

# BACKGROUND

No. 2949 | SEPTEMBER 4, 2014

## What Contributes to Gas Prices and Solutions to Help

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### Abstract

*Americans have become accustomed to high gasoline prices. For the past three years, the average price of regular gasoline in the U.S. has averaged above \$3.00 per gallon. High gasoline prices not only hurt consumers at the pump, but also raise the costs of all goods and services that depend on transportation. Gasoline prices in the U.S. have dropped slowly over the past few months and are projected to continue to slide through the end of the year, despite increased unrest in the Middle East. Congress can and should do more to increase energy supplies domestically and to lower gasoline prices by opening energy markets and eliminating nonsensical policies that artificially drive prices higher.*

Drivers recently received a bit of welcome news when the Energy Information Administration projected that gasoline prices would likely decline throughout the rest of 2014 to around \$3.30 per gallon after reaching a high of \$4 per gallon in March.<sup>1</sup> For several years, paying more than \$3.50 for a gallon of gasoline had been the new normal, and for many drivers that price is uncomfortably high.<sup>2</sup>

High prices at the pump driven by market forces are not a compelling reason for the federal government to intervene in energy markets, but they should prompt policymakers to examine government policies that artificially increase gasoline prices. To that end, Congress and the Administration should implement policies that open access to domestic resources and reduce regulatory obstacles that prevent energy markets from working more efficiently.

### KEY POINTS

- Crude oil is a globally traded commodity and the largest contributing factor in the price of U.S. gasoline. Global demand, supply disruptions, and the value of the dollar also influence gas prices.
- The most effective response to price volatility is to allow markets to respond to supply and demand changes without government intervention.
- Increased domestic production would clearly and substantially benefit the U.S. economy.
- Increased U.S. oil production would have important global effects, such as cushioning future disruptions and diluting the perceived grip that OPEC and other unfriendly government regimes have on oil supply.
- To continue the downward trend in gas prices and enable American companies to be more competitive in global markets, Congress should remove unnecessary restrictions and interventions in the energy market, including the crude oil export ban, the renewable fuel standard, Tier 3 regulations, the Jones Act, and drilling bans on federal lands and waters.

This paper, in its entirety, can be found at <http://report.heritage.org/bg2949>

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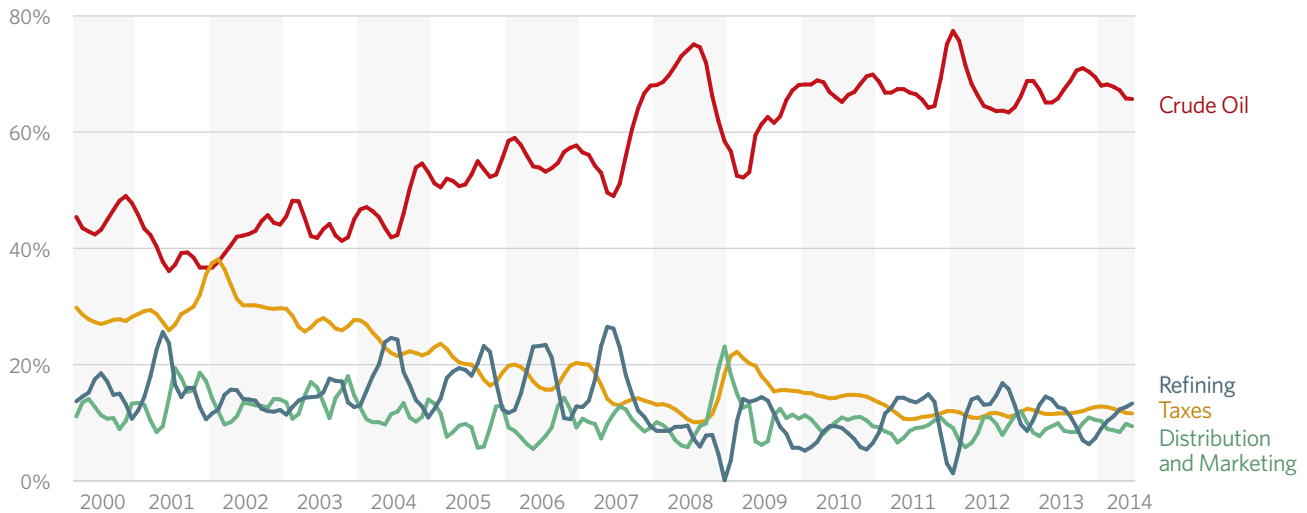
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CHART 1

## Where Your Gas Money Goes

Crude oil is the largest component of the cost of regular gasoline, accounting for at least 60 percent of the total over the past five years.

SHARE OF COST OF REGULAR GASOLINE BY COMPONENT (THREE-MONTH AVERAGES)



Source: U.S. Energy Information Administration, "Gasoline and Diesel Fuel Update," [http://www.eia.gov/petroleum/gasdiesel/gaspump\\_hist.cfm](http://www.eia.gov/petroleum/gasdiesel/gaspump_hist.cfm) (accessed July 28, 2014).

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## What Causes Changes in Gas Prices?

Crude oil contributes the largest component to the price of gasoline. As of June 2014, crude prices made up 67 percent of the price of gas, with refining (14 percent), taxes (12 percent), and retailing and transportation (8 percent) accounting for the rest.<sup>3</sup> The federal excise tax on gasoline is 18.4 cents per gallon and 24.4 cents per gallon on diesel fuel. States levy their own taxes, ranging from a low of 12.4 cents per gallon in Alaska to more than 52.6 cents per gallon in California.<sup>4</sup>

Because oil is a globally traded commodity, different factors around the world affect the supply of and demand for oil, in turn affecting the price Amer-

icans pay at the gas pump. Growing demand for oil in other parts of the world, especially in rapidly developing regions such as India and China, put upward pressure on prices. Bad weather or geopolitical risks can disrupt supply, increasing prices. For instance, severe weather can shut down a pipeline or refinery, choking supply and driving prices higher.

Even the mere threat of such events can drive up prices because a potential supply disruption can affect oil futures markets. Speculators working in futures markets can increase the price of gasoline if inventories build up while sellers wait for higher prices, but that effect is marginal because compa-

1. Timothy Cama, "Gas Prices to Drop Through the End of 2014," *The Hill*, August 12, 2014, <http://thehill.com/policy/energy-environment/214946-gas-prices-to-drop-through-the-end-of-2014> (accessed August 18, 2014).

2. AAA, "Gas Prices Continue to Slide Despite Geopolitical Tensions," *Daily Fuel Gauge Report*, July 22, 2014, <http://fuelgaugereport.aaa.com/gas-prices-continue-to-slide-despite-geopolitical-tensions/> (accessed August 21, 2014).

3. U.S. Energy Information Administration, "Gasoline and Diesel Fuel Update," July 7, 2014, <http://www.eia.gov/petroleum/gasdiesel/> (accessed July 8, 2014). Figures do not total 100 percent because of rounding.

4. Figures exclude the federal gas tax. American Petroleum Institute, "What's Up with Gasoline Prices?" June 2014, <http://www.api.org/-/media/Files/Oil-and-Natural-Gas/Gasoline/Whats-Up-With-Gasoline-Prices-HiRes.ashx> (accessed August 21, 2014).

nies must eventually offload those inventories. Too often when gas prices rise, politicians and critics of Wall Street blame speculators and allege market manipulation, but these criticisms are mistaken and unfounded.<sup>5</sup> The Federal Trade Commission, the Federal Reserve, and others have thoroughly investigated allegations of speculator malfeasance and found no correlation between speculation and the price of any commodity.<sup>6</sup> Importantly, speculators in futures markets can also drive down near-term prices on expectations of increases in supplies as well as provide liquidity and risk protection for both producers and consumers.<sup>7</sup>

The value of the U.S. dollar also affects the price that drivers pay at the pump. Since oil is a global commodity and trades in U.S. dollars, when the dollar becomes weaker, more dollars are needed to buy the same amount of oil. For instance, when the Federal Reserve's quantitative easing policies pumped money into the economy over the past few years, oil became more expensive for Americans. Conversely, when the dollar becomes stronger, such as during its recent 10-month high, a dollar can buy more oil.<sup>8</sup>

Finally, global spare capacity also influences how quickly and significantly prices change. The Energy Information Administration defines spare capacity as the amount of oil that can be brought on the market within 30 days and sustained for 90 days.<sup>9</sup> When oil markets are tight and have low spare capacity, the producers have less ability to respond by increasing supplies.

Additional U.S. oil production can significantly increase global spare capacity. Opponents of expanding domestic oil production argue that any increases in U.S. output will be offset by decreases in output from the Organization of the Petroleum Exporting Countries (OPEC). Consequently, higher American oil production will not affect gas prices.<sup>10</sup>

Even though OPEC is often labeled a cartel, it does not necessarily act like one, nor has it ever been particularly effective in restricting oil supplies. OPEC is largely unable to restrict supplies and control oil prices because its members have a strong incentive to cheat and increase oil production above their quotas. As American University professor of international relations Jeff Colgan writes, "A cartel needs to set tough goals and meet them; OPEC sets easy goals and fails to meet even those."<sup>11</sup> Even if OPEC members were to restrict supply as U.S. production supplants OPEC supplies, global spare capacity would grow and provide a welcome cushion against any future disruptions.<sup>12</sup>

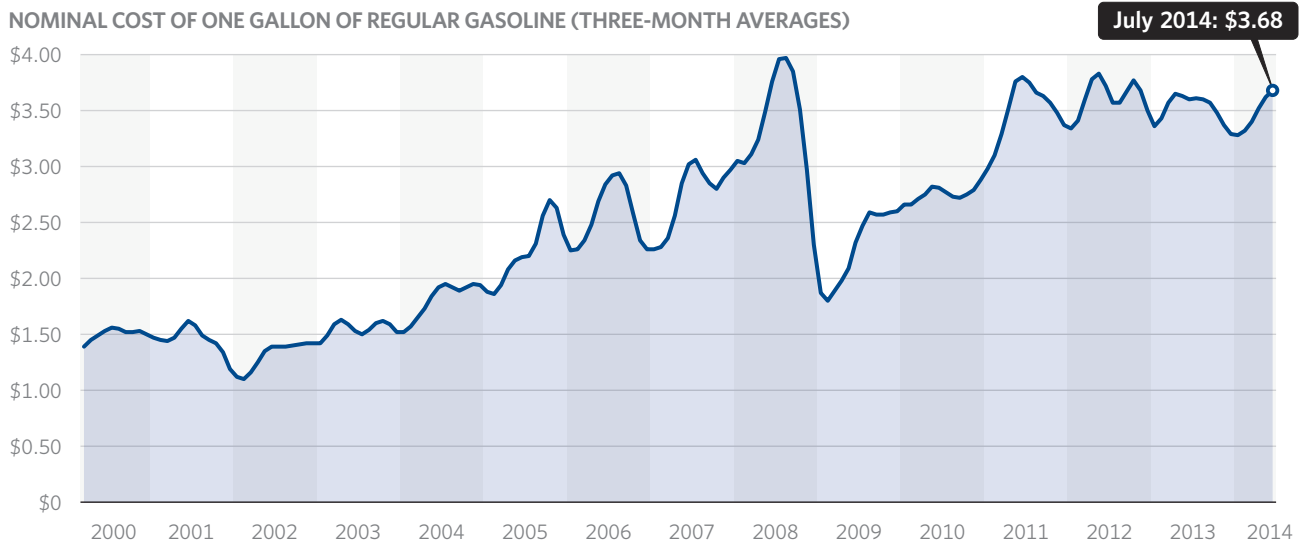
In fact, all of these reasons have contributed in some degree to the recent fall in gasoline prices. Surging U.S. production and relatively weak demand have eased market concerns despite potential supply disruptions in the Middle East. As a result, futures prices are falling, which translates into lower prices at the pump, and the glut of supply is building the cushion of spare capacity.

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5. Alex Seitz-Wald, "Progressive Lawmakers Warn a 'Significant Portion' of Gas Prices Is Due to Speculation, Call for Crack Down," ThinkProgress, April 16, 2011, <http://thinkprogress.org/economy/2011/04/16/158425/progressive-lawmakers-oil-speculation/> (accessed August 5, 2014).
  6. George M. Korniotis, "Does Speculation Affect Spot Price Levels? The Case of Metals with and without Futures Markets," Federal Reserve Board, Divisions of Research & Statistics and Monetary Affairs, Finance and Economics Discussion Series, May 26, 2009, <http://www.federalreserve.gov/pubs/feds/2009/200929/200929pap.pdf> (accessed August 21, 2014).
  7. David W. Kreutzer, "Oil Speculators Help Consumers at the Gas Pump," Heritage Foundation *Issue Brief* No. 2003, July 24, 2008, <http://www.heritage.org/research/reports/2008/07/oil-speculators-help-consumers-at-the-gas-pump>.
  8. Angela Moon, "Shares Down as Wall Street Tumbles; Dollar Adds to Monthly Gain," Reuters, July 31, 2014, <http://www.reuters.com/article/2014/07/31/us-markets-global-idUSKBN0G00DP20140731> (accessed August 21, 2014).
  9. U.S. Energy Information Administration, "What Drives Crude Oil Prices?" <http://www.eia.gov/finance/markets/supply-opec.cfm> (accessed July 8, 2014).
  10. The 12 major oil-producing nations of OPEC produced more than 40 percent of the world's oil in 2013. Benoit Faucon, "OPEC Says Oil Production, Market Share Fell in 2013," *The Wall Street Journal*, July 18, 2014, <http://online.wsj.com/articles/opec-says-oil-production-market-share-fell-in-2013-1405682597> (accessed August 5, 2014).
  11. Jeff Colgan, "The Emperor Has No Clothes: The Limits of OPEC in the Global Oil Market," Universität Heidelberg, September 13, 2012, [http://www.uni-heidelberg.de/md/awi/peio/colgan\\_13.09.2012.pdf](http://www.uni-heidelberg.de/md/awi/peio/colgan_13.09.2012.pdf) (accessed August 21, 2014).
  12. Lananh Nguyen, "OPEC Spare Capacity to Surge amid U.S. Shale Boost, IEA Says," Bloomberg, May 14, 2013, <http://www.bloomberg.com/news/2013-05-14/opec-spare-capacity-to-surge-amid-u-s-shale-boost-iea-says.html> (accessed August 6, 2014).

CHART 2

## Gas Prices Remain High, Yet Steady

NOMINAL COST OF ONE GALLON OF REGULAR GASOLINE (THREE-MONTH AVERAGES)



Source: U.S. Energy Information Administration, "Gasoline and Diesel Fuel Update," [http://www.eia.gov/petroleum/gasdiesel/gaspump\\_hist.cfm](http://www.eia.gov/petroleum/gasdiesel/gaspump_hist.cfm) (accessed July 28, 2014).

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## Government Policies That Inhibit Markets

The most effective response to variations in energy prices is simply to allow markets to work. Government restrictions, regulations, and attempts to force technologies into the market impede the free market's efficacy. To help American fuel consumers, Congress and the Administration should:

- **Lift the drilling bans and approve the Keystone XL pipeline.** Congress should lift the ban on exploration in the eastern Gulf of Mexico and the Atlantic and Pacific coasts and should conduct more lease sales off Alaska's coasts. Alaska's Arctic National Wildlife Refuge is another abundant source of oil, with an estimated 10.4 billion barrels of oil beneath a few thousand acres. Furthermore, if President Barack Obama had approved the permit for the Keystone XL pipeline when the Department of State first concluded that the pipe-

line was environmentally safe, the U.S. would have begun importing up to 830,000 barrels of oil per day from Canada to the Gulf Coast refineries as early as 2013.<sup>13</sup> While predicting the exact impact of increased imports of Canadian oil on gasoline prices is difficult, increased domestic production would clearly have substantially benefited the U.S. economy. According to Citi Global Perspectives & Solutions, aggressive domestic production would yield significant economic benefits and put downward pressure on prices.<sup>14</sup>

- **Repeal the Renewable Fuel Standard (RFS).** More commonly known as the ethanol mandate, the RFS mandates that refineries blend increasing amounts of ethanol into gasoline each year, reaching 36 billion gallons in 2022. The Congressional Budget Office recently published a

13. U.S. Department of State, "The Keystone XL Pipeline: The Role of the State Department," August 19, 2011, <http://www.state.gov/documents/organization/170556.pdf> (accessed July 8, 2014).

14. Edward L. Morse et al., "Energy 2020: North America, the New Middle East?" Citi GPS, March 20, 2012, <https://ir.citi.com/%2FSyMM9ffgfOZguStaGpnCw5NhPkvdMbbnO2HMA05ZX%2BJHjYVS07GqhxF2wMk%2Bh4tv7DEZ5FymVM%3D> (accessed August 21, 2014).

report showing the RFS will increase gas prices by 13 cents to 26 cents per gallon as soon as 2017.<sup>15</sup> Multiple federal agency and government-backed studies demonstrate the RFS has harmed Americans, driving up fuel and food prices.<sup>16</sup>

- **Lift the ban on crude oil exports.** Removing government restrictions on crude oil exports would decrease gas prices and grow the American economy by creating more opportunities to produce and sell oil and a more efficient distribution system for refining it. A recent IHS study projects even greater benefits, finding that removing the ban would lower gasoline prices by 8 cents per gallon, saving motorists \$265 billion over 15 years and adding nearly 1 million jobs by 2018.<sup>17</sup>
- **Prohibit greenhouse gas and Tier 3 regulations.** The Department of the Interior has already suspended oil and gas leases because of their alleged impact on climate change, and refineries are a coming target of the Environmental Protection Agency (EPA). Its greenhouse gas regulations will block and increase the cost of energy production, and producers will pass those costs on to consumers. Yet the regulations will have no meaningful impact on the climate. The EPA has also finalized Tier 3 gas regulations to lower the amount of sulfur in gasoline beginning in 2017. More stringent sulfur regulations could add 6 cents to 9 cents per gallon to the cost of manufacturing gasoline, and the EPA has acknowledged the more stringent regulation will produce no measurable improvement in air quality.<sup>18</sup>

- **Repeal the Jones Act.** Signed into law almost a century ago, the Jones Act mandates that any goods shipped by water between two points in the United States must be transported on a U.S.-built, U.S.-flagged vessel with a crew that is at least 75 percent American. By preventing foreign competition, the Jones Act significantly increases domestic maritime shipping prices, driving up costs for American businesses and consumers. A February 2014 International Energy Agency report estimates that repealing the Jones Act would reduce gasoline prices by 15 cents per gallon.<sup>19</sup> The Jones Act creates an unnecessary and expensive hurdle for shipping crude oil from coast to coast and Congress should repeal it.

### Free-Market Reforms Will Combat High Gas Prices

High gas prices hurt consumers not only at the pump but also by raising the cost of all goods and services that depend on transportation. Higher prices mean families buy fewer goods and services, slowing economic growth and job creation. Congress should allow the market to determine prices by implementing the free-market reforms to improve the market's ability to respond.

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15. Congressional Budget Office, "The Renewable Fuel Standard: Issues for 2014 and Beyond," June 2014, <http://www.cbo.gov/publication/45477> (accessed August 21, 2014).

16. Randy Schnepf and Brent D. Yacobucci, "Renewable Fuel Standard (RFS): Overview and Issues," Congressional Research Service Report for Congress, March 14, 2013, <http://fas.org/sgp/crs/misc/R40155.pdf> (accessed August 21, 2014).

17. Press release, "U.S. Crude Oil Export Decision," IHS, May 29, 2014, <http://www.ihs.com/info/0514/crude-oil.aspx?ocid=coe:pressrls:01> (accessed August 21, 2014).

18. David C. Tamm and Kevin P. Milburn, "Addendum to Potential Supply and Cost Impacts of Lower Sulfur, Lower RVP Gasoline," Baker & O'Brien Incorporated, March 2012, <http://www.api.org/news-and-media/news/newsitems/2012/mar-2012/-/media/Files/News/2012/12-March/Addendum-Potential-Impacts-of-Lower-Sulfur-Lower-RVP-Gasoline-Report.ashx> (accessed August 21, 2014).

19. Natasha Doff and Naomi Chase, "Frozen East Coast Pays as Law Blocks Cheaper Fuel Flows," Bloomberg, February 28, 2014, <http://www.bloomberg.com/news/2014-02-28/frozen-east-coast-pays-as-law-blocks-cheaper-fuel-flows.html> (August 7, 2014). The full report is available for purchase from the International Energy Agency.