)	(0.08)	(0.19)	(0.17)	(0.15)	(0.12)	(0.12)	(0.10)	(0.17)	(0.13)	(0.25)	(0.20)	(0.16)	(0.14)	(0.06)	(0.05)
Fuel	0.86***	0.73**	0.08	0.07	−0.10	−0.19	−0.20*	−0.20*	0.01	−0.10	0.08	0.08	0.65	0.72	−0.08	−0.05	−0.13	−0.26	−0.05	−0.09	−0.06	−0.04	−0.11	−0.18**	0.08	0.02	−0.18**	−0.22**	0.23*	0.19*	−0.12	−0.11	−0.13	0.29	−0.01	−0.11	0.13	−0.04	0.06	−0.02	−0.05	−0.11	0.06	0.04
	(0.33)	(0.32)	(0.10)	(0.11)	(0.19)	(0.16)	(0.11)	(0.10)	(0.15)	(0.10)	(0.25)	(0.25)	(0.60)	(0.55)	(0.25)	(0.17)	(0.21)	(0.21)	(0.07)	(0.06)	(0.11)	(0.14)	(0.09)	(0.07)	(0.18)	(0.16)	(0.09)	(0.09)	(0.14)	(0.11)	(0.16)	(0.15)	(0.30)	(0.18)	(0.08)	(0.11)	(0.15)	(0.15)	(0.26)	(0.16)	(0.09)	(0.08)	(0.15)	(0.16)
Core Goods	−0.66*	−0.66*	0.30	0.20	0.37	0.25	0.66***	0.59***	0.09	−0.32*	0.22	0.05	−0.36	−0.45	0.52	−0.20	0.71**	0.71***	0.23*	0.17*	0.37	0.21	0.33**	0.29**	0.11	−0.13	0.33***	0.23*	0.16	0.05	0.21	0.15	0.30	−0.02	0.27	0.004	0.20	0.03	0.17	0.20	0.26	0.21	0.21	0.03
	(0.40)	(0.34)	(0.19)	(0.21)	(0.34)	(0.28)	(0.22)	(0.21)	(0.23)	(0.18)	(0.32)	(0.30)	(0.59)	(0.55)	(0.41)	(0.33)	(0.29)	(0.27)	(0.13)	(0.10)	(0.31)	(0.27)	(0.16)	(0.13)	(0.22)	(0.18)	(0.12)	(0.12)	(0.23)	(0.18)	(0.26)	(0.22)	(0.40)	(0.18)	(0.20)	(0.20)	(0.38)	(0.28)	(0.37)	(0.30)	(0.21)	(0.16)	(0.19)	(0.16)
Services	0.07	−0.13	0.24	0.17	0.21	−0.02	0.53	0.46	0.83**	−0.15	0.67*	0.50	0.33	0.16	0.40	−0.08	0.80**	0.56**	0.37**	0.17	0.46***	0.27**	0.44**	0.14	0.54	0.08	0.31	0.07	0.80***	0.47***	−0.02	−0.08	1.24***	0.79***	0.65**	0.37*	1.15***	0.41*	−0.16	−0.92***	0.37**	0.12	0.83***	0.49**
	(0.29)	(0.25)	(0.23)	(0.23)	(0.25)	(0.24)	(0.42)	(0.34)	(0.38)	(0.30)	(0.34)	(0.34)	(0.27)	(0.25)	(0.44)	(0.29)	(0.37)	(0.26)	(0.17)	(0.19)	(0.15)	(0.13)	(0.20)	(0.17)	(0.34)	(0.22)	(0.23)	(0.19)	(0.20)	(0.13)	(0.31)	(0.29)	(0.44)	(0.26)	(0.30)	(0.20)	(0.35)	(0.24)	(0.43)	(0.35)	(0.17)	(0.17)	(0.27)	(0.23)
Δ0y		0.70**		0.28**		0.52***		0.37***		0.70***		0.27**		0.38***		0.93***		0.35***		0.31***		0.49***		0.39***		0.54***		0.35***		0.53***		0.24*		0.68***		0.61***		0.60***		0.54***		0.44***		0.41***
		(0.18)		(0.13)		(0.15)		(0.14)		(0.12)		(0.12)		(0.14)		(0.11)		(0.13)		(0.09)		(0.13)		(0.07)		(0.10)		(0.12)		(0.10)		(0.14)		(0.11)		(0.14)		(0.13)		(0.14)		(0.08)		(0.15)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10-20k	10-20k	20-35k	20-35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Adj R^2	0.16	0.35	−0.06	0.01	−0.04	0.18	0.13	0.25	0.002	0.36	−0.003	0.05	0.02	0.08	−0.06	0.43	0.09	0.20	0.03	0.19	0.11	0.29	0.02	0.21	−0.01	0.33	−0.003	0.15	0.16	0.39	−0.05	−0.01	−0.03	0.55	0.03	0.35	0.13	0.39	0.02	0.34	0.08	0.30	0.07	0.21

Note: This table reports the regression results from Eq. (2) for households' 5 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Table B.19. Demographic Group Results (5-year ahead expectations, Services Breakdown)

	Dependent variable: $\Delta 5y$																																							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta \pi_{c,g,t}$																																											
Food	0.72***	0.09	0.66***	0.10	0.72**	0.34	0.58	−0.05	0.70***	0.03	0.68***	0.27	0.12	−0.05	0.16	−0.53**	−0.03	−0.49*	0.11	−0.17	0.52**	0.07	−0.06	−0.42**	0.13	−0.37	0.02	−0.32	0.36	−0.10	0.14	−0.03	−0.10	−0.71***	0.09	−0.55**	0.44*	−0.06	0.21	−0.29	0.20	−0.26	0.12	−0.23
	(0.25)	(0.20)	(0.23)	(0.19)	(0.36)	(0.26)	(0.44)	(0.28)	(0.25)	(0.27)	(0.22)	(0.24)	(0.19)	(0.20)	(0.24)	(0.22)	(0.17)	(0.28)	(0.26)	(0.23)	(0.22)	(0.16)	(0.20)	(0.18)	(0.34)	(0.26)	(0.23)	(0.21)	(0.23)	(0.19)	(0.42)	(0.40)	(0.24)	(0.26)	(0.28)	(0.28)	(0.27)	(0.25)	(0.52)	(0.37)	(0.29)	(0.27)	(0.20)	(0.16)
Alcohol	1.78**	1.55***	−1.83*	−0.83	−0.57	−1.68*	0.59	−0.75	0.23	0.03	0.89	−0.36	1.97**	1.71**	0.73	−0.07	1.79	2.40**	2.09***	1.02	0.96	0.79	3.20***	2.49***	2.02	1.29	1.66**	1.23	1.00	0.23	2.01	1.75	1.42	−0.30	1.82**	0.70	1.82	1.43	4.04**	2.81	2.45***	2.26***	1.07	0.40
	(0.77)	(0.56)	(1.00)	(0.95)	(1.23)	(0.98)	(1.10)	(0.81)	(0.71)	(0.42)	(0.93)	(0.78)	(0.79)	(0.68)	(0.84)	(0.72)	(1.09)	(1.11)	(0.76)	(0.75)	(0.98)	(0.80)	(0.85)	(0.61)	(1.29)	(1.22)	(0.80)	(0.81)	(0.78)	(0.70)	(1.48)	(1.56)	(0.90)	(0.70)	(0.81)	(0.50)	(1.79)	(1.40)	(2.01)	(2.04)	(0.91)	(0.84)	(0.72)	(0.68)
Energy (Utilities)	−0.23	−0.05	−0.17	−0.14*	−0.19	−0.20	−0.01	−0.21	−0.22	−0.17	−0.20**	−0.19***	−0.03	−0.04	−0.05	−0.07	−0.19**	−0.17**	−0.17	−0.16	−0.27***	−0.26***	−0.06	−0.07	−0.14	−0.15	−0.06	−0.05	−0.25**	−0.25***	−0.06	−0.09	−0.05	−0.17	−0.06	−0.08	−0.57***	−0.45***	−0.25	−0.21	−0.19	−0.16	−0.15*	−0.16***
	(0.19)	(0.17)	(0.12)	(0.08)	(0.18)	(0.14)	(0.21)	(0.18)	(0.19)	(0.16)	(0.09)	(0.06)	(0.04)	(0.03)	(0.12)	(0.09)	(0.08)	(0.07)	(0.14)	(0.12)	(0.10)	(0.09)	(0.13)	(0.10)	(0.14)	(0.10)	(0.11)	(0.08)	(0.10)	(0.08)	(0.19)	(0.15)	(0.16)	(0.11)	(0.12)	(0.09)	(0.20)	(0.15)	(0.24)	(0.17)	(0.15)	(0.13)	(0.08)	(0.06)
Energy (Fuel)	0.44**	0.37**	0.07	0.03	−0.002	−0.004	−0.01	0.03	0.16	0.08	0.16	0.22	0.41	0.51	−0.31	−0.16	−0.23	−0.44**	−0.14	−0.15**	−0.16	−0.11	−0.18*	−0.27***	−0.13	−0.15	−0.27**	−0.31***	0.06	0.08	−0.08	−0.08	−0.72	0.08	−0.10	−0.15	0.09	−0.14	0.02	−0.001	−0.19*	−0.23***	−0.09	−0.11
	(0.21)	(0.19)	(0.12)	(0.10)	(0.10)	(0.10)	(0.12)	(0.09)	(0.14)	(0.11)	(0.16)	(0.14)	(0.50)	(0.47)	(0.20)	(0.16)	(0.17)	(0.17)	(0.09)	(0.07)	(0.11)	(0.13)	(0.11)	(0.09)	(0.20)	(0.18)	(0.11)	(0.10)	(0.12)	(0.11)	(0.20)	(0.19)	(0.45)	(0.21)	(0.10)	(0.12)	(0.16)	(0.11)	(0.28)	(0.18)	(0.10)	(0.08)	(0.16)	(0.16)
Core Goods	−0.35	−0.32	0.18	0.02	0.48**	0.19	0.31	0.17	0.31	−0.03	0.62**	0.21	−0.14	−0.25	0.87**	0.01	0.79***	0.83***	0.29	0.24*	0.52*	0.32	0.46**	0.44**	0.37	0.09	0.43***	0.36**	0.31	0.15	0.21	0.17	0.78*	0.13	0.43	0.02	0.15	0.14	0.23	0.19	0.43**	0.40**	0.37	0.12
	(0.24)	(0.20)	(0.18)	(0.12)	(0.21)	(0.19)	(0.28)	(0.20)	(0.32)	(0.27)	(0.30)	(0.24)	(0.38)	(0.38)	(0.36)	(0.35)	(0.25)	(0.24)	(0.18)	(0.14)	(0.31)	(0.28)	(0.19)	(0.17)	(0.27)	(0.24)	(0.17)	(0.16)	(0.24)	(0.20)	(0.28)	(0.26)	(0.44)	(0.21)	(0.34)	(0.27)	(0.38)	(0.32)	(0.38)	(0.30)	(0.22)	(0.19)	(0.22)	(0.18)
Rent	−0.39*	−0.27**	0.12	0.03	0.78	0.30	−0.82	0.52	1.82	1.62	2.09	0.23	0.92	0.70	0.26	−0.75	0.75	0.80	−1.20	0.10	0.32	0.30	15.34*	16.04**	−62.47**	−9.90	−0.34	−0.001	−0.28	−0.42	0.57	0.93	0.001	0.44	0.64	−0.73	−1.08	−0.52	0.56	0.37	−0.26	0.40	1.06	−0.23
	(0.21)	(0.13)	(0.70)	(0.50)	(1.05)	(0.85)	(2.22)	(1.45)	(1.95)	(1.64)	(1.77)	(1.03)	(0.91)	(0.98)	(1.58)	(0.84)	(1.38)	(1.18)	(1.08)	(0.92)	(0.38)	(0.32)	(9.24)	(6.69)	(30.40)	(30.74)	(1.04)	(0.95)	(0.76)	(0.53)	(0.80)	(0.73)	(0.78)	(0.70)	(1.94)	(1.32)	(1.39)	(1.13)	(1.67)	(2.16)	(0.66)	(0.77)	(1.61)	(1.12)
Restaurants & Catering	0.15	−0.43	0.09	−0.29	0.12	0.59	0.64	−0.01	−0.69	−1.56	−0.83	−0.74	−2.45	−2.66*	−1.13	−1.27	0.06	−0.83	−0.05	−0.42	−0.01	−0.55	−1.05	−1.50*	−1.29	−1.79*	−0.89	−1.48**	0.46	0.43	−0.85	−1.34	2.60	0.76	0.05	−0.49	−0.12	−1.00	0.16	−0.36	−0.02	−0.66	−0.83	−1.04
	(0.80)	(0.54)	(1.56)	(1.10)	(1.78)	(1.46)	(2.03)	(1.60)	(1.25)	(1.06)	(1.71)	(1.32)	(1.63)	(1.39)	(2.65)	(1.56)	(1.72)	(1.71)	(0.62)	(0.54)	(2.06)	(1.50)	(1.13)	(0.87)	(1.04)	(0.92)	(0.97)	(0.72)	(1.76)	(1.22)	(0.98)	(0.86)	(2.17)	(1.92)	(1.55)	(1.11)	(0.90)	(0.87)	(1.70)	(1.14)	(1.18)	(0.82)	(1.51)	(1.25)
Recreation Services	1.59	1.40	1.54*	1.05	1.64**	−0.12	−0.57	−0.66	2.01	1.81**	1.03	−0.15	3.83**	3.09**	1.65	−0.05	1.59	2.20	1.12	0.91	1.75	0.88	1.76*	1.53**	3.12***	2.56**	1.23	1.21	2.17**	1.13	0.08	0.66	7.07***	2.22*	1.56	0.01	0.58	1.24	0.59	−0.89	1.88*	1.58	2.33*	1.68
	(1.14)	(1.00)	(0.89)	(0.91)	(0.76)	(0.73)	(1.32)	(0.88)	(1.63)	(0.92)	(1.66)	(1.28)	(1.49)	(1.48)	(1.45)	(1.32)	(1.61)	(1.43)	(1.22)	(1.02)	(1.65)	(1.12)	(0.99)	(0.74)	(1.20)	(1.23)	(1.44)	(1.08)	(0.89)	(0.79)	(1.27)	(1.12)	(2.74)	(1.17)	(1.39)	(0.75)	(2.01)	(1.35)	(1.98)	(1.77)	(1.12)	(1.01)	(1.31)	(1.09)
Transport	0.84	0.58	0.60	0.52	0.69	−0.06	0.55	−0.02	2.20***	0.78	0.71	0.20	−0.62	−0.64	2.82**	1.40	1.85	1.18	0.76*	−0.12	1.61**	1.04**	0.36	−0.33	2.03**	0.78	0.70	0.10	1.80**	1.05*	0.32	0.11	3.02***	1.54***	1.43	1.12	2.73**	1.21	0.21	−1.85	1.26**	0.51	1.96**	1.24**
	(0.59)	(0.55)	(0.63)	(0.48)	(0.45)	(0.38)	(0.76)	(0.51)	(0.73)	(0.74)	(0.99)	(0.98)	(0.61)	(0.55)	(1.34)	(0.88)	(1.13)	(0.92)	(0.41)	(0.43)	(0.70)	(0.53)	(0.57)	(0.45)	(0.91)	(0.50)	(0.63)	(0.42)	(0.78)	(0.58)	(0.67)	(0.66)	(1.06)	(0.59)	(1.17)	(0.80)	(1.09)	(1.09)	(1.91)	(1.27)	(0.59)	(0.46)	(0.81)	(0.63)
Hair & Beauty	3.08	1.50	0.99	3.72*	7.90*	3.82	−5.21	−5.19	7.72**	7.91***	6.16**	4.38**	−9.76**	−10.09**	7.15*	3.98	2.90	5.99***	3.63	3.92*	0.94	4.67	5.74***	7.25***	4.23	4.21*	6.16**	7.26***	1.41	1.72	−0.60	0.03	3.52	4.71	3.37	2.69*	2.45	4.38**	7.19	7.87	5.25**	6.90***	4.01	4.16**
	(2.26)	(1.60)	(2.26)	(2.00)	(4.14)	(3.68)	(5.17)	(4.45)	(3.10)	(2.49)	(2.49)	(2.08)	(4.84)	(5.07)	(3.75)	(3.14)	(2.87)	(1.71)	(2.70)	(2.14)	(4.51)	(5.64)	(2.14)	(1.83)	(3.01)	(2.23)	(2.83)	(2.60)	(1.92)	(1.77)	(4.13)	(4.29)	(5.67)	(4.23)	(2.84)	(1.57)	(2.59)	(1.73)	(6.64)	(5.20)	(2.13)	(2.09)	(2.45)	(1.89)
Other Services	−0.58*	−0.68**	0.58	0.49	−0.11	−0.08	−0.04	0.07	0.13	−0.09	0.33	0.36	0.77	0.67	−0.87	−0.53*	0.44	0.43	0.35	0.34	−0.05	0.003	0.56*	0.49*	−0.05	−0.08	0.38	0.29	0.16	0.18	−0.26	−0.23	−0.47	0.13	0.04	0.29	1.10*	0.54	0.22	−0.13	−0.20	−0.21	0.72**	0.68**
	(0.35)	(0.29)	(0.61)	(0.41)	(0.36)	(0.28)	(0.53)	(0.36)	(0.44)	(0.30)	(0.30)	(0.25)	(0.47)	(0.48)	(0.59)	(0.27)	(0.47)	(0.38)	(0.31)	(0.25)	(0.49)	(0.39)	(0.31)	(0.26)	(0.36)	(0.23)	(0.37)	(0.27)	(0.36)	(0.24)	(0.38)	(0.27)	(0.45)	(0.31)	(0.43)	(0.26)	(0.65)	(0.37)	(0.58)	(0.49)	(0.31)	(0.25)	(0.36)	(0.30)
$\Delta 0y$		0.62***		0.47***		0.48***		0.73***		0.55***		0.43***		0.30**		0.86***		0.42***		0.34***		0.49***		0.44***		0.54***		0.38***		0.50***		0.27**		0.64***		0.66***		0.62***		0.54***		0.45***		0.46***
		(0.07)		(0.10)		(0.06)		(0.11)		(0.11)		(0.10)		(0.14)		(0.13)		(0.13)		(0.09)		(0.11)		(0.06)		(0.10)		(0.11)		(0.09)		(0.13)		(0.12)		(0.12)		(0.12)		(0.08)		(0.13)
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10--20k	10--20k	20--35k	20--35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Adj. R^2	0.19	0.52	0.04	0.32	0.12	0.40	−0.03	0.43	0.10	0.37	0.21	0.39	0.19	0.22	0.04	0.46	−0.001	0.16	−0.04	0.13	0.06	0.24	−0.01	0.26	−0.04	0.32	−0.08	0.13	0.12	0.34	−0.15	−0.10	0.09	0.50	−0.10	0.30	0.04	0.35	−0.09	0.25	0.09	0.29	−0.01	0.19

Note: This table reports the regression results from Eq. (2) for households' 5 year-ahead inflation expectations. Columns (1)-(12) compares across age groups, columns (13)-(20) across income groups, columns (21)-(26) across house tenure, columns (27)-(30) across gender, column (31)-(40) across regions and (41)-(44) across work status. The even columns also control for change in perceptions of inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

B.6 Exposure vs Sensitivity

Table B.20. Exposure vs Sensitivity (Full)

	Dependent variable: $\Delta_0 y$																																							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
$\Delta\pi_{c,g,t}$																																											
Food	0.45**		0.79***		0.57**		0.71***		0.78***		0.75***		0.42***		0.62***		0.83***		0.59***		0.61***		0.54***		0.72***		0.71***		0.56***		0.64**		0.86*		0.74***		0.43**		0.51*		0.69***		0.50***	
	(0.23)		(0.19)		(0.22)		(0.27)		(0.20)		(0.18)		(0.13)		(0.17)		(0.19)		(0.19)		(0.19)		(0.16)		(0.19)		(0.17)		(0.18)		(0.25)		(0.52)		(0.17)		(0.17)		(0.30)		(0.17)		(0.16)	
Food		0.79***		0.99***		0.61***		0.62**		0.72***		0.52***		0.37***		0.60***		0.83***		0.73***		0.61***		0.62***		0.59***		0.70***		0.57***		0.58**		0.81*		0.74***		0.41**		0.58		0.86***		0.42***	
		(0.25)		(0.19)		(0.22)		(0.31)		(0.20)		(0.13)		(0.11)		(0.14)		(0.20)		(0.23)		(0.19)		(0.18)		(0.18)		(0.17)		(0.18)		(0.25)		(0.46)		(0.14)		(0.17)		(0.36)		(0.21)		(0.14)
Alcohol	2.26***		0.23		2.20		2.51**		2.40**		2.36**		1.56**		1.01		−0.12		1.68		1.83**		2.58**		1.10		1.49		2.03**		1.03		2.36		1.22		2.01		3.12**		0.99		2.42***	
	(0.87)		(0.80)		(1.40)		(1.01)		(1.15)		(1.07)		(0.77)		(0.95)		(0.94)		(1.21)		(0.75)		(1.11)		(1.12)		(0.95)		(0.87)		(0.88)		(1.97)		(1.06)		(1.33)		(1.24)		(0.91)		(0.70)	
Alcohol		0.96		−1.09		1.40		2.10***		1.09		2.70**		0.83**		0.77		0.26		3.14*		1.53**		2.47**		1.49		1.66*		2.02**		1.94*		2.23***		2.11***		0.52		2.58*		1.16		1.92***	
		(0.61)		(0.83)		(1.92)		(0.70)		(0.72)		(1.06)		(0.40)		(0.64)		(1.07)		(1.71)		(0.68)		(1.25)		(1.26)		(0.91)		(0.81)		(1.11)		(0.66)		(0.71)		(1.18)		(1.37)		(1.05)		(0.67)
Utilities	−0.20*		−0.05		0.03		0.05		−0.03		−0.06		0.02		−0.04		−0.05		−0.05		−0.04		−0.01		−0.05		−0.02		−0.05		−0.05		−0.04		−0.08		0.01		−0.09		−0.06		−0.0003	
	(0.11)		(0.10)		(0.08)		(0.10)		(0.10)		(0.12)		(0.07)		(0.09)		(0.09)		(0.08)		(0.08)		(0.09)		(0.10)		(0.08)		(0.09)		(0.10)		(0.12)		(0.08)		(0.10)		(0.14)		(0.08)		(0.08)	
Utilities		−0.22**		−0.04		0.005		0.08		−0.05		−0.01		0.04		−0.04		−0.03		−0.07		−0.01		−0.01		−0.03		−0.01		−0.05		0.01		−0.07		−0.04		0.01		−0.07		−0.08		0.0003	
		(0.09)		(0.12)		(0.10)		(0.12)		(0.11)		(0.08)		(0.05)		(0.08)		(0.09)		(0.11)		(0.08)		(0.11)		(0.07)		(0.08)		(0.08)		(0.12)		(0.12)		(0.06)		(0.11)		(0.15)		(0.11)		(0.06)	
Fuel	0.002		0.07		0.20		0.08		0.19		0.06		−0.01		−0.06		0.26*		0.17		0.01		0.17		0.13		0.13		0.07		0.06		−0.16		0.12		0.14		0.11		0.13		0.04	
	(0.10)		(0.16)		(0.14)		(0.13)		(0.13)		(0.13)		(0.16)		(0.16)		(0.15)		(0.14)		(0.11)		(0.13)		(0.12)		(0.11)		(0.12)		(0.12)		(0.26)		(0.14)		(0.14)		(0.20)		(0.12)		(0.12)	
Fuel		0.11		0.12		0.20*		0.01		0.14		0.04		−0.17		−0.07		0.25*		0.14		−0.03		0.14		0.13		0.10		0.10		0.07		−0.19		0.09		0.13		0.07		0.13		0.02	
		(0.11)		(0.15)		(0.12)		(0.11)		(0.10)		(0.17)		(0.24)		(0.15)		(0.14)		(0.09)		(0.15)		(0.10)		(0.12)		(0.10)		(0.14)		(0.14)		(0.29)		(0.13)		(0.14)		(0.17)		(0.09)		(0.16)	
Core Goods	0.01		−0.06		−0.04		−0.35		−0.01		0.11		−0.32		0.24		−0.31		−0.06		−0.07		−0.18		0.03		−0.01		−0.18		−0.14		−0.05		0.06		0.04		−0.36		−0.14		−0.02	
	(0.24)		(0.30)		(0.29)		(0.35)		(0.33)		(0.30)		(0.31)		(0.33)		(0.25)		(0.31)		(0.23)		(0.31)		(0.30)		(0.23)		(0.30)		(0.28)		(0.46)		(0.33)		(0.36)		(0.38)		(0.26)		(0.29)	
Core Goods		0.05		−0.02		−0.07		−0.24		0.07		0.13		−0.14		0.23		−0.33		−0.08		−0.04		−0.17		0.004		0.03		−0.22		−0.15		−0.07		0.11		0.06		−0.29		−0.16		0.03	
		(0.24)		(0.27)		(0.28)		(0.36)		(0.28)		(0.31)		(0.38)		(0.32)		(0.22)		(0.26)		(0.29)		(0.26)		(0.29)		(0.24)		(0.29)		(0.30)		(0.44)		(0.30)		(0.36)		(0.38)		(0.24)		(0.32)	
Services	0.55**		0.16		0.30		0.35		0.55*		0.35		0.35		0.31		0.54		0.55*		0.32		0.50*		0.53*		0.42		0.47*		0.25		0.37		0.42		0.66		1.09**		0.46*		0.49*	
	(0.23)		(0.31)		(0.26)		(0.29)		(0.30)		(0.28)		(0.25)		(0.32)		(0.38)		(0.28)		(0.26)		(0.27)		(0.32)		(0.27)		(0.27)		(0.30)		(0.51)		(0.27)		(0.40)		(0.47)		(0.26)		(0.28)	
Services		0.23		0.06		0.35		0.41		0.81**		0.35		0.14		0.32		0.43		0.51**		0.18		0.56**		0.59*		0.41		0.45		0.14		0.68*		0.32		0.79**		0.82*		0.37*		0.53*	
		(0.15)		(0.29)		(0.23)		(0.30)		(0.36)		(0.31)		(0.23)		(0.33)		(0.38)		(0.23)		(0.24)		(0.25)		(0.33)		(0.27)		(0.28)		(0.27)		(0.40)		(0.26)		(0.38)		(0.44)		(0.22)		(0.31)	
Cons Basket	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind	Ave	Ind
Dem. Group	15-24	15-24	25-34	25-34	35-44	35-44	45-54	45-54	55-64	55-64	65+	65+	<10k	<10k	10--20k	10--20k	20--35k	20--35k	>35k >35k	>35k >35k	Rent	Rent	Mortg	Mortg	Own	Own	Male	Male	Female	Female	South-east	South-east	Scotland	Scotland	North & NI	North & NI	Mid-lands	Mid-lands	Wales & West	Wales & West	In work	In work	Out of work	Out of work
Obs	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Adj R^2	0.11	0.12	0.15	0.18	0.20	0.17	0.25	0.23	0.24	0.24	0.21	0.20	0.16	0.13	0.16	0.17	0.25	0.25	0.23	0.26	0.23	0.23	0.23	0.23	0.20	0.19	0.32	0.31	0.19	0.20	0.12	0.14	0.07	0.09	0.18	0.23	0.16	0.15	0.15	0.12	0.26	0.27	0.24	0.24

Note: This table presents results from testing the importance of distinguishing between 'sensitivity' and 'exposure' by running two different versions of Eq. (2). The first rows of the component baskets show results using a representative basket of goods (and averaged CPI weights), whereas the second rows capture the change in inflation experienced. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.

Appendix C Robustness

C.1 Non-linearity independent of asymmetry

Table C.1. Persistence, Non-linearity, Asymmetry Results: Robustness

	Dependent variable:																				
	Δ1y (1)	Δ1y (2)	Δ1y (3)	Δ1y (4)	Δ1y (5)	Δ1y (6)	Δ1y (7)	Δ2y (8)	Δ2y (9)	Δ2y (10)	Δ2y (11)	Δ2y (12)	Δ2y (13)	Δ2y (14)	Δ5y (15)	Δ5y (16)	Δ5y (17)	Δ5y (18)	Δ5y (19)	Δ5y (20)	Δ5y (21)
$\Delta\pi_{Food,g,t}$	0.58***	0.41*	0.04	0.39	0.34	−0.09	0.58	0.75***	0.64***	0.21*	0.09	0.11	−0.17	0.53**	0.37**	0.25	−0.10	−0.35	−0.10	−0.59**	0.06
	(0.19)	(0.21)	(0.12)	(0.35)	(0.37)	(0.25)	(0.56)	(0.16)	(0.17)	(0.12)	(0.25)	(0.29)	(0.20)	(0.27)	(0.19)	(0.21)	(0.16)	(0.31)	(0.28)	(0.27)	(0.45)
$[\Delta\pi_{Food,g,t}]^2$	0.37	−0.03	0.36*				0.93*	0.82***	0.58**	0.61***				0.88***	0.76***	0.51*	0.58***				0.43
	(0.36)	(0.35)	(0.19)				(0.53)	(0.22)	(0.24)	(0.17)				(0.30)	(0.27)	(0.30)	(0.22)				(0.42)
$\Delta\pi_{Food,g,t} \times \Uparrow_{c,t}$				0.16	−0.11	0.26	−0.99				1.05***	0.82*	0.70**	−0.56				1.18***	0.61	0.86**	0.01
				(0.56)	(0.58)	(0.35)	(0.95)				(0.40)	(0.46)	(0.33)	(0.56)				(0.45)	(0.47)	(0.39)	(0.76)
$\Delta\pi_{Total,g,t}$		−0.01			−0.02				−0.003			−0.06				−0.01			−0.09		
		(0.04)			(0.07)				(0.04)			(0.08)				(0.05)			(0.06)		
$[\Delta\pi_{Total,g,t}]^2$		0.03							0.04***							0.01					
		(0.04)							(0.01)							(0.02)					
$\Delta\pi_{Total,g,t} \times \Uparrow_{c,t}$					0.05							0.17**							0.08		
					(0.17)							(0.08)							(0.08)		
Δ0y			0.77***			0.77***	0.76***			0.51***			0.51***	0.49***			0.45***			0.46***	0.44***
			(0.07)			(0.07)	(0.07)			(0.04)			(0.04)	(0.04)			(0.07)			(0.07)	(0.07)
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control for other components	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations	456	456	456	456	456	456	456	312	312	312	312	312	312	312	312	312	312	312	312	312	312
Adjusted R^2	0.10	0.04	0.51	0.14	0.03	0.52	0.53	0.22	0.19	0.47	0.24	0.17	0.48	0.48	0.07	−0.003	0.21	0.09	−0.01	0.24	0.22

Note: This table presents the results from augmented regression specifications of Eq. (1), focusing on the coefficients related to food price-driven inflation. Columns (1), (8), and (15) report the coefficients 1-year, 2-year, and 5-year ahead expected inflation from the regression that includes the square of changes in experienced inflation driven by each respective component of the basket. Columns (2), (9), and (16) are based on the same regression but include the square of changes in 'total' experienced inflation, whereas Columns (3), (10), and (17) augment it by controlling for perceived inflation. Columns (4), (11), and (18) report the coefficients from the regression that test for asymmetries for 1-year, 2-year, and 5-year ahead expected inflation. Columns (5), (12), and (19) are based on the same regression but include the square of changes in 'total' experienced inflation, whereas Columns (6), (13), and (20) augment it by controlling for perceived inflation. Columns (7), (14), and (21) report the coefficients from the regression that includes the square of changes in experienced inflation driven by each respective component of the basket, positive increases in that component and control for perceived, for 1-year, 2-year, and 5-year ahead expected inflation. *p<0.1; **p<0.05; ***p<0.01. Reported standard errors are heteroskedasticity and autocorrelation robust.