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Date: September 9, 2015

To: McCullough Research Clients

From: Robert McCullough

Jacob Gellman

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

Since February 2015, West Coast consumers may have been overcharged more than \$6 billion due to abnormally high gasoline prices. To explain recent price spikes, refiners have pointed to several highly-publicized supply disruptions. One such event was a February 18 explosion at the ExxonMobil gasoline refinery in Torrance, CA, following a fire at that facility. In subsequent weeks, gas prices rose significantly, despite unusually low crude oil prices around the globe. The industry offered this event, as well as a strike at a Martinez, CA refinery, as explanations for high prices. However, publicly available data show no significant impact on gasoline supplies during this time period.

McCullough Research continues to assert that abnormally high gas prices on the West Coast are a result of uncompetitive market power in the highly concentrated industry of gasoline producers.<sup>1</sup>

It should be noted that gas prices have little effect on the demand for actual gas purchases.<sup>2</sup> If the price of gasoline rises \$0.10 in one week, it does not change the distance of a worker's daily commute; she must still drive the same amount, regardless of the short-term fluctuation in price. Consumers are thus at the mercy of price setters, who, in a perfect world, set the price according to market forces. Unfortunately, we do not live in a perfect world.

In the six months following the Torrance fire, McCullough Research estimates that consumers in Washington, Oregon, and California have paid over \$6 billion more than they would have if gas prices had remained proportionate to oil prices:

<sup>&</sup>lt;sup>1</sup> Previous McCullough Research reports can be found at: http://www.mresearch.com/reports.html

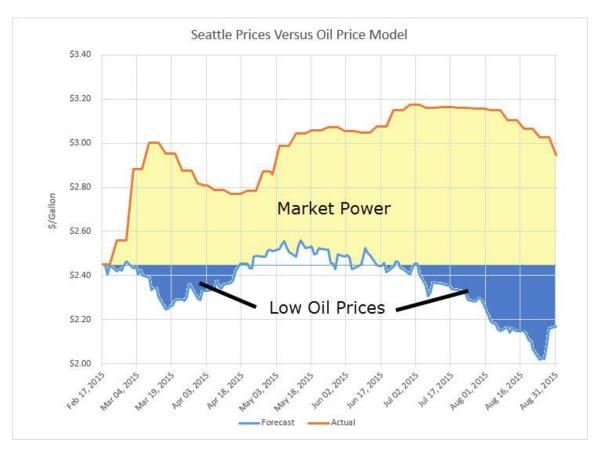
<sup>&</sup>lt;sup>2</sup> http://www.eia.gov/todayinenergy/detail.cfm?id=19191

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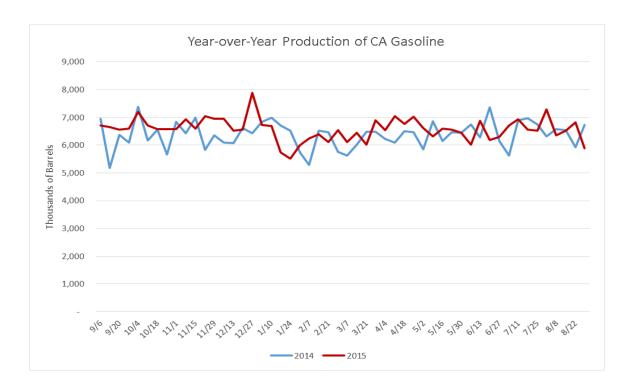
Excess West Coast Fuel Costs after Torrance Fire		
2015	Avg \$/gal above forecast	Cost to consumers
Feb 18 - Mar 16	\$0.370	\$525,361,054.70
Mar 17 - Apr 20	\$0.506	\$903,147,343.18
Apr 21 - May 25	\$0.457	\$814,174,109.54
May 26 - Jun 22	\$0.612	\$889,725,663.51
Jun 23 - Jul 20	\$0.775	\$1,093,043,644.34
Jul 21 - Aug 31	\$0.924	\$1,946,034,371.06
Total	\$0.607	\$6,171,486,186.33

Historically, gas prices have followed crude oil prices quite predictably. However, this has not been the case following the Torrance explosion. West Coast consumers, whose gasoline is provided almost solely by California refineries, have been subject to considerable market power following the alleged supply disruption:



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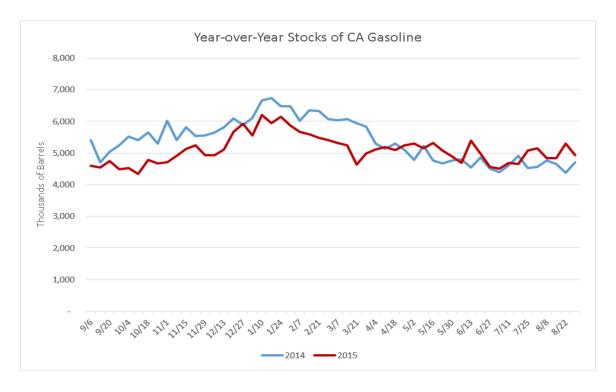
Contrary to industry claims, the Torrance explosion had no real impact on supply. Weekly data released by the California Energy Commission (CEC) show refiners' production and stocks of gasoline in the state, including gasoline intended for export, as well as CARBOB gasoline, which is intended for sale within California.<sup>3,4</sup> A year-over-year comparison demonstrates that CARBOB gasoline has experienced no discernible supply shocks:



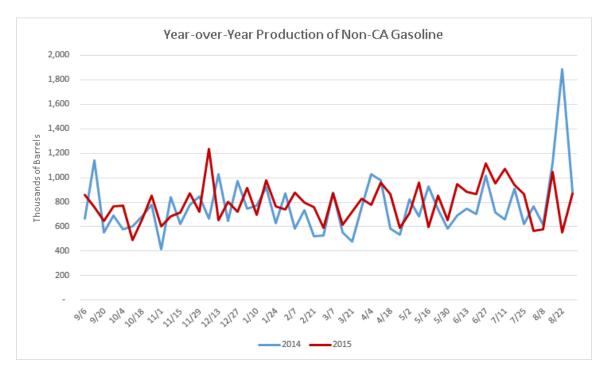
<sup>&</sup>lt;sup>3</sup> http://energyalmanac.ca.gov/petroleum/fuels\_watch

<sup>&</sup>lt;sup>4</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 California RBOB regulations promulgated by the California Air Resources Board." http://energyalmanac.ca.gov/gasoline/types\_of\_gasoline.html

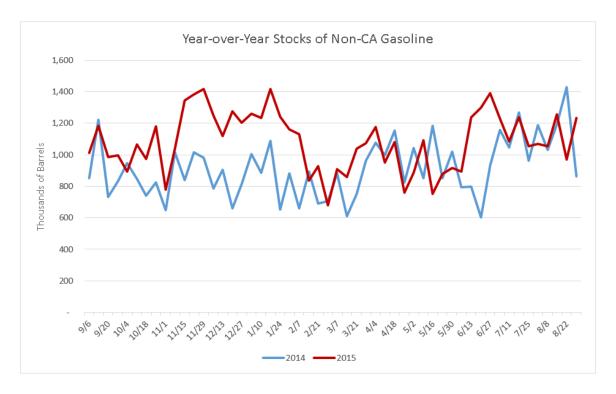
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Similarly, production and stocks of gasoline intended for export from California showed no significant decline compared to last year's levels, save for an anomalous week in August 2014:



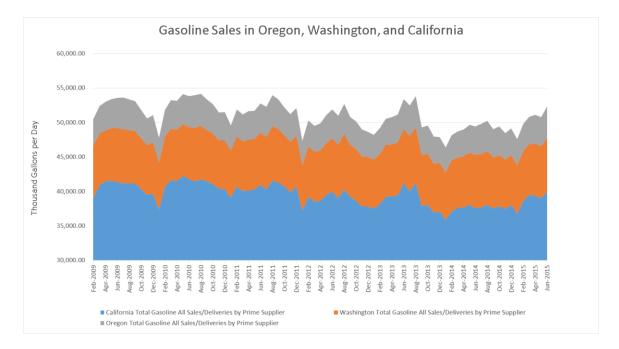
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With no evidence of a supply shortage, a logical person might attribute the recent high gas prices to an upsurge in the demand for gas. Yet demand for gas has not experienced any sharp increase, as shown by EIA data on gasoline consumption:<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=C100050061&f=M

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Gasoline consumption ticked up in March, but the total amount was only 4% higher than in March 2014. Seattle gasoline, which is principally supplied by Californian refineries, experienced a 13.4% price spike between the last week of February and the first week of March, its largest increase since prices there have been tracked. Overall, consumption of gasoline on the West Coast rose only 5% from February 2015 to June 2015, yet gas prices rose an astonishing 30.7%. It is clear that demand is not responsible for the exceedingly high prices.

The only reasonable conclusion to draw is that recent high gas prices are a result of market power leveraged by the highly concentrated refining industry in California. As consumers experience record high price spikes, California refiners have enjoyed record high profits, with margins nearly doubling over the first half of 2015.<sup>6</sup> It is no coincidence that these record profit margins have occurred at the same time that West Coast gasoline consumers have been overcharged in excess of \$6 billion.

<sup>&</sup>lt;sup>6</sup> "California Oil Refineries' Gross Profits Nearly Double in 2015," Ivan Penn and Samantha Masunaga, Los Angeles Times, July 21, 2015. Retrieved 7/23/15 from: http://www.latimes.com/business/la-fi-gas-profits-20150722-story.html#page=1