## McCullough Research

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Date: June 23, 2015

To: McCullough Research Clients

From: Robert McCullough

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Subject: Market Power in West Coast Gasoline Markets: An Update

McCullough Research maintains that today's gasoline prices on the West Coast represent an exercise of uncompetitive market power by gasoline producers who operate in a highly concentrated industry. What follows is the latest update in our series of reports on gasoline prices and refineries in the West.<sup>1</sup> We estimate that in the four months after the Torrance explosion, market power has cost consumers in California, Oregon, and Washington nearly \$2.8 billion above what they would have paid had gas prices remained commensurate with crude oil prices.

On February 1, 2015 a strike began at a Tesoro refinery in Martinez, California, and on February 18 an explosion occurred in Torrance, at another California refinery, owned by Exxon Mobil. Prior to these events, consumers on the West Coast had been enjoying low gasoline prices, largely due to the lowest crude oil prices since 2009.

While it appears reasonable to assume that the Martinez strike and Torrance explosion both disrupted the supply of gasoline in California – which provides the majority of all West Coast gas production – there is no real evidence of any such supply disruption.

What follows are newly updated charts of the year-over-year production and storage of gasoline by California refineries. As in previous reports, there remains no evidence that these measures were significantly impacted by February's events. The type of gasoline tracked, called CARBOB, is that which is intended for sale within California's borders.<sup>2</sup> The data derive from a weekly report published by the California Energy Commission.<sup>3</sup>

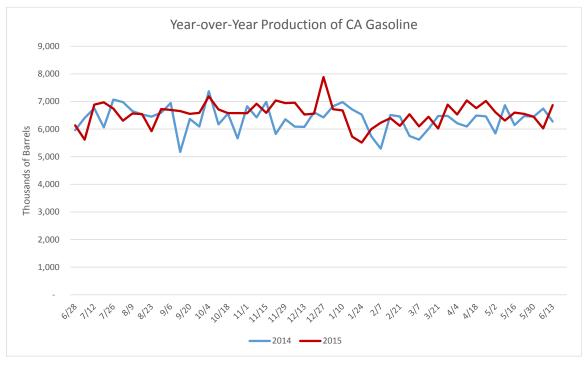
<sup>1</sup> The first McCullough Research report, Market Power in West Coast Gasoline Markets (released on March 23, 2015), along with monthly updates, can be found at http://www.mresearch.com/reports.html.

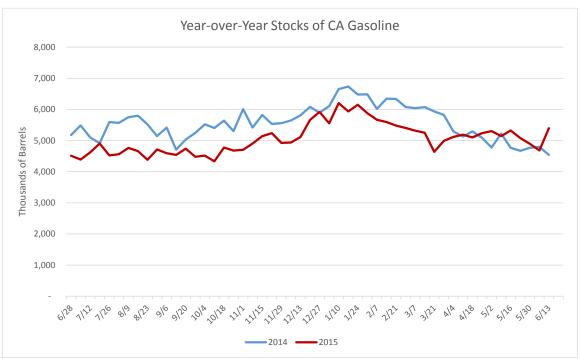
<sup>&</sup>lt;sup>2</sup> CARBOB stands for California Reformulated Gasoline Blendstocks for Oxygenate Blending. It is defined by the State of California as "Unfinished motor gasoline that meets the requirements of the CA RBOB regulations promulgated by the California Air Resources Board." http://energyalmanac.ca.gov/gasoline/types\_of\_gasoline.html

<sup>&</sup>lt;sup>3</sup> http://energyalmanac.ca.gov/petroleum/fuels\_watch

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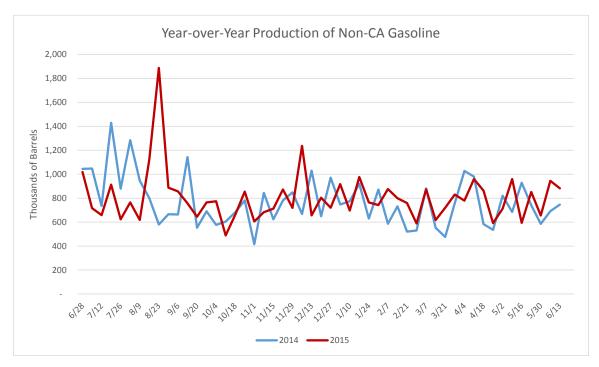


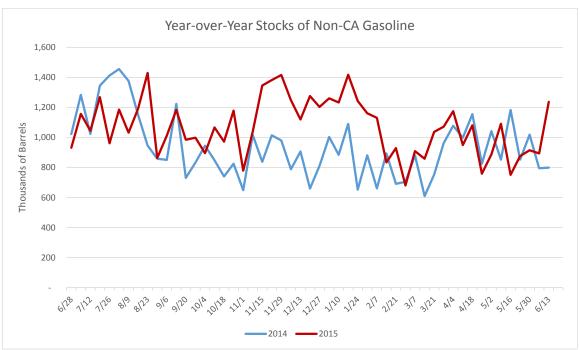
Stocks and production of gasoline in California refineries over the last few months have at times been slightly lower than a year ago, but overall do not exhibit a significant difference

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outside normal, weekly fluctuations. The production and stocks of gasoline intended for sale out-of-state have also been unaffected since the two refinery events in February:

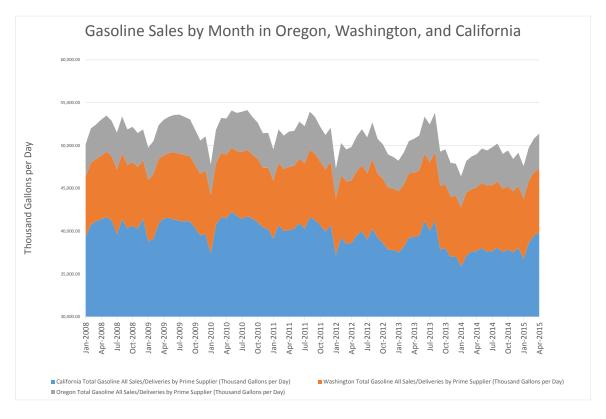




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The next reasonable assumption is that demand rather than supply is driving up the cost of gasoline on the West Coast. However, US EIA data on gasoline consumption show no major increase in demand:<sup>4</sup>

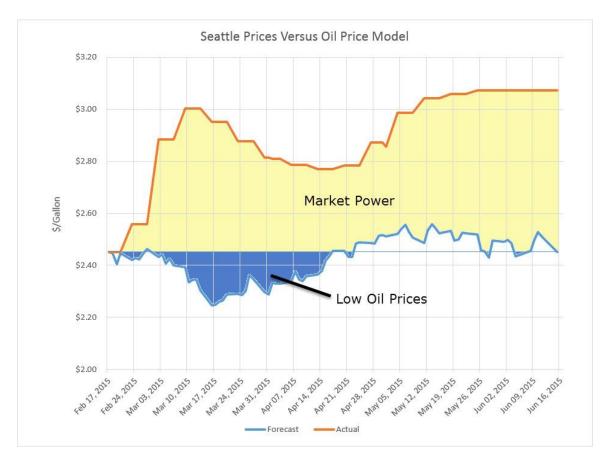


Gasoline consumption ticked up in March, but the total amount was only 4% higher than in March 2014. In addition, consumption of gasoline on the West Coast rose 2% from February to March of this year, while gas prices rose 22%. Consumption also ticked up moderately in April – a modest 1.1% over March levels. With this lack of evidence of an abnormal spike in demand, coupled with the aforementioned lack of a supply disruption, we conclude that recent high gas prices result from the exercise of market power in a concentrated industry.

Historically, gas prices have followed crude oil prices quite predictably. However, this has not been the case after the Torrance explosion. The graph below shows how much higher actual gasoline prices have been over forecasted prices, which are based on the price of crude:

<sup>4</sup> http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=C100050061&f=M

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Unfortunately, actual prices remain much higher than their expected levels. To date, over-priced gasoline has cost consumers in California, Oregon, and Washington an estimated \$2.79 billion since February 18, 2015.

Excess West Coast Fuel Costs after Torrance Fire		
2015	Avg \$/gal above forecast	Cost to consumers
Feb 18 - Mar 16	\$0.355	\$526,074,480.00
Mar 17 - Apr 13	\$0.544	\$740,689,804.40
Apr 14 - May 18	\$0.393	\$718,017,780.20
May 19 -Jun 15	\$0.577	\$813,767,290.00
Total	\$0.466	\$2,798,549,354.60