



Insights exchange for the model-driven economy

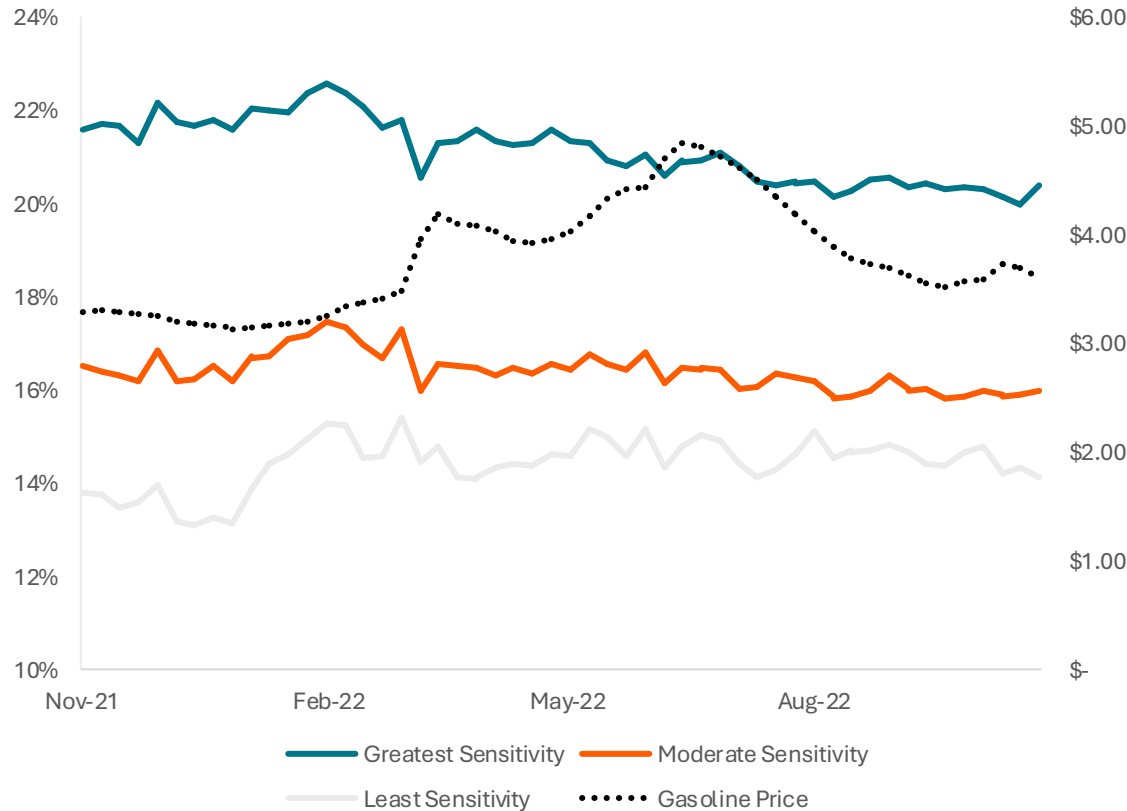
Consumers Cut Back Due to Iran Conflict; 2022 Data Shows Broad Inflationary Potential

1. **Consumers in Congressional Districts with a higher concentration of SUVs and pickups were less likely to add convenience items to a gasoline purchase**, repeating behavior observed when prices last broke \$4 / gallon.
2. **2022's high oil prices and inflation led consumers to cut spend on electronics and appliances**, with spend bottoming in mid-2023, and falling again following the introduction of tariffs in 2025.
3. **Consumers with the lowest sensitivity to higher gas prices cut back high-priced discretionary purchases the most**, with more gas price-impacted consumers only decreasing spend at Department Stores.
4. **Prices in premium culinary retail showed less impact from 2022's oil price spike**, rising more-rapidly earlier in the year, and consumers largely maintained purchasing habits despite those increases.
5. **Grocery prices would be expected to increase 1.1% year-over-year for every \$10 increase in oil prices**, just as consumers moved towards lower-priced items at the fastest rate of the last 5 years.
6. **Price trends from 2022 suggest food inflation would occur across all core categories**. When oil prices peaked in 4Q22, consumers kept up with rising prices in most categories but spent less on produce.
7. **Trade claims data shows high oil prices raising prices across derived products and energy intensive commodities**, as import prices of plastic and aluminum both peaked in 3Q22.

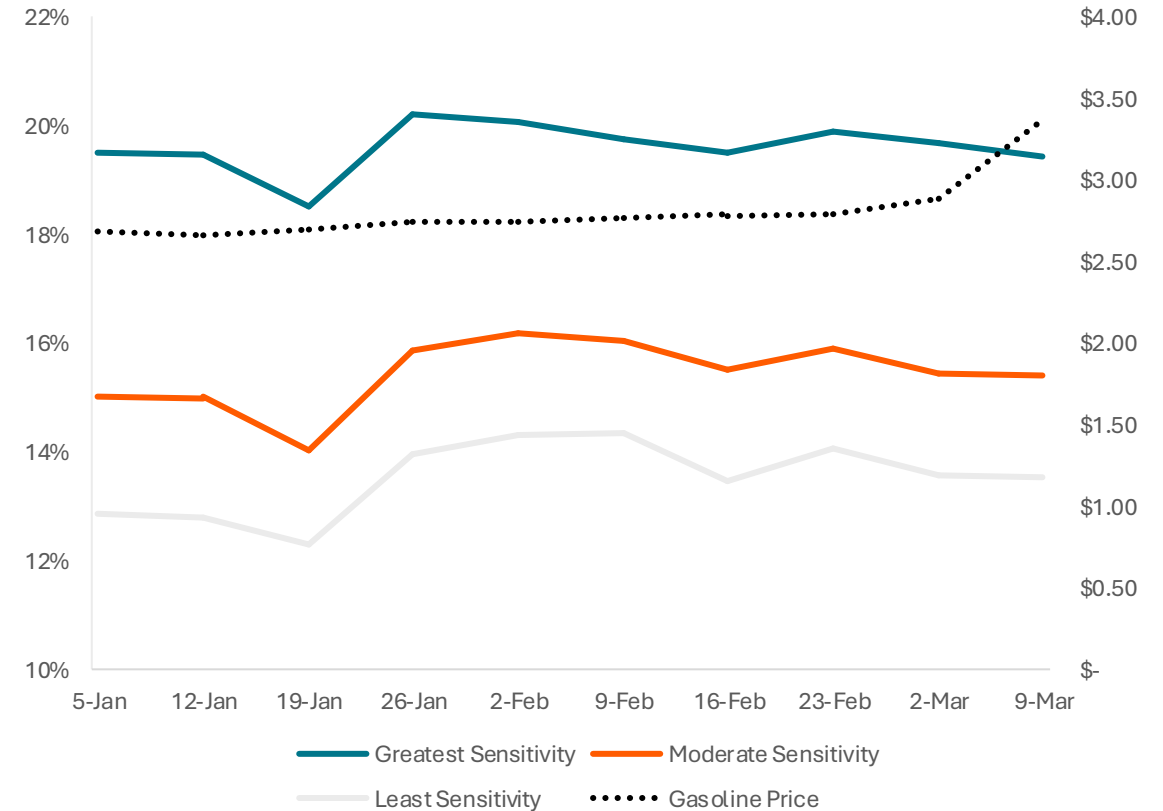
Consumers Less Likely to Buy Convenience Items with Gas as Prices Increase

When gas prices spiked in spring-summer 2022, attach rates of convenience items to gasoline purchases declined the most in the Congressional Districts with the highest share of SUVs and pickups, the areas with the greatest gas price sensitivity. The pattern may be repeating itself; the week of March 9, attach rates declined 0.2 pp in the most sensitive CDs and stayed flat elsewhere.

Convenience Purchase Attach Rates to Gasoline Purchases (l) vs. Average U.S. Gas Price (r)



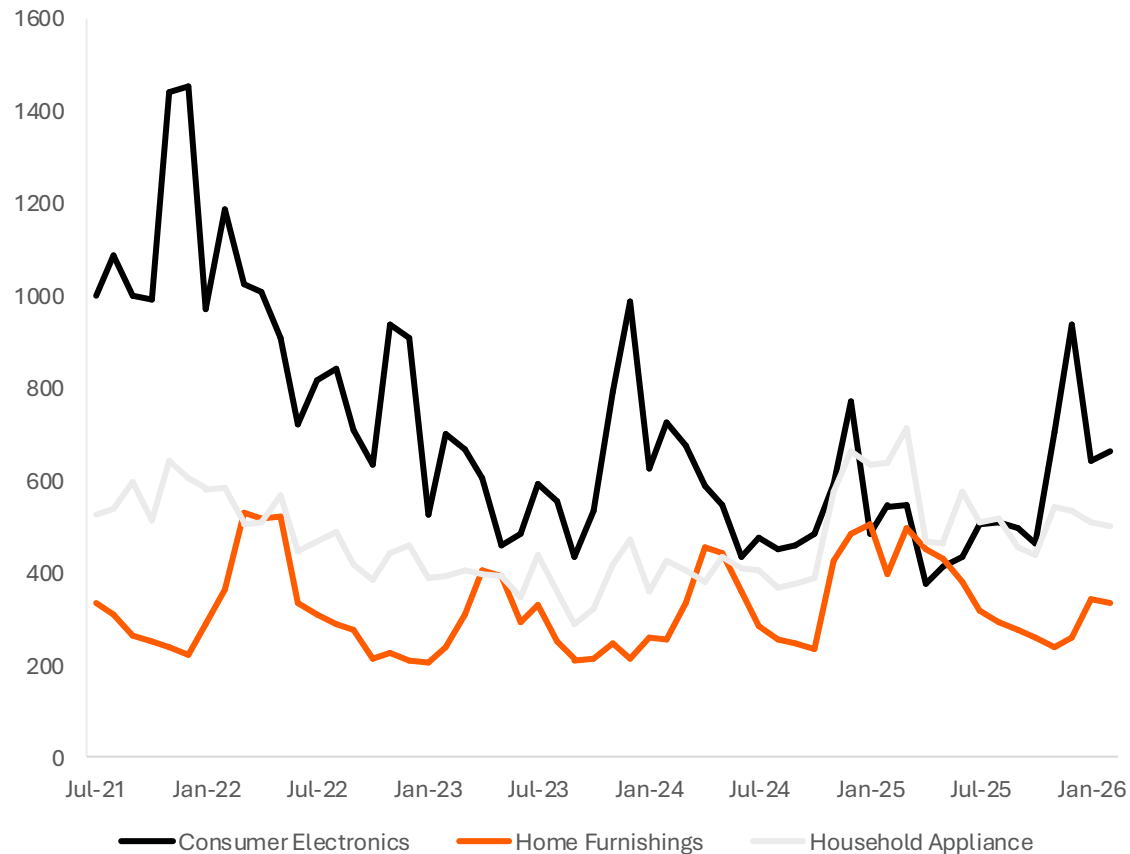
2026 Convenience Purchase Attach Rates to Gasoline Purchases (l) vs. Average U.S. Gas Price (r)



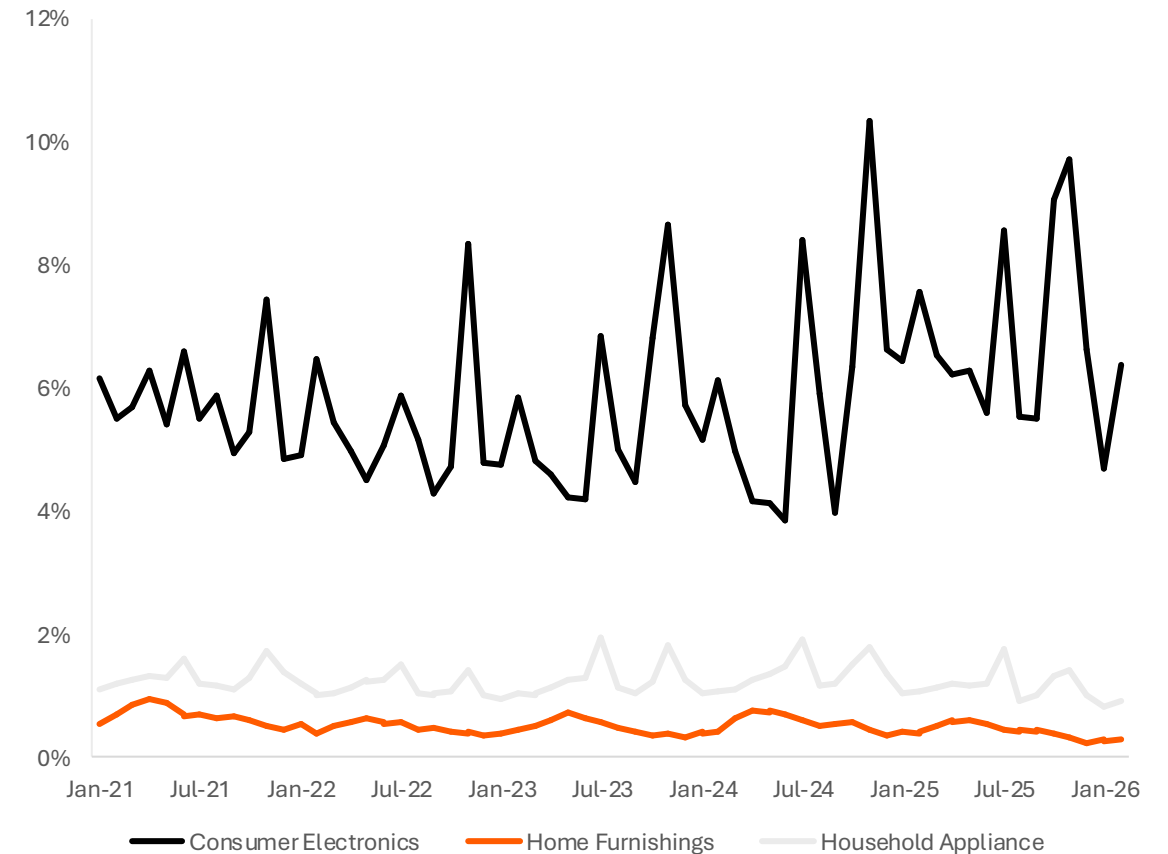
Large Purchases Declined During High Inflation, Still Recovering from Tariffs

The 2022 inflation spike led consumers to cut back purchasing across high-priced categories; normalized spend hit its low point in mid-2023, several months after oil prices peaked. In-store spend on electronics then hit a new low after the "Liberation Day" tariff announcements. While electronics purchasing has recovered since, furniture and appliance spending is down vs. prior years.

Normalized Category Spend, POS-Instore Panel



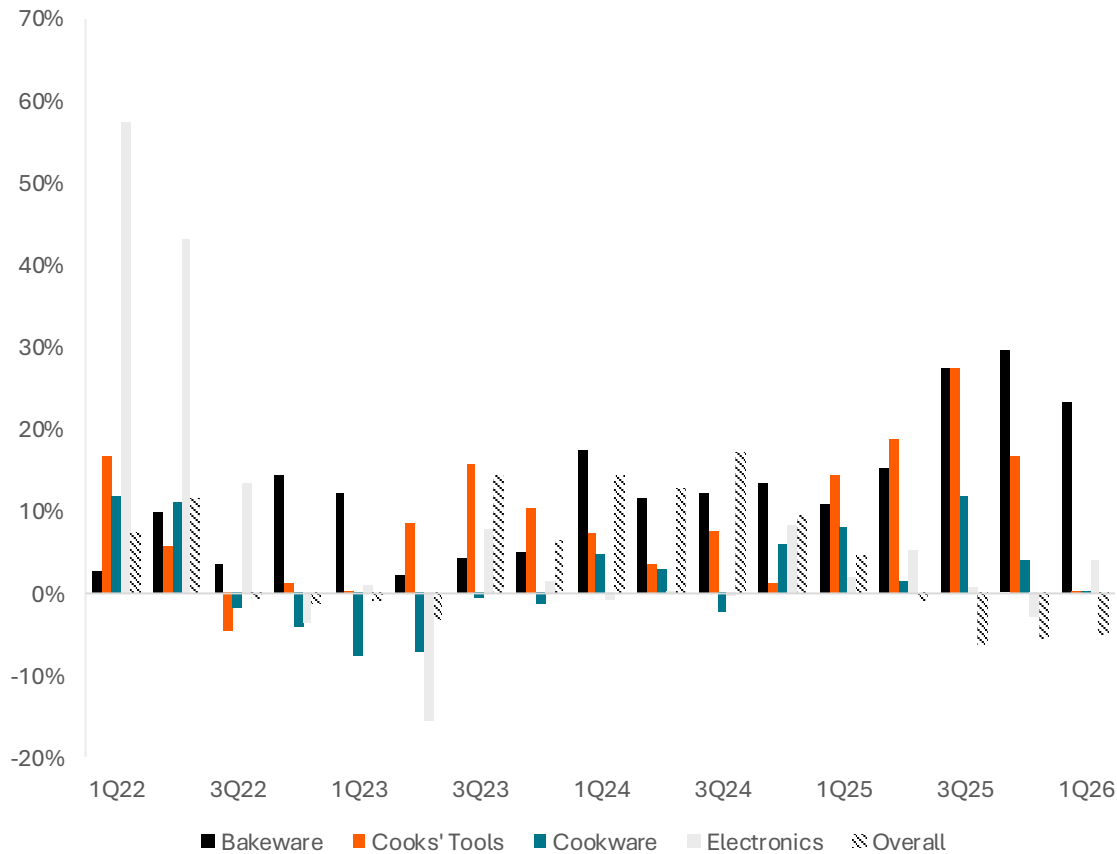
Category Share of Total Spend, POS – Online Panel



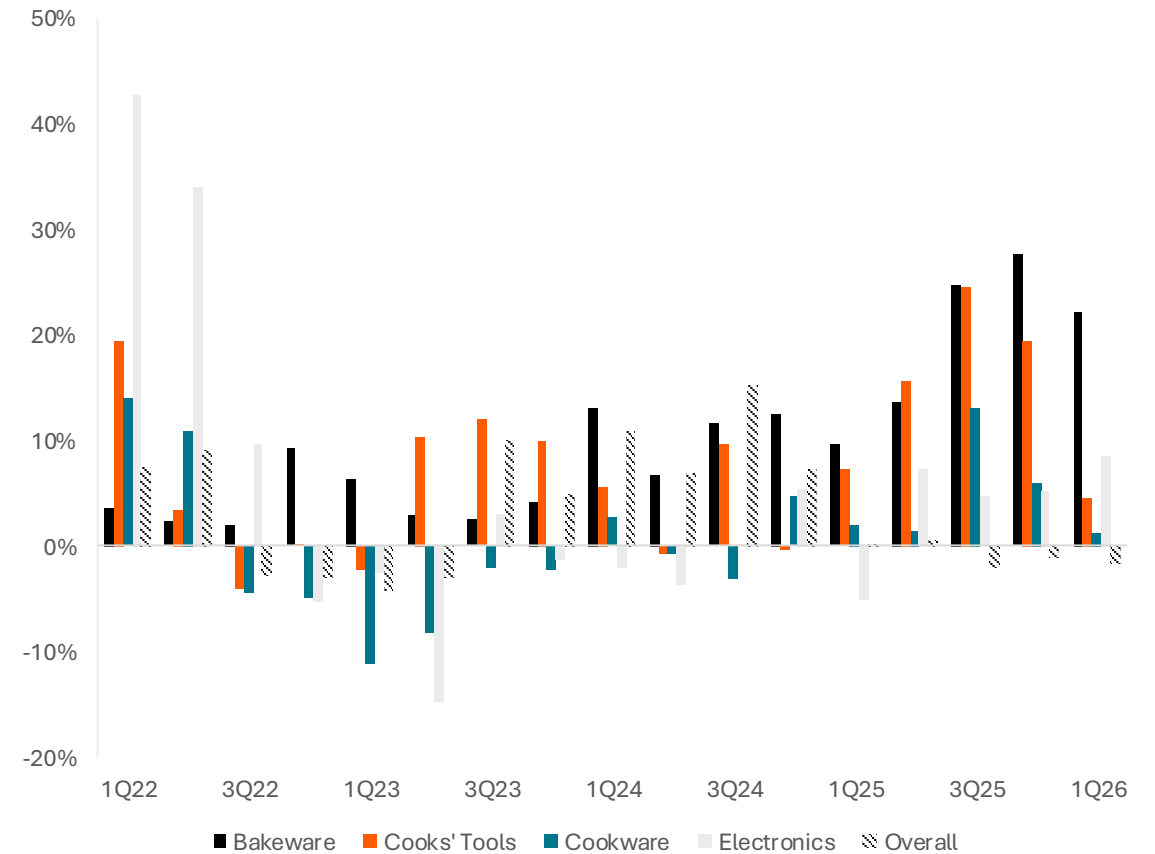
Consumers Made Slight Trade-Downs in Culinary Retail; Less Oil Impact on Price

Prices in culinary retail rose less year-over-year when oil prices peaked in late 2022, rising more in the earlier half of the year. Similar growth in average purchase price indicates consumers mostly maintained spend, with minor trade-downs to cheaper products.

Culinary Retail List Price Y/Y Growth by Category



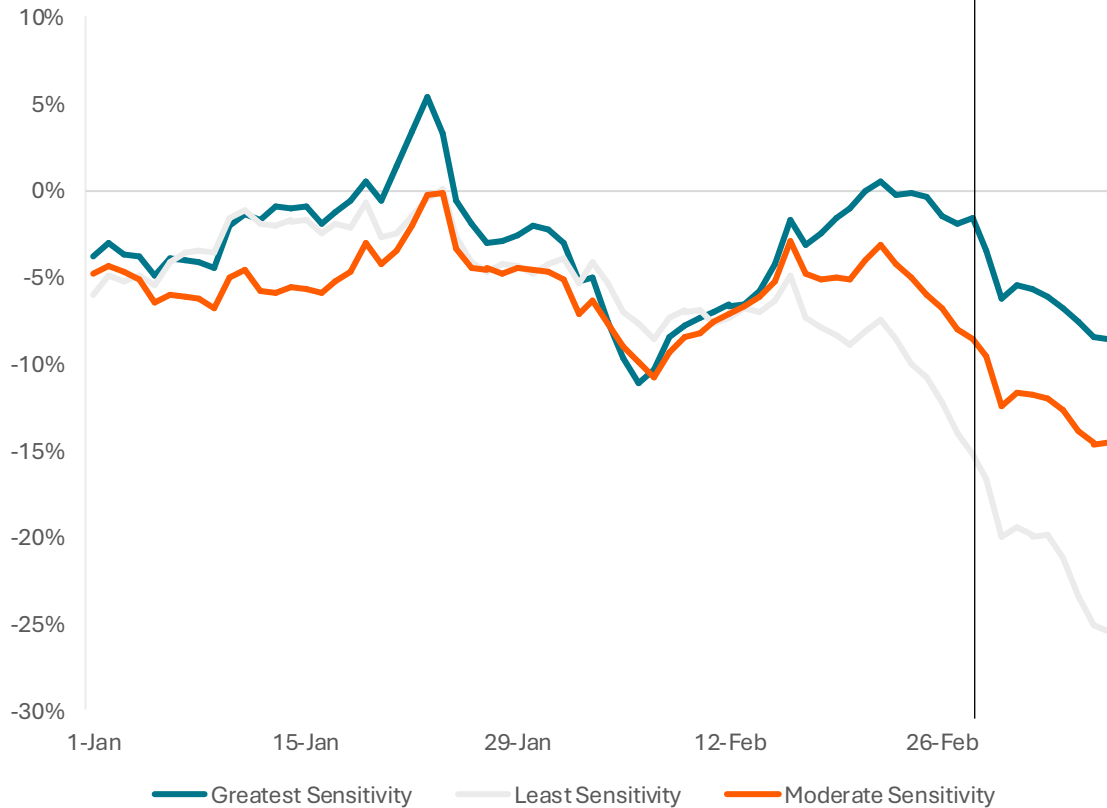
Culinary Retail Purchase Price Y/Y Growth by Category



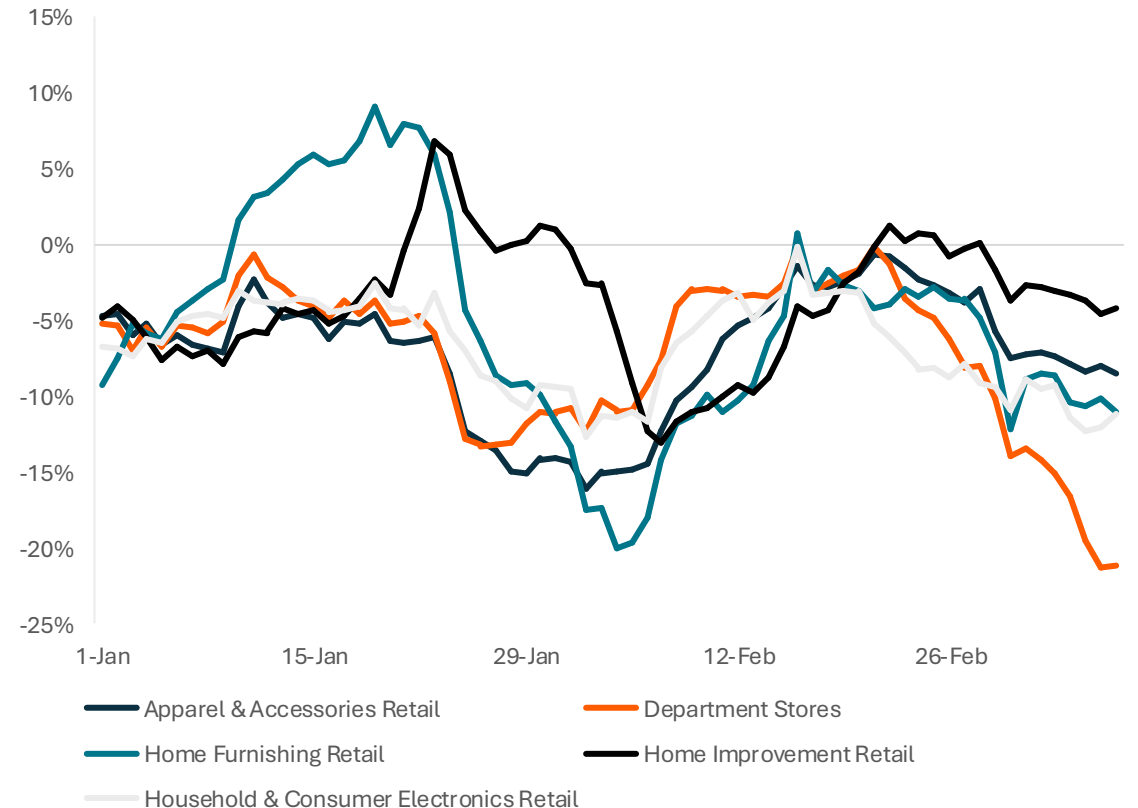
Least Gas-Sensitive Consumers Making Largest Discretionary Spending Cuts

Spending in big-ticket categories has plummeted year-over-year for consumers in the Congressional Districts with the lowest share of trucks and SUVs, though that correlates with liberal voters who are more likely to oppose the Iran conflict. Looking at the potential impact of high gas prices, consumers who should feel a greater sensitivity have only cut spend at Department Stores.

Trailing 14-Day Discretionary Credit Card Spend Y/Y Growth by Congressional District Gas Price Sensitivity



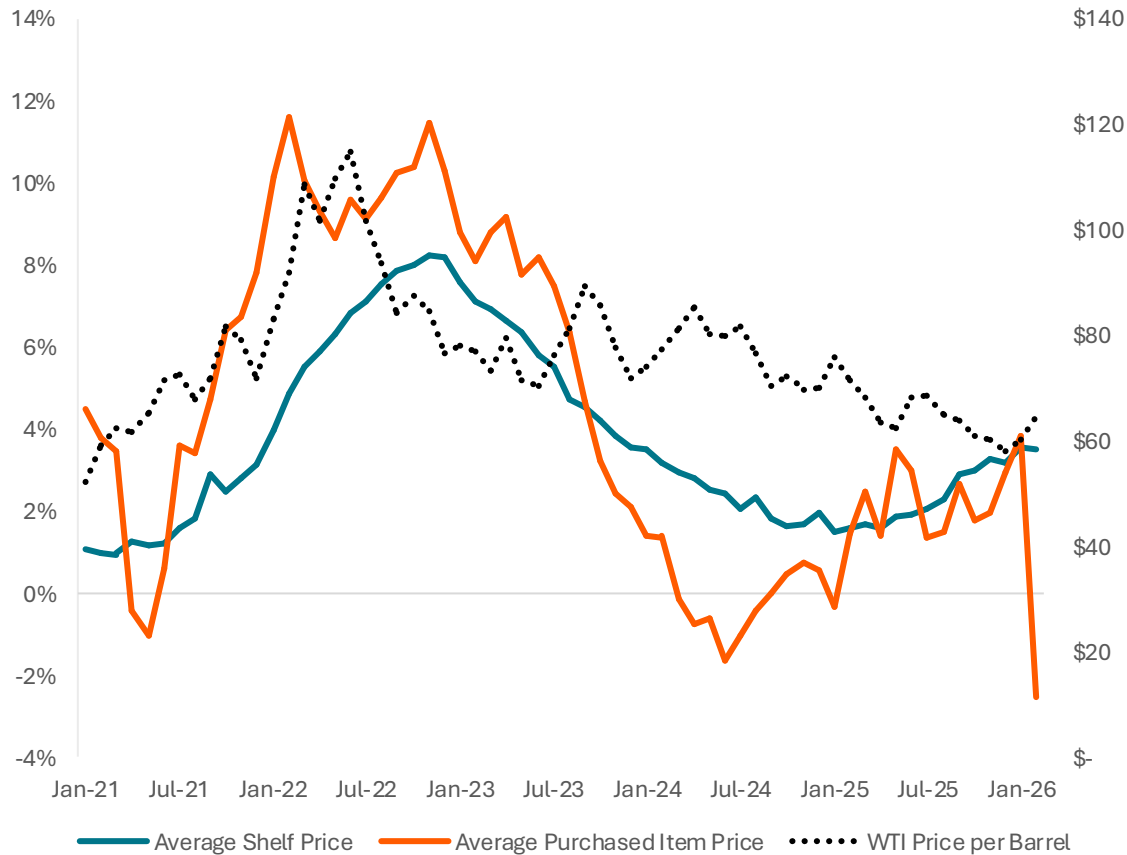
Trailing 14-Day Credit Card Spending Trends for the Most Gas-Sensitive Congressional Districts



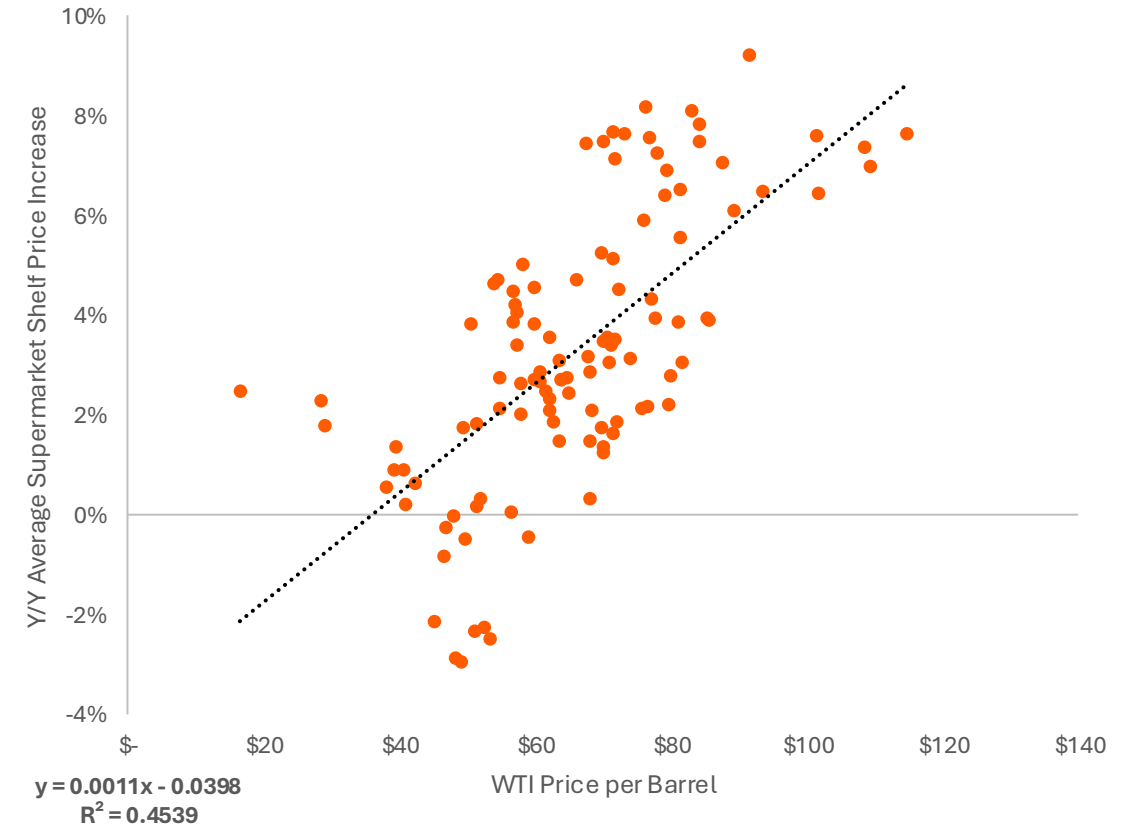
Grocery Prices Increase as Oil Prices Rise; Consumers Cut Back in Feb.

Dating back to 2017, every \$10 increase in oil prices is associated with a 1.1% Y/Y increase in supermarket prices the next month, suggesting the Iran conflict will increase grocery costs for consumers. February marked the largest growth deceleration and Y/Y decline in average purchase price, suggesting consumers were already feeling pressure before price increases in gas or groceries.

Grocery Price Inflation vs. WTI Price per Barrel



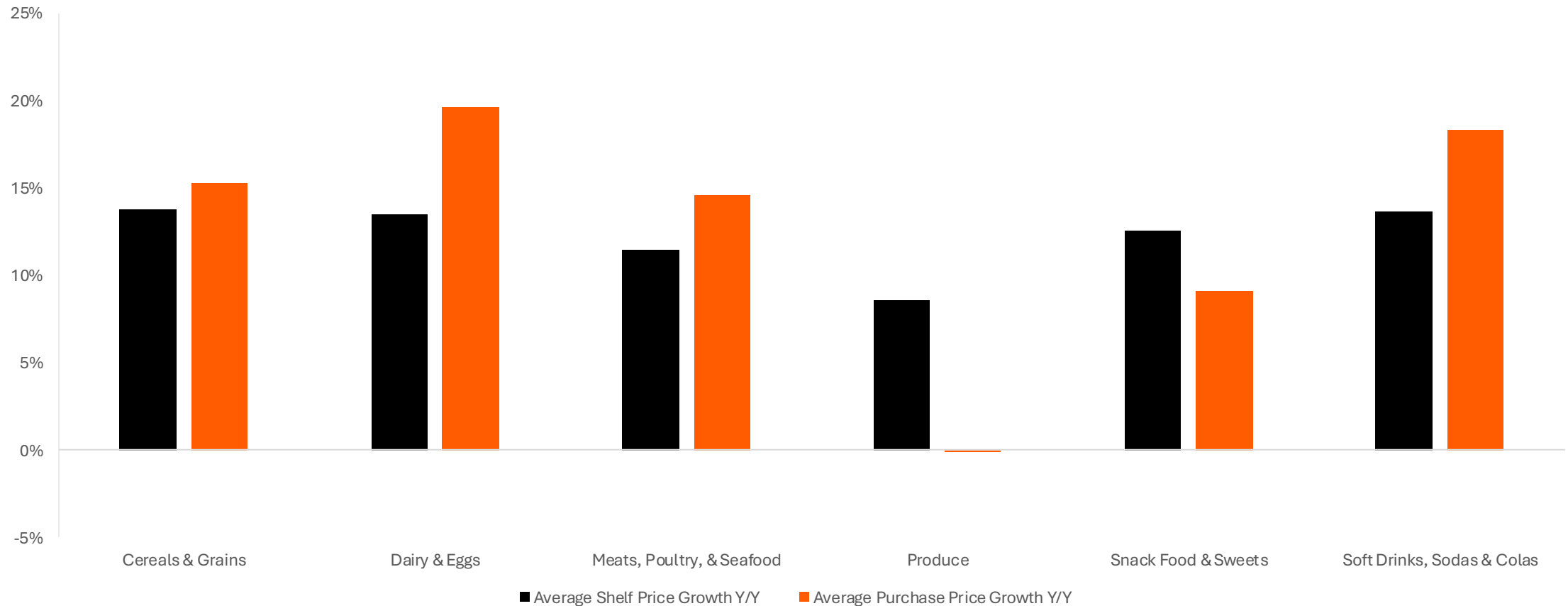
Prior Month's Price per Barrel vs. Supermarket Shelf Price Y/Y Growth



4Q22 Grocery Prices Inflated Across Categories with Consumer Pullback in Produce

When oil prices peaked in 4Q22, grocery inflation was well-distributed across major categories, with produce rising the least at +9% Y/Y. Consumers purchased more-expensive products or greater pack sizes across soft drinks, grains, dairy, and meats but traded down in produce, choosing cheaper items or smaller quantities.

4Q22 Food Inflation and Average Purchase Price by Category



Trade Claims Show Commodity Values Peaked During 2022 Oil Spike

Import values per kilogram peaked for plastic packaging and aluminum in late 2022, demonstrating the impact of high oil prices on both derived products and unrelated commodities, which still demand energy to produce. Urea prices are expected to also be impacted; values of nitrogen-based fertilizer are already above 2022 levels but could rise further.

U.S. Quarterly Import Value (\$) per Kg, 3Q22 – 1Q26

