

Consumer Vibe Check: Gas Prices and Inflation Expectations

Taerin Kim and Yeji Sung

According to household surveys, inflation expectations tend to move together with expectations for gasoline price changes. The relationship is not symmetrical, though: Inflation expectations rise when households revise up their outlook for gas price growth but change little when they revise it down. This pattern is strongest among lower-income and less-educated households. Analysis also suggests that increases in expected gas price growth are associated with greater perceived inflation uncertainty. However, quantitatively, the evidence suggests a moderate relationship between changes in expected gasoline prices and households' inflation expectations.

Gasoline prices are among the most salient and volatile expenses consumers face. When gas prices rise sharply, people may interpret the increase not just as a price change in this category but as a signal about inflation more generally. Household expectations about future gas prices may therefore shape people's perceptions of overall inflation (Coibion and Gorodnichenko 2015).

This possibility is especially relevant now, as the conflict in the Middle East and supply chain disruptions around the Strait of Hormuz have renewed concerns about higher oil and gasoline prices. The average monthly retail gasoline price in the United States reached \$4.65 per gallon in May 2026, up from \$3.06 in February before the start of the U.S.-Iran conflict. These recent global energy market disruptions follow the large gas price increases after Russia's invasion of Ukraine in 2022, which made energy prices a central concern for U.S. household budgets. Together, these episodes raise the question: When consumers become more concerned about future gas prices, do they also expect higher inflation overall?

This *Economic Letter* examines how households' inflation expectations and uncertainty about future inflation move with changes in their expectations for gas prices. Our analysis shows that, when households expect higher growth in gas prices, their inflation expectations also increase and they become more uncertain about future inflation. These responses are modest on average, but much stronger when expected growth in gas prices increases rather than decreases. Specifically, our estimates show that upward revisions in gas price expectations are associated with higher inflation expectations and greater perceived uncertainty, while comparable downward revisions are not associated with equally large declines. These results are consistent with experimental evidence in Aidala et al. (2024). The relationship is also stronger among more vulnerable households, such as lower-income and less-educated households.

Measuring comovement in individual expectations

We use the New York Fed's Survey of Consumer Expectations to study how individual expectations about gas price and overall inflation move together as a person's beliefs evolve over time. Specifically, we examine

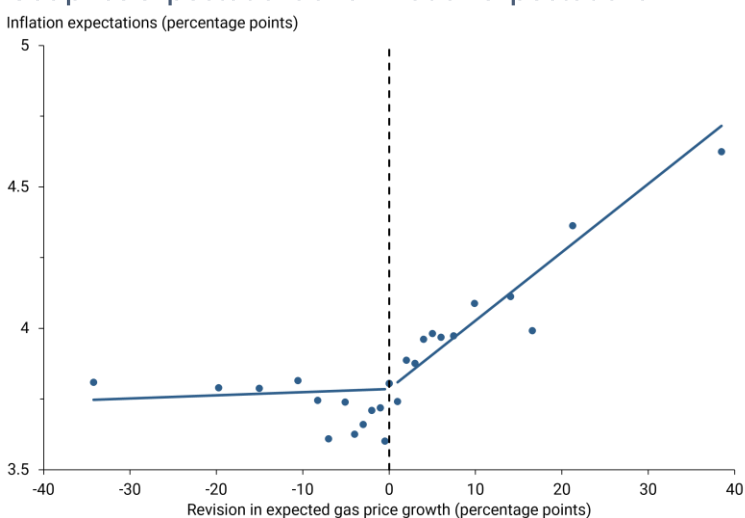
whether changes in a person's outlook for gas price growth are accompanied by changes in their inflation expectations and uncertainty about future inflation. This analysis requires a survey that follows the same respondents over time because movements in survey averages do not tell us whether a given person's beliefs about the two topics are changing together. Average gas price expectations and inflation expectations may also move together for other reasons, such as common economic news or changes in the mix of survey respondents.

The data cover monthly surveys from June 2013 through June 2025. We restrict the sample to respondents with at least eight consecutive months of participation, which retains about 70% of respondent-month observations. Respondents report their expected change in gasoline prices over the next year and their expected inflation rate over the next year. They also report a probability distribution, which shows their view of the range of likelihood for different possible inflation outcomes. We measure belief *revisions* as month-to-month changes in each respondent's reported expectations.

We then use a statistical method known as regression to measure how revisions to a person's gas price outlook are associated with changes in that same person's inflation expectations over time. In other words, we ask whether a person who becomes more optimistic or pessimistic about gas price growth reports a different inflation outlook relative to their inflation expectations in the previous month. The regression furthermore allows each person to have their own baseline. This means that we measure the relationship by comparing each person with themselves over time, rather than comparing people with one another. As a result, persistent differences across respondents, such as some people consistently reporting higher inflation expectations, do not drive the estimates. Finally, we distinguish between upward and downward revisions in expected gas price growth to assess whether the relationship is asymmetric.

Figure 1 shows the relationship between the change in individual expectations for gas price growth on the horizontal axis and the change in their one-year inflation expectations on the vertical axis. The relationship can differ depending on whether consumers revise their outlook for gas price growth upward or downward relative to their baseline. Focusing first on upward revisions, consumers who come to expect higher gas price growth also tend to raise their inflation expectations. The relationship is modest but statistically significant: A 10 percentage point upward revision in expected gas price growth is associated with a 0.24 percentage point increase in one-year inflation expectations.

Figure 1
Gas price expectations and inflation expectations



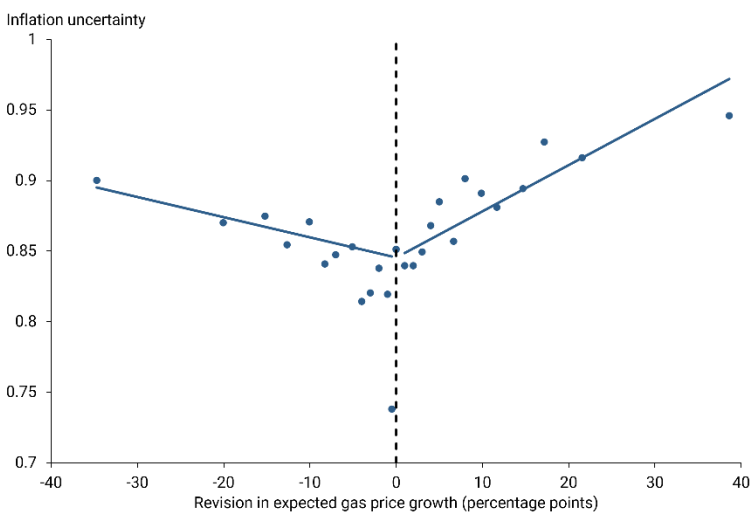
Note: Dots show binned averages of one-year inflation expectations for different ranges of revisions in expected gas price growth. The dot values account for differences across respondents and for their inflation expectations in the previous month. The lines show fitted values from the same regression, allowing the relationship to differ between upward and downward revisions.

The response is also asymmetric. A comparable downward revision is not associated with a statistically significant decline in inflation expectations with the difference between the upward and downward responses being statistically distinguishable from zero. This suggests that increases in expected gas price growth comove more strongly with broader inflation expectations than decreases in expected gas price growth. This asymmetry suggests that inflation expectations may rise as households expect gas prices to climb, but inflation expectations may not retrace those increases when households later expect the run-up in gas prices to unwind.

We also estimate how uncertainty about future inflation changes when individuals revise their expectations for gas price growth. In this analysis, we replace one-year inflation expectations with the respondent's reported uncertainty about one-year inflation in our statistical analysis. We measure perceived uncertainty by looking at the range of future inflation outcomes that each respondent considers likely. Specifically, we use the interquartile range (IQR), which captures the middle 50% of their reported distribution. Thus, a larger IQR means the respondent sees a wider range of inflation outcomes as plausible. We report the regression results in percentage terms, showing how much higher or lower current uncertainty is after accounting for each respondent's uncertainty in the previous month.

Using specifications similar to those in Figure 1, we find that increases in expected gas price growth are associated with greater perceived inflation uncertainty. Figure 2 shows that a 10 percentage point upward revision in expected gas-price growth is associated with a 3.3% increase in the IQR of one-year inflation expectations, while a comparable downward revision is associated with a 1.4% increase. Thus, revisions of gas price growth in either direction are associated with greater perceived uncertainty, with a larger increase coinciding with consumers raising their expectations for gas price growth. This suggests that concerns about gas prices may coincide with a less certain inflation outlook, even when the average change in expected inflation is modest.

Figure 2
Gas price expectations and inflation uncertainty



Note: Dots show binned averages of inflation uncertainty for different ranges of revisions in expected gas price growth. The dot values account for differences across respondents and previous-month inflation uncertainty, and the lines show fitted values from the same regression. Inflation uncertainty is based on the width of the middle half of possible future inflation outcomes reported by each respondent. On the vertical scale, a difference of 0.01 corresponds approximately to a 1% difference in uncertainty.

Household differences in how beliefs move together

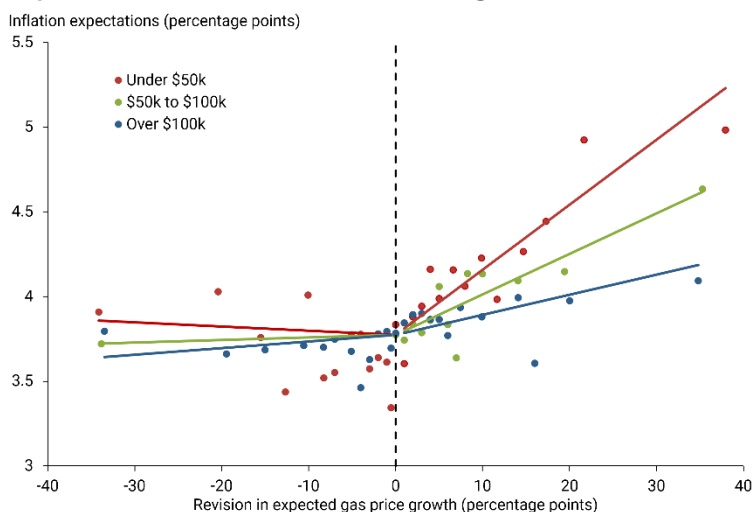
The average relationship between gas price expectations and inflation expectations may hide important differences across households. Gasoline is a regular and sizable expense for many consumers, but its importance in household budgets varies substantially. For lower-income households, gasoline purchases typically take up a larger share of total spending. This implies that higher gas prices may be harder for these

households to absorb without cutting back on other expenses. As a result, the expected increase in gas prices may be more salient for these households and provide a stronger signal about changes in their overall cost of living. The same revision in expected gas price growth may therefore be associated with a larger revision in broader inflation expectations among households that are more exposed to gas price changes.

We examine this possibility by allowing the comovement between gas price expectations and one-year inflation expectations to vary across households. Specifically, we analyze how upward and downward revisions in expected gas price growth move differently according to household income and education groups. We first split households by income, since gas purchases take up different shares of household budgets. We then split households by education, another factor that can influence inflation expectations.

Figure 3 shows that responses to higher expected gas price growth differ clearly by income. We split households into three groups according to annual household income: less than \$50,000, \$50,000 to \$100,000, and more than \$100,000. A 10 percentage point upward revision in expected gas price growth is associated with a 0.38 percentage point increase in one-year inflation expectations for the lowest-income group (red line). The corresponding estimate is 0.24 percentage point for the middle-income group (green line) and 0.12 percentage point for the highest-income group (blue line). The relationship is therefore more than three times larger for households in the lowest income group than for those in the highest income group. The difference between these estimates is statistically distinguishable from zero.

Figure 3
Expectations comovement according to household income



Note: The lines show fitted values from a regression that allows responses to differ across annual household income groups and for revisions above and below a respondent's usual baseline.

Although the comovement remains modest in absolute terms, this pattern suggests that lower-income households connect expected gasoline-price increases more strongly with broader inflation. By contrast, downward revisions to expected gas price growth are not associated with statistically meaningful declines in inflation expectations for any income group.

We also find a similar, though less pronounced, pattern by education (not shown). Because households with less education tend to have lower incomes, the patterns by education and income are closely related. A 10 percentage point upward revision in expected gas price growth is associated with a 0.32 percentage point increase in one-year inflation expectations for high school graduates. The corresponding estimate is 0.26 percentage point for respondents with some college education and 0.21 percentage point for college graduates. As with the income groups, downward revisions are associated with small and statistically insignificant changes in inflation expectations.

Conclusion

Recent disruptions in global energy markets have raised gasoline prices and made their future path more uncertain. These developments have renewed attention to the role of energy commodities in household inflation expectations (Glick et al. 2021). The evidence in this *Letter* points to an asymmetric relationship: Inflation expectations rise when households revise their outlook for gas price growth upward but change little when they revise it downward. The relationship is modest overall, though it is somewhat stronger among lower-income and less-educated households. Households also become more uncertain about future inflation when they raise their expectations for gas price growth, with a smaller increase following downward revisions. Our results suggest that gasoline price pressures may leave a more persistent imprint on household inflation outlooks when prices climb than when they subside.

Taerin Kim

Research Associate, Economic Research Department, Federal Reserve Bank of San Francisco

[Yeji Sung](#)

Economist, Economic Research Department, Federal Reserve Bank of San Francisco

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Data

[Download data for figures \(Excel, 165 kb\)](#)

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