

Priming the Pump? Gas Prices and Governmental Approval in the U.S. and Canada

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Received: 📅 2025 Jan 09

Accepted: 📅 2025 Jan 28

Published: 📅 2025 Feb 06

Abstract

Among many economic pocketbook issues identified as being potentially influential on vote choice, gas prices have risen to a prominent place. Commentators regularly include them in a basket of consumer goods that the public pays close attention to, especially elevated prices. As a simple reward and punishment mechanism, gas prices may well play a critical role in incumbent party approval. I explore this research question using unique datasets of multi-year daily gas prices in the U.S. and Canada, as well as daily and monthly governmental approval ratings in both countries and U.S. survey questions. The analyses of these data indicate that daily gas prices modestly correlate with daily presidential approval, and that there is a partisan pattern to the interpretation of the importance of gas prices, with a negative impact on incumbent parties.

Keywords: Political Behavior, Economic, Election Cycle, Politics and Votes, Negative Impact, Public Policy Survey

1. Introduction

As we engage in another North American election cycle, with the Mexican and U.S. presidential elections complete and the Canadian parliamentary elections occurring sometime in the next few months, we constantly wonder what will likely influence the outcome of these major elections. A perennial factor is the economy [1-6]. The most studied variables are GDP per capita, inflation, and unemployment—the “big three” of macroeconomics. Normally, we consider the impact of economics on the incumbent candidate, in a voter reward-and-punishment framework. The better the economy, the more likely voters will credit the incumbent candidate or incumbent party. The worse the economy, the more likely they will punish the incumbent.

One measure of the economy, in particular commonly known prices of goods, is the price of gas. Much chatter about gas prices takes place in the media, supposedly reflecting popular understanding about higher prices (see Cummings, Fraccaroli, and Mahoney who document how much more frequently high gas prices are mentioned by the media than low gas prices) [7]. In this paper, I begin to explore how gas prices may translate into political behavior, by seeking answers to the question, “Did gas prices have an impact on opinions about U.S. and Canadian politics and votes in U.S. elections?”

The answer, it turns out, is that gas prices have a mixed, but likely partisan and economically driven, effect on the vote in the U.S., and largely a negative impact on approval of the

U.S. and Canadian executive (high prices, lower approval, and vice versa). I will first seek to demonstrate this result through local analysis of Idaho, and then move up to the national level in the U.S. and the national level in Canada. In Idaho, I utilize a series of questions from a recent Idaho Policy Survey, as well as a participant-observer study I have conducted for several years in the Treasure Valley in Idaho. Nationally, I also have evidence from two U.S. nationwide surveys on which I have had questions asked on gas prices and voting. Finally, regarding Canada, I use a time-series of national gas prices and Canadian prime ministerial approval.

1.1. A First Cut at the Evidence in Idaho: Observation of Daily Gas Prices

I first provide some overview of the issue. During 2022, it was hard to escape the constant chatter about gas prices, as part of a larger conversation about the highest inflation rate experienced in four decades: 9.1% at its height, in June. Common “everyday” prices, known by most adults, include among other things the price of milk, eggs, and gas. Thus, the headlines across the Gem State wrote themselves.

- “Idaho, US both achieve record-high gas prices” (Idaho State Journal, 18 May 2022).
- “Gas prices going down in U.S. but still rising in Idaho” (Idaho Press, 20 June 2022).
- “Idaho in top 10 – for gas prices” (Coeur d’Alene Press, 21 June 2022).
- “Gas prices skyrocket in Idaho” (Idaho Mountain Express, 20 July 2022).
- “Motorists travel to Buhl for lower gas prices” (Twin Falls

Times-News, 25 July 2022).

- "Americans changing driving habits amid high gas prices" (Idaho Falls Post-Register, 1 August 2022).
- "Gas prices in Idaho indicate larger global recession trend" (Idaho Statesman, 27 October 2022).

Clearly, the public paid attention to the inflationary times. To use a political science term, gas prices achieved issue salience as the conversation focused on the higher cost of goods and services. There is some evidence that, politically speaking, gas prices have a national political impact.

One persistent drag on [President] Biden's ratings has been the economy, with his worst numbers coming amid high inflation and gas prices. His numbers improved slightly after gas eased from a nationwide average of around \$5 a gallon over the summer. However, his ratings have not increased substantially as gas prices have continued to fall to 2021 levels. (New York Times, 7 February 2023) [8].

To reverse this thinking, however, President Biden also appears to have benefitted from lower gas prices during his term in office. For instance, the national average regular unleaded gas price on February 1st, 2023, was \$3.40, 20 cents lower than on February 1st, 2022 (Axios, 1 March 2023) [9]. Biden's approval ratings also rose and were at their highest since October 2021. By June 15th, 2023, however, the national average price rose to \$3.65, and Biden's approval ratings slid down a point since February 1st. In addition, by November 1st, 2023, the national average was back to \$3.43 (AAA), with Biden's approval ratings down 2 ¼ points since February 1st.

Do gas prices have any real political consequence? The clearest political expression of the high gas prices in 2022 promised to be the 2022 midterm elections. Republicans believed their candidates would be in the ascendancy as they pinned the blame onto Democrats for a stuttering economy, due in no small part to high gas prices. Democrats worried that any downward trend in gas prices would not be early enough in the election cycle to resonate with voters. As it turned out, gas prices did fall from their July heights throughout the fall campaign, perhaps muting the voters' response to them.

The common assumption among election forecasters was that economic indicators such as rising prices would lead to a comprehensive electoral defeat for the incumbent party in Washington, D.C., the Democrats. The theory is

that voters will punish incumbents under whose watch the economy performs poorly. This is especially true during a midterm election when the incumbent party nearly always loses congressional seats and state gubernatorial executives [10,11].

However, the Democrats exceeded expectations, gaining senators and governors for the first midterm election since 1934, and keeping House of Representative losses to a minimum, with Republicans gaining only eight seats. As well, in Idaho, incumbent Republicans once again swept all statewide elective offices, led by Governor Little winning by 27 percentage points over a token Democratic challenger and an avatar of the extreme right, and gained seats in the legislature.

For all the hue and cry, then, did gas prices matter in the voting booth? One would think that extremely high prices (\$5.29 at their zenith in mid-July 2022 in the Treasure Valley) would have given voters pause and seek change in policy through leadership turnover. But perhaps the impact was muted. Political Science literature is decidedly mixed on the question. Some findings point toward prices being influential, while other findings discourage that viewpoint.

[0] Overall, the effect that gas prices have on the President's parties has only gone down in recent years. Presidential approval ratings have become more static because of increasing political polarization, so events that would have led to larger changes are now smaller because people have more fixed opinions. This creates a higher floor and lower ceiling for approval ratings [12]

To attempt to answer these questions about gas prices and presidential approval, I have engaged in a lengthy, 7 ½ year participant observer project that correlates the daily gas price (unleaded) at a local independent gas station of mine in central Meridian, Idaho (Big Smoke on West Franklin Road), with the daily presidential approval rating (FiveThirtyEight.com). I simply record the daily gas price from this gas station. I record data from only this gas station to maintain measurement reliability. The project has spanned nearly the entirety of the Trump Administration and the entirety of the Biden Administration. The presidencies have had notably different correlations.

The Pearson correlation of the Trump presidency years is as follows:

Year	Pearson Correlation	Number of Data Points
2017	-.32	273
2018	.53	52
2019	.14	365
2020	-.18	365

Table 1

In addition, for the Biden presidency years to date, we have:

Year	Pearson Correlation	Number of Data Points
2021	-.75	342
2022	-.69	365
2023	-.03	365
2024 (through November 1st)	.01	306

Table 2

We can conclude from this exercise that some years are more impactful than others, and the extent to which Biden is held accountable for gas prices tended to be more so than was Trump. The simple mean value for the annual Pearson correlations during the Biden Administration is $-.37$, while the absolute mean value for the annual Pearson correlations during the Trump Administration is $.29$, with the simple mean value for Trump being $.04$ as negative and positive correlations cancel each other out.

1.2. A Second Cut at the Evidence in Idaho: Public Policy Survey

But what of Idahoans, more specifically? Do they exhibit similar political consequences as they consider gas prices? In the 2023 Idaho Public Policy Survey, a representative sample of 1,000 Idahoans was asked the following question. "What influence did the price of gas have on who you voted for in November's election."

The topline or overall results are as follows:

A great deal of influence = 30.0%

Some influence = 17.4%

A little bit of influence = 9.3%

No influence = 39.5%

The split in the public is almost exact: half found them to be influential, and half did not. On first glance, any impact is dimmed at best with only half of the public sufficiently geared up to cast their ballots based on high gas prices. Even if we are impressed with half the public finding gas prices to be important, then we do not have any clear sense of direction.

However, examining the results closer, we do have a stronger weathervane to view. The partisan lens appears to be critical in processing gas prices information onto political outcomes. If we break down the results by partisan identification, we are left with the following results.

Influence of Gas Prices On Your Vote?	Democratic Identifiers	Independent Identifiers	Republican Identifiers
A Great Deal / Some	16.3%	51.4%	62.2%
A Great Deal	9.6%	29.6%	44.0%
Some	6.6%	21.8%	18.3%
A Little Bit / None	83.1%	44.8%	35.2%
A Little Bit	8.4%	6.3%	13.3%
None	74.6%	38.5%	22.4%
Number of Respondents	166	395	339

Table 3

There is a 65% difference among Democratic identifiers between those who believed it provided a great deal of influence (9.6%) as opposed to no influence at all (74.6%). There is nearly a 40% difference among Republican identifiers between those who believed it provided a great deal of influence (62.2%) as opposed to no influence at all (22.4%). There is a much smaller gap for Independent identifiers: a nine percentage point difference between those who believed it provided a great deal of influence (29.6%) as opposed to no influence at all (38.5%).

The story becomes clearer, from a partisan perspective. Democrats were far more likely to consider other factors in their vote choice in Idaho, as opposed to gas prices, while Republicans clearly had gas prices as a focal point for their

vote choice. Independents show a slight preference toward placing less importance on gas prices in vote choice. There was every opportunity for voters to take advantage of these prices and punish the party in the White House, which gets blame for all economic maladies [13]. It appears that Idaho Republicans took advantage of this opportunity.

However, there are some surprising results. When asked whether Idaho is headed in the right direction or is on the wrong track, there is a similar yet unexpected stark split to that of partisan leanings.

"Do you think things in Idaho are generally headed in the right direction, or do you feel that things are off on the wrong track?"

Idaho Is Headed....	Gas Price Influence On Vote Choice?	
	Great Deal / Some Influence	Little Bit / No Influence
In The Right Direction	53.2	35.7
On The Wrong Track	33.1	50.0

Table 4

This is somewhat surprising, as high gas prices would seem to affirm the "wrong track" sentiment, rather than the "right direction" one, but Idahoans who believed the state was headed in the right direction tended to place greater importance on gas prices by about 17 percentage points. This could indicate general satisfaction with government, despite the high gas prices.

Perhaps a better way of looking at it is to prioritize issues. For those who think the economy and jobs are high priorities for Idaho state government, the evidence shows they pay more attention to gas prices in their vote choice.

"Should the Idaho Legislature Prioritize Jobs and the Economy?"	Gas Price Influence On Vote Choice?	
	Great Deal / Some Influence	Little Bit / No Influence
Top Priority	70.7	57.4
Moderate Priority	23.0	33.4
Low Priority	5.1	6.8

Table 5

In a similar vein, those respondents who prioritized taxation also showed a vast difference in their use of gas prices in their vote choice.

Should the Idaho Legislature Prioritize Taxation?	Gas Price Influence On Vote Choice?	
	Great Deal / Some Influence	Little Bit / No Influence
Top Priority	66.9	42.6
Moderate Priority	27.0	42.8
Low Priority	3.6	10.0

Table 6

For those who placed taxation as a top priority issue, those who were highly influenced by gas prices while they voted outnumber those who were not influenced much by 27 percentage points. Conversely, those who placed taxation as either a moderate or a low priority were nearly 16 percentage points more likely to give little or no importance to gas prices in their vote choice.

All of this evidence leads to a fundamental conclusion. Whoever tends to place higher priority on economic issues in general tends to give higher importance to high gas prices in voting. In short, this exercise has identified economic voters, which has a long tradition in political science scholarship. This perspective stands to reason as a perennial motivation in voting behavior, as the economic voting thesis strongly suggests that "[w]hen you think economics, think elections. When you think elections, think economics" [13]. This seems to be borne out, in Idaho and across the country, when looking more closely at the impact of gas prices on individual political decisions.

1.3. A Third Cut at the U.S. Evidence: Nationwide Survey

What of a national perspective on the political impact of gas prices? Verasight, a survey research firm, conducted a nationwide random stratified survey from 7 September – 13 September 2023, N = 2000 respondents. The survey asked questions about American politics and social issues. One of the questions asked was the following.

"What influence did the price of gas have on who you voted for in last November's election?"

The topline results were as follows:

A great deal of influence = 22%

Some influence = 24%

A little bit of influence = 14%

No influence = 41%

These national results mirror those found in the Idaho Public Policy Survey: 46% found gas prices to be somewhat or very influential, while 55% found gas prices to have little or no influence. (Rounding error allows these results to sum to 101%).

What of the partisan breakdown nationally? The results are below.

Influence of Gas Prices On Your Vote?	Democratic Leaners and Identifiers	Independent Identifiers	Republican Leaners and Identifiers
A Great Deal	13%	13%	35%
Some	23%	19%	27%
A Little Bit	15%	14%	12%
None	49%	54%	26%

Table 7

These results, once again, reflect the views of Idahoans in that there is a strong partisan component to the impact of gas prices on vote choice. By a nearly 2-to-1 margin (62% to 36%), Republican leaners and identifiers say that gas prices had a great deal or some influence on their vote choice during the 2022 elections, as opposed to Democratic leaners and identifiers who had that same strong reaction to gas prices. And by that same nearly 2-to-1 margin (64% to 38%), Democratic leaners and identifiers say that gas prices had a great deal or some influence on their vote choice, as opposed to Republican leaners and identifiers who had that same strong reaction to gas prices.

Verasight also conducted a nationwide survey, with a random stratified sample (N = 1000), from 1 – 11 October 2024. As

in 2023, there were a variety of political and social questions on the survey, with one of the questions being the following. “What influence will the price of gas have on who you vote for in this November’s presidential election?”

The topline results were as follows:

A great deal of influence = 22%

Some influence = 29%

A little bit of influence = 13%

No influence = 37%

There is a 5% point shift upward for “Some influence” and a 4% shift downward for “No influence” as compared to 2022.

What of the partisan breakdown nationally in 2024? The results are below.

Influence of Gas Prices On Your Vote?	Democratic Leaners and Identifiers	Independent Identifiers	Republican Leaners and Identifiers
A Great Deal	12%	16%	34%
Some	24%	29%	33%
A Little Bit	12%	12%	13%
None	52%	43%	21%

Table 8

The partisan divide is reinforced in 2024, with Republican leaners and identifiers increasing their “A Great Deal” and “Some” influence by 5%, Independents increasing their “A Great Deal” and “Some” influence by 13%, and Democratic leaners and identifiers not changing their “A Great Deal” and “Some” influence at all. The gulf is wide between Republicans and Democrats (31%), and is quite large between Republicans and Independents as well (22%). The gap between Democrats and Independents is not wide in comparison (9%).

The takeaway is unmistakable, looking across elections and electorates: gas prices are clearly filtered through a partisan lens, whether in Idaho or across the country, as are so many other political issues in this era of political polarization. This polarized perspective is relatively easier to adopt with gas prices, as there are many more television news reports about high gas prices as opposed to low gas prices [7]. The incumbent party will always play defense with high gas prices, while the challenger party will go on offense. This dynamic is likely to continue.

1.4. An Examination of Canadian Evidence

Canada and the U.S. share much: a lengthy border, friendly relations for centuries, close military and economic alliances, the same colonial power, representative democracies, advanced industrialized economies, and diverse immigrant populations, among other features. Given the closeness of the two countries, we might expect similar behaviors on gas prices. I begin to test this idea, below, with some preliminary data.

Before beginning, there are significant differences between Canada and the U.S. Political accountability runs through Parliament via the Prime Minister in Canada, and while the presidentialization of the Prime Minister is a point of discussion, there is still a diffuseness of attribution through political parties that is built into the Westminster system, perhaps shielding the Prime Minister from policy accountability [14]. Additionally, there are federal and provincial carbon taxes on gasoline sales. In Canada, the nationwide carbon price is \$80 per ton in 2024 [15]. Provincial carbon taxes range from 14 – 17 cents per liter of gas. Notably, the gas prices patterns in Canada and the US are similar [16].

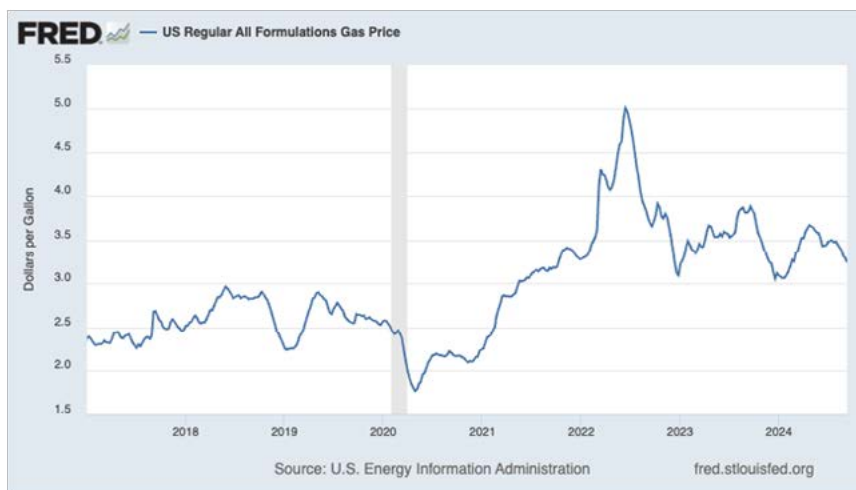


Figure 1

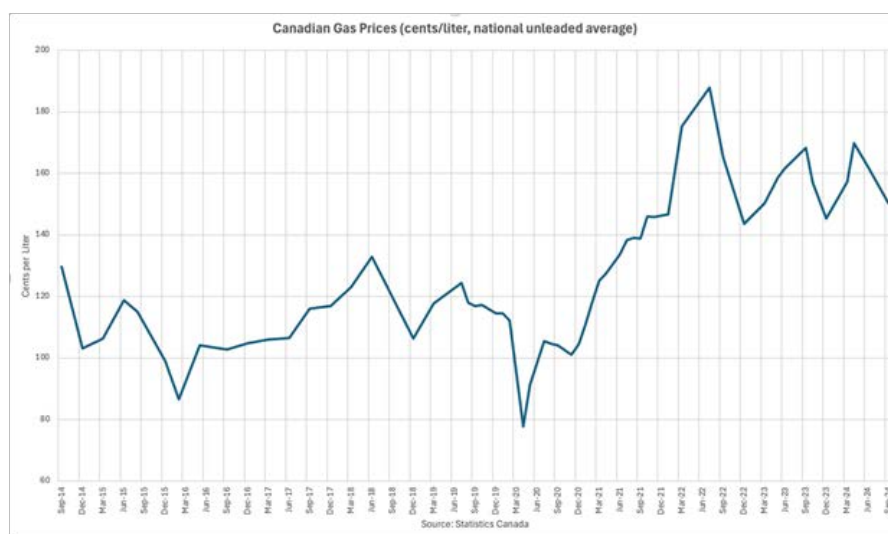


Figure 2

(Author-Generated Graph).

Given these similar price patterns, I will run a simple Pearson correlation test of prime ministerial approval and gas prices to see if there are political patterns to gas price movements akin to those in the U.S. The Canadian data on prime ministerial approval come from Angus Reid Canada (2014-2024) and the gas prices data come from Statistics Canada (2014-2024) [17]. Angus Reid Canada surveyed Canadians 57 times during the 2014-24 period on prime ministerial approval, hence the correlation with gas prices will be with an $N = 57$ [18-28].

Here is the correlation between prime ministerial approval and gas prices:

$$r_{\text{approval, gas prices}} = -.65$$

Across this time period, therefore, as gas prices rose, prime ministerial approval dropped, and vice versa. Of course, this is hardly causative evidence, as many other potential

factors must come into analytical play that could render the correlation to be spurious, such as geopolitical events, the global oil market, and domestic production. There is no partisan dimension to the Canadian analysis, either, other than nearly the entirety of the approval dataset is of Justin Trudeau's premiership. However, this exercise is suggestive of an economics and politics connection of a primary order in Canada, similar to one that I have found in the U.S. between the pump and the halls of government.

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