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Date: July 23, 2015

To: McCullough Research Clients

From: Robert McCullough

Ramon Cabauatan

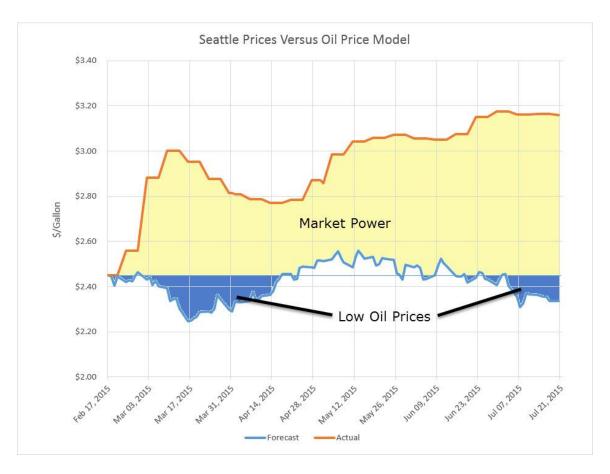
Subject: Market Power in West Coast Gasoline Markets: An Update

An ExxonMobil gasoline refinery in Torrance, CA experienced a fire and eventually an explosion on February 18, 2015. Over the weeks that followed, West Coast gas prices began rising significantly, despite unusually low crude oil prices around the globe. The refining industry continues to claim that the supply of gasoline was considerably impacted by the Torrance fire, a strike at a Martinez, CA refinery, and myriad planned and unplanned outages at California's various other refineries. However, publicly available data on gasoline supplies show no such impact. As in all our previous reports on the subject, McCullough Research continues to assert that abnormally high gas prices on the West Coast are due to an exertion of market power. In the five months following the Torrance fire, we estimate that consumers in California, Oregon, and Washington have paid over \$4 billion more than they would have if gas prices had remained proportionate to oil prices:

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 20	\$0.506	\$864,136,792.40
Apr 21 - May 25	\$0.457	\$785,704,042.20
May 26 - Jun 22	\$0.612	\$844,015,032.00
Jun 23 - Jul 20	\$0.775	\$1,071,872,760.00
Total	\$0.541	\$4,091,803,106.60

The figures in the table above compare actual gas prices to a forecast based primarily on the price of crude oil, which is the prevailing force behind fluctuations in the price of gasoline. This comparison is shown graphically below:

¹ Previous McCullough Research reports can be found at: http://www.mresearch.com/reports.html



Seattle prices are presented to illustrate the large effect that California's refineries have on all Western states' gasoline markets. This effect is due to the fact that California provides the lion's share of gasoline to the region. The assertion that the supply of gasoline has not been abnormally disrupted is backed by data released by the California Energy Commission (CEC), which publishes weekly reports on the production and stocks of gasoline at refineries in the state including gasoline intended for export and CARBOB gasoline which is intended for sale within California's borders.^{2,3}

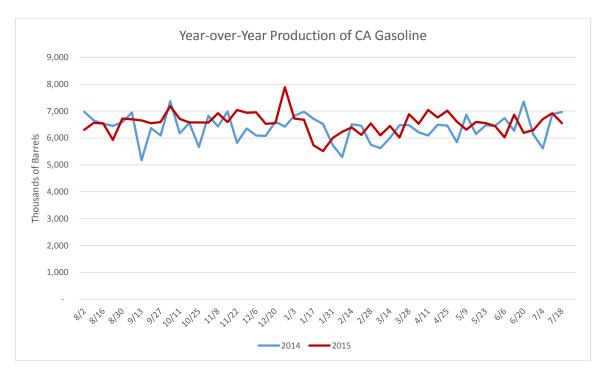
The CEC refinery data show that there has been no significant decline in the production or stocks of CARBOB. A year-over-year comparison demonstrates no discernible supply shocks:

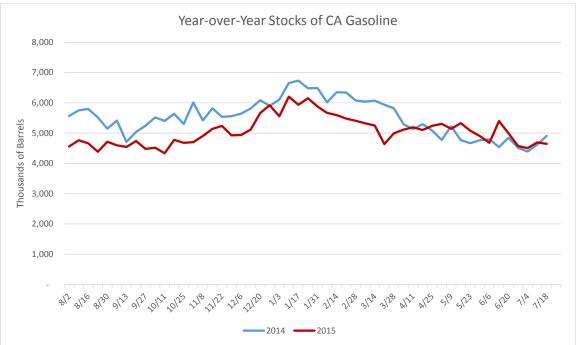
² http://energyalmanac.ca.gov/petroleum/fuels_watch

³ 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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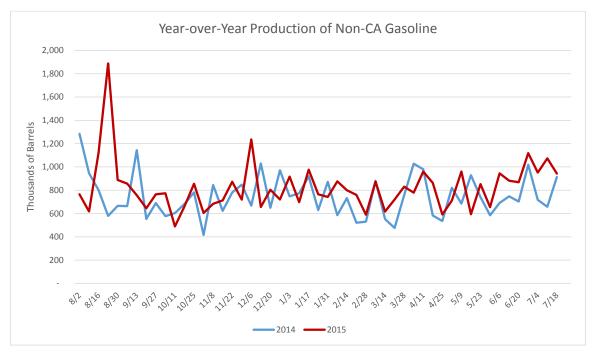


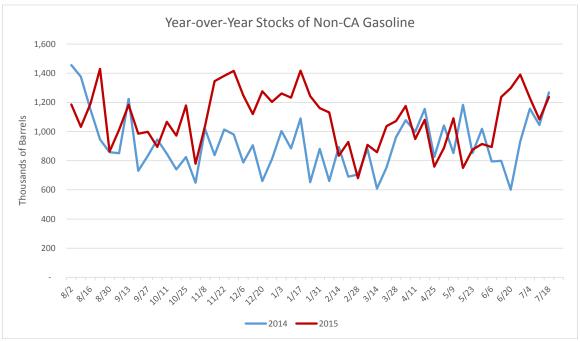


Similarly, the production and stocks of gasoline intended for sale outside of California also show no significant decline with respect to last year's levels:

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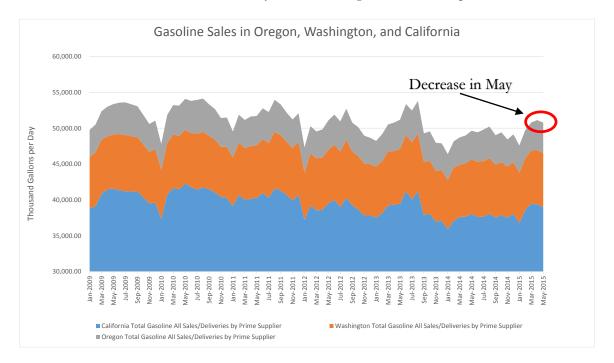


With no evidence of a supply shortage, one may attempt to blame recent high gasoline prices on a spike in demand for gas. However, demand for gas has not gone through any sharp

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increase, and in fact demand decreased between April and May 2015 – the most recent months for which data is available – as shown by EIA data on gasoline consumption:⁴



The most reasonable conclusion to draw is that recent high gas prices are a result of market power being leveraged by the highly concentrated refining industry in California. Unsurprisingly, the industry's profit margins have recently reached record highs – nearly doubling over the first half of 2015.⁵ 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 \$4 billion.

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

⁵ "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