Visa InSights

Gas Price Expectations Are Changing Consumer Spending Behavior

MARCH 2015

Consumers expect gas prices to increase in the next three months.

- Increase: 70%
- Stay the Same: 19%
- Decrease: 11%

Most consumers are saving the windfall from lower gas prices:

- Saving more: 52%
- Spending more at other places: 30%
- Paying down debts: 24%

KEY QUESTIONS

Have consumer behavior and confidence changed due to February gas price increases?

How do gas price expectations influence consumer spending?

Are there age and income differences in whether consumers spend or save the gas windfall?

What are the regional differences in gas prices and retail spending after February price increases?

What are the combined effects of lower gas prices and a weaker Canadian dollar on Canadian cross-border spending?
Visa InSights

Higher Gas Price Expectations May Spur Consumers to Spend Less

Highlights

- A Visa March survey indicates that 70% of consumers believe gas prices will go up in the next three months. They may be spending less and saving more as a result. But a higher percentage of those who expect prices to go down are spending more, particularly in restaurants and grocery stores, suggesting that expectations may have a disproportionate impact on consumer spending.

- After falling for seven consecutive months, U.S. gasoline prices rose every day in February, which weighed on consumer confidence and spending. The price increase was due largely to annual refinery maintenance, and is short term. U.S. gas prices are still more than 30% below where they were at the same time in 2014. The western U.S. experienced much higher gas price growth in February.

- Consumers may also react more quickly to gas price increases than decreases. When gas prices decline, consumers do not immediately alter their spending and other financial behavior. But when prices increase, there is a more immediate reaction to stop spending, drive less and/or save more.

- Gas prices should remain low through at least the remainder of 2015, which could boost spending in other categories. Excess supply and weak demand for oil point to extended downward price pressures. Additionally, U.S. oil inventory is nearing capacity, further indication of potential price declines. Consumers may increase spending as low prices persist.

Most consumers expect higher gas prices in the next three months

- Our March survey showed that the recent rise in gas prices seems to have affected consumer expectations more than the seven month drop prior to February. Consumer confidence slipped from its upward trend, and consumer spending faltered after February gas price increases.

- Expectations of price increases are making consumers cautious. There has been no significant spending lift in non-gas categories. Despite low year-over-year gasoline prices, the vast majority of consumers expect prices to rise in the next three months.

- Had gas prices remained low or continued to decline in February, consumers may have adjusted their spending behavior. Believing that lower gas prices were at least semi-permanent, consumers would have been more comfortable spending the windfall.

- Younger consumers are more optimistic about gas prices, and may be more likely to spend. More than 37% of 18-34 year-olds say gas prices will decrease or stay the same, compared to roughly 27% of consumers over age 34.
March survey: low income and younger consumers are still spending

Visa Business & Economic Insights conducted a second study with Prosper Insights to gauge how consumers are affected by gas prices. The survey was conducted March 11-15, 2015 and is a nationally representative study with over 4,500 respondents.

- In March, slightly fewer consumers indicate that they are saving more as a result of lower gas prices, with 52% of consumers saving as compared to 55% in our January survey.

- But 30% say they are using their gas savings to spend more at other places, higher than the 26% in January.

- Low income households are the most likely to spend their gas savings. Since low income households are more likely to live paycheck to paycheck, gas savings can have a significant impact on their budgets.

- Younger consumers are also more likely to spend their gas savings. More than one-third of consumers ages 18-34 say they are spending more, compared to 30% of those ages 35-54 and only 26% over 55.

- Fewer high income households say they are spending their gas savings. Instead, more high-income consumers are saving. Nearly 60% consumers earning above $100,000/year are saving more, compared to just under 50% earning below $50,000.

- Gas price expectations reveal distinct spending patterns. Among consumers who expect gas prices to decrease, a higher percentage are spending more on groceries, fast food, and full service restaurants.

- More than one-third of consumers said they were spending more at grocery stores in January’s survey. Regardless of gas price expectations, that declined to roughly 20% in March.

- Almost one-quarter more consumers who believe gas prices will decrease are spending more at full-service restaurants, compared to the January survey.

Have consumers changed their behavior since January? (Of the money saved on gas, I am . . . )

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Jan 2015</th>
<th>Mar 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving more</td>
<td>52%</td>
<td>55%</td>
</tr>
<tr>
<td>Spending more at other places</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>Paying down my debts</td>
<td>24%</td>
<td>24%</td>
</tr>
</tbody>
</table>

How does income level affect the likelihood of spending gas savings? (% spending more at other places, by household income)

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Jan 2015</th>
<th>Mar 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$50k</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>$50-100k</td>
<td></td>
<td>31%</td>
</tr>
<tr>
<td>$100k+</td>
<td></td>
<td>26%</td>
</tr>
</tbody>
</table>

Are more consumers who expect gas prices to fall spending the windfall? (With the money saved on gas, I am spending more at...)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery Stores</td>
<td>0%</td>
</tr>
<tr>
<td>Full-Service Restaurants</td>
<td>10%</td>
</tr>
<tr>
<td>Fast Food Restaurants</td>
<td>20%</td>
</tr>
<tr>
<td>Clothing Stores</td>
<td>30%</td>
</tr>
<tr>
<td>Gas station conv. stores</td>
<td>40%</td>
</tr>
</tbody>
</table>

Sources: Visa Business and Economic Insights; Prosper Insights (March 2015)
Consumer spending growth slowed in February as gas prices increased

- Retail sales excluding autos and gas growth slowed to 3.6% YoY in February from 6.1% in January, suggesting consumers were hesitant to spend their gas windfall. From November to January, there were signs that consumers were beginning to use their gas savings to increase discretionary spending.

- The sharp gas price increase may have reset the clock in terms of when consumers start spending their gas windfall, even if prices remain low. After falling for six consecutive months, gas prices quickly increased in February, reminding consumers that gas prices could rebound quickly and stay high.

- Consumers normally adjust their spending once gas prices remain low for six to nine months. After several months of low gas prices, savings accumulate and consumers become confident that the low prices will persist. Yet it is unclear how consumers will respond in the coming months given February’s volatility.

Higher February gas prices in the west didn’t seem to affect retail spending

- The west saw large gains in retail sales excluding autos and gas, despite higher gas prices. Strong job growth, population gains, and mild weather likely boosted sales.

- High income states such as Connecticut are less likely to be impacted by lower gas prices, since consumers are more likely to save their windfall.

- Rising gas prices may be partly responsible for slower growth in other areas of the country.

- Benefits of low gas prices are likely to appear first in the southeast region. Long driving distances should translate to big savings, and low disposable income means the windfall is more likely to be spent.

Sources: Retail Spending Monitor, Moody’s Analytics, Visa Business and Economic Insights
But consumer confidence retreated with February gas price increases

- As gas prices started rising in February, consumer confidence fell sharply after increasing for seven months.
- Gas prices are inversely correlated to consumer confidence. Over the last 20 years:
  - When gas prices fell 5% or more, confidence increased 1.3%.
  - When gas prices rose 5% or more, confidence decreased 1.5%.
- Consumers are sensitive to quick gas price increases, and tend not to remember prices from a year ago. Prices rose in February. Although they were still low compared to a year ago, this startled consumers and confidence dropped.

Savings rate increase shows that consumers have been saving the windfall

- The savings rate rose to 5.5% in January – the highest level in two years – as gas prices fell. Lower gas prices increase purchasing power – consumers can buy more goods and services for the same amount of money.
- But most consumers do not alter their spending behavior immediately, which reduces nominal spending.
- Rapid gas price changes can spur consumers to increase savings, given they do not know when or how far prices will rise. The savings rate increased to 5.8% in February as gas prices rose.
- In the short run, consumer spending is relatively insensitive to gas price decreases. Monthly gas price declines of 5% or more typically correspond to a 0.2 percentage point increase in the savings rate.
Higher income consumers benefit most, but save more of the windfall

High income consumers should save more on gas (Estimated annual gas savings by income percentile, 2015)

- High income households save more overall because of lower gas prices. The top quintile consumes more fuel, and likely saves more when prices fall. But they are less likely to spend the savings.
- The lowest quintile consumes less gas, creating a smaller gas windfall. Low income consumers may need to spend their gas savings.
- The lowest quintile consumes roughly 350 gallons per year, while the highest consumes about 1,200 gallons per year.

Sources: Visa Business & Economic Insights, Consumer Expenditure Survey

Refinery maintenance caused gas price increases

- February gas price increases were likely temporary, and primarily due to refining and production. The longer-term effects of low oil prices should have a greater effect into 2016. Larger global oil supply and demand drove both oil and gasoline price declines from June through January.
- Prices rose in February because of planned maintenance that took refineries offline and lowered national refining capacity. Late-winter maintenance generally puts upward pressure on prices. Refineries transition to a summer-blend of gas, which also puts pressure on supplies.

Gas prices remain low year over year, despite February increase (Average retail gas prices per gallon)

Sources: Energy Information Administration, Visa Business & Economic Insights
Visa InSights

Specific events also resulted in regional gas price increase differences

- **A February refinery explosion in California** affected refining capabilities nationally, and likely contributed to higher California gas price increases.
- **The west coast – and particularly California – led the regional increases.** Although spending didn’t decline in February, there may be future downward pressure on California spending due to gas price increases.
- **The eastern U.S. experienced smaller increases than the U.S. average**, which could have a lesser impact on consumer spending in the east for the remainder of the year.

Prices rose in February and stabilized in March
(Change in gas prices from January 26 to March 23, 2015)

- California: 34%
- West Coast Except CA: 25%
- Midwest: 24%
- Rocky Mountain: 23%
- US Average: 20%
- Gulf Coast: 18%
- Lower Atlantic: 13%
- East Coast: 12%
- Central Atlantic: 11%
- New England: 10%

Source: Energy Information Administration

Forecasts show gas and oil prices could remain low through 2016

- **Gas prices should remain below $3/gallon through 2016, with oil prices below $70,** due to both excess supply and weak demand. Oil is expected to bottom out at $44/barrel in the second quarter of 2015, according to IHS Economics. This forecast could change given recent events in the Middle East.
- **On the supply side, U.S. oil production is at its highest level since 1983** at over 9 million barrels per day. Although the number of active drilling rigs has declined, overall production continues to climb, which should force prices lower until demand picks up. Although Saudi Arabia is presently boosting production to gain market share, its involvement with Yemen’s civil war may shift its focus, causing lower production.
- **Slow economic growth is weakening global demand for oil,** further lowering prices. China – the world’s second-largest oil consumer – is expecting GDP growth of just 6.5% in 2015, the slowest since 1990.
- **Oil prices could fall even further if the U.S. and Iran agree to halt Iran’s nuclear program.** Iran is demanding sanctions be lifted, which would enable Iran to increase its oil production.

Oil prices expected to remain historically low through 2016, keeping gas prices low
(LHS: Brent crude spot price, RHS: average retail gas prices per gallon)

Source: IHS Economics, Energy Information Administration, Short-Term Energy Outlook (March 2015)
Canadian cross-border spending affected by low gas prices and weak currency

- Falling oil prices have given Canadian consumers a potential spending boost from lower gasoline prices.
- But the Canadian dollar has fallen relative to the U.S. dollar, reducing Canadian purchasing power in the U.S. The loonie has declined significantly due to the drop in oil prices.
- Canadians are expected to spend less in the U.S. and more at home due to a weaker loonie.
- Cross-border purchases could drop 16% year-on-year in 2015 if cross-border spending falls to the same share of total spending as in 2009 when the loonie was last this low.
- However, such a sharp drop in cross-border spending is unlikely, as both the U.S. and Canadian economies are stronger in 2015, providing spending support. Growth should remain positive but sluggish.

Summer travel is different: border states may benefit from lower gas prices

- Cross-border spending by Canadians actually grew over this past winter on a Canadian dollar basis, despite the weaker loonie.
- This resilience is due in part to the changing nature of Canadian travel to the U.S., with more Canadians locked into travelling to second homes purchased over the past five years.
- Since 2009, Canadians have made nearly a quarter of all foreign real estate purchases in the U.S. Over three quarters of those properties are located in “sand states” per the National Association of Realtors.
- Cross-border spending in the sand states over the past few months has been less sensitive to the drop in the loonie than in the border states.
- By this summer, lower transportation costs should help cushion the impact from a weaker currency.
- A two-hour drive could cost as much as C$10 less than last year, and cost the same as 2009, given current Canadian trends in gas prices and fuel efficiency.

Canadian winter in the sand states, and summer closer to home

Distribution of Canadian card present spending on Visa cards by type of U.S. state (Avg 2012-2014)
Disclaimer

Materials, advice and recommendations appearing in this post are provided for informational purposes only and should not be relied upon for marketing, legal, regulatory or other advice. These materials, advice and recommendations should be independently evaluated in light of your specific business needs and any applicable laws and regulations. Visa is not responsible for your use of the materials, recommendations, advice or other information, including errors of any kind, contained in this post. Visa reserves the right to update this post.

Forward looking Statements

This presentation may contain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These Forward-looking statements can generally be identified by the terms “objective,” “goal,” “strategy,” “opportunities,” “continue,” “can,” “will” and other similar references to the future expressions. Examples of such forward-looking statements may include, but are not limited to, statements we make about our corporate strategy and product goals, plans and objectives. By their nature, forward-looking statements: (i) speak only as of the date they are made, (ii) are neither not statements of historical fact nor guarantees of future performance and (iii) are subject to risks, uncertainties, assumptions and changes in circumstances that are difficult to predict or quantify. Therefore, actual results could differ materially and adversely from those our forward-looking statements because of a variety of factors, including the following: the impact of laws, regulations and marketplace barriers; developments in litigation or and government enforcement, including those affecting interchange reimbursement fees, antitrust and tax; new lawsuits, investigations or proceedings, or changes to our potential exposure in connection with pending lawsuits; economic factors; industry developments, such as competitive pressure, rapid technological developments and disintermediation from the our payments network; system developments; costs arising if Visa Europe were to exercise its right to require us to acquire all of its outstanding stock; the loss of organizational effectiveness or key employees; the failure to integrate acquisitions successfully or to effectively develop new products and businesses; natural disasters, terrorist attacks, military or political conflicts, and public health emergencies; and the various other risk factors discussed in our most recent Annual Report on Form 10-K and our most recent Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission. You should not place undue reliance on such statements.