

INFORMATION CAPSULE

Research Services

Vol 1405 February 2015 Christie Blazer, Supervisor

WHY LOWER OIL PRICES HAVE NOT RESULTED IN LOWER FOOD PRICES

At a Glance

Although oil prices are at their lowest level in six years, this has not yet translated into lower food prices. Economists agree that there will be a long lag time between the drop in oil prices and decreases in food prices. This paper reviews the reasons why food prices have continued to rise despite lower oil prices. Some of the price increases associated with providing breakfast and lunch to Miami-Dade County Public Schools' students during the 2014-2015 school year are also summarized.

Oil prices are at their lowest level in six years. By January 2015, crude oil prices had plunged more than 50% since June 2014, falling below \$50 a barrel. But in spite of lower oil prices, food prices increased significantly in 2014 (Fitzgerald, 2015; U.S. Department of Labor, 2015). Economist Chris Christopher estimated that consumers paid \$3.3 billion more for food in October 2014, compared to October 2013 (cited in Layne & Bose, 2014). The U.S. Department of Labor's (2015) Consumer Price Indices* for dairy products, fruits and vegetables, and meat, poultry, fish, and eggs all increased in December 2014. Analysts predict that food prices will continue to increase in 2015 (White, 2015; Doering, 2014).

Economists agree that the price of oil has the potential to reduce the cost of food. When food is purchased, consumers are not just paying for the actual food product, but also for the cost of processing and transporting that product (Flynn, 2015; McKenzie, 2015; Bellemare, 2013; Steiner, 2011). The U.S. Department of Agriculture's (USDA) Economic Research Service (2014) stated that food prices are "affected by fuel prices, labor wages, agribusiness contracting, imports, and other factors of production." According to the USDA, energy - including transportation - accounts for only about 9% of the cost of food (cited in Fitzgerald, 2015).

Analysts admit that lower fuel prices have not yet translated into lower food prices. They acknowledge that it is difficult to predict when decreases in food prices associated with cheaper oil will be seen. Most agree that there will be a long lag time between the drop in oil prices and decreases in food prices. There are differences of opinion regarding the length of this lag time, but estimates range from six to 18 months (Flynn, 2015; Goldstein, 2015; McKenzie, 2015; O'Neill, 2015; White, 2015; Jordan, 2014; USDA Economic Research Service, 2014).

*The Consumer Price Index is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services (U.S. Department of Labor, 2014).

Why Food Prices Have Increased

Following are some of the reasons why food prices have continued to rise despite lower oil prices:

High diesel fuel prices. The trucks that transport food operate on diesel fuel and almost twothirds of farm machines use diesel fuel. One of the major reasons why food prices have not decreased is that diesel fuel prices have not fallen as fast as gasoline prices. Analysts estimate that diesel prices have fallen by 26% over the past year, compared with a 38% decline in gasoline prices (Goldstein, 2015; O'Neill, 2015; Marquez, 2014; Taschler, 2014).

Experts maintain that consumers will not see a reduction in food products until diesel prices are lowered. There are several reasons why diesel fuel prices are expected to remain higher than gasoline prices at least for the time being:

- Although U.S. gasoline sales have been slowly declining since 2010 as cars become more fuel efficient, the diesel market has increased by 6% over the same time period.
- There is an increased demand for diesel as a heating fuel during the winter months.
- Changes in federal air pollution rules require cleaner burning diesel that is more expensive to produce.
- The federal tax on diesel fuel is six cents more per gallon than on gasoline, according to The Association for Convenience & Fuel Retailing, an Alexandria, Virginia-based trade association.
- U.S. refineries are built to produce gasoline. The Association for Convenience & Fuel Retailing noted, "Refinery yields can be somewhat tweaked, but to produce significantly more [diesel] would require significant upgrades costing billions of dollars."
- There is high global demand for diesel fuel. The U.S. exports nearly one-third of the diesel it produces to countries where diesel is the dominant fuel (Osborne, 2014; Marquez, 2014; Taschler, 2014).

Truck driver shortage. The American Trucking Associations said the industry is short thousands of drivers as older drivers retire and others opt for a job that does not keep them on the road all of the time. This shortage of truck drivers results in higher salaries for those willing to do the job and higher prices charged for the food being transported (Hipolit, 2014; Jordan, 2014).

Businesses are not sharing profits. Economists note that corporations have not reduced food prices even though fuel prices have decreased. Lower fuel prices provide these businesses with more income and there appears to be a reluctance among corporations to cut prices because "it becomes harder to raise them again" if fuel costs go back up (Fitzgerald, 2015; O'Neill, 2015; Jordan, 2014). John Esparza, president of the Texas Trucking Association, said, "Trucking companies don't make adjustments every time fuel goes down. Because Monday [prices] could go back up again. For those sorts of changes you need time" (cited in Osborne, 2014). Similarly, corporations that are not involved with the sale of food but have benefitted from reduced fuel prices, such as airlines and taxi cab companies, have also chosen not to pass the savings onto consumers. Some corporations claim that fuel savings have been offset by the rising costs of wages, employee health insurance, pension contributions, and maintenance (Fitzgerald, 2015; Jordan, 2014).

Droughts. Severe droughts over the last few years have driven beef and produce prices up. Beef and veal prices soared as a result of the lingering impact of a widespread drought in 2012 and dry conditions that continue to affect the cattle producing states of Texas and Oklahoma. In 2014, cattle inventories fell to their lowest levels since 1951. Economists have estimated that the drought drove up beef prices 23% in 2014. The cattle market is not expected to experience a noticeable increase in herd sizes for about two years (Davidson, 2014; Doering, 2014; Hipolit, 2014).

The California drought in 2014 led to higher prices for a variety of fruits and vegetables, such as lettuce, berries, and avocados (Flynn, 2015; Davidson, 2014; Doering, 2014; Hipolit, 2014; Leubsdorf & Hilsenrath, 2014; USDA Economic Research Service, 2014; World Bank Group, 2014).

Experts warn that severe weather conditions such as extreme heat also tend to lead to increases in food prices (Doering, 2014; USDA Economic Research Service, 2014; Bellemare, 2013; Höges et al., 2012).

Porcine epidemic. A fast-moving virus known as Porcine Epidemic Diarrhea (PED) killed an estimated eight million pigs in 2013 and 2014, or about 10% of the U.S. herd, in 31 states. Analysts estimate that the virus outbreak resulted in a 56% increase in the price of pork. Experts believe it will take at least nine months before the U.S. hog industry returns to normal, barring a worsening of the PED virus (Davidson, 2014; Doering, 2014; Leubsdorf & Hilsenrath, 2014).

High corn prices. Since 2005, U.S. refineries have been required to add fuel derived from renewable sources to conventional gasoline. Because of this requirement, the U.S. is using more corn to produce ethanol than to make animal feed. This has resulted in increased corn prices, since less of it is available for animal feed. Some experts maintain that the higher prices discourage people from raising cows, pigs, and chickens that feed on corn (Goldstein, 2015; Hipolit, 2014; Höges et al., 2012).

Citrus greening. Orange juice prices were up 20% in 2014 and have continued to rise. A disease known as citrus greening has infected trees in all 32 of Florida's citrus-growing counties and has damaged or destroyed substantial portions of the state's orange crop. The citrus greening disease was also a major factor in the December 2013 lime shortage that resulted in a 372% increase in the price of a box of Persian limes, from \$18 to \$85 (Leubsdorf & Hilsenrath, 2014; Loria, 2014; USDA Economic Research Service, 2014).

On a Local Note

The USDA's National School Lunch and School Breakfast Programs continue to add new requirements, such as increased servings of fruits and vegetables, the introduction of whole-grain rich foods, and efforts to offer lower sodium items (USDA Food and Nutrition Service, 2012). These requirements have raised the cost of providing breakfast and lunch to students at Miami-Dade County Public Schools (M-DCPS) and at all school districts across the country. For example, guidelines introduced for the 2014-2015 school year that mandate a serving of fruit at each breakfast resulted in an additional cost to M-DCPS of \$0.25 per portion per meal on average.

M-DCPS has also seen milk prices rise during the 2014-2015 school year. Federal Milk Marketing Orders (FMMO) regulate handlers that sell milk by requiring them to pay not less than an established minimum price for the Grade A milk they purchase. Due to the FMMO, Borden

increased the price of milk sold to M-DCPS by over two cents per carton in August 2014. M-DCPS used 16,378,498 Borden milk cartons at the increased price between August and December 2014. This resulted in the district spending \$417,651 more for milk in the first four months of the 2014-2015 school year (data provided by M-DCPS' Department of Food and Nutrition, 2015).

Summary

Oil prices have dropped more than 50% since last summer, but food prices are still rising. Economists agree that there will be a long lag time between the drop in oil prices and decreases in food prices, but there are differences of opinion regarding the length of this lag time – estimates range from six to 18 months.

This report reviewed reasons why food prices have continued to rise despite lower oil prices, including high diesel fuel prices, a truck driver shortage, reluctance of corporations to lower prices, droughts, thinning cattle and hog herds, high corn prices, and the citrus greening disease.

The price of providing breakfast and lunch to Miami-Dade County Public Schools (M-DCPS) students continues to increase each year. For example, the USDA's National School Lunch and School Breakfast Programs mandated a serving of fruit at each breakfast for the 2014-2015 school year, resulting in an additional cost to M-DCPS of \$0.25 per portion per meal. In addition, an increase of over two cents in the price of each carton of milk cost M-DCPS an extra \$417,651 during the first four months of the 2014-2015 school year.

References

Bellemare, M.F. (2013). *What Causes the Price of Food to Rise?* Retrieved from <u>http://www.bestfoodfacts.org/food-for-thought/food-price-rising</u>.

Davidson, P. (2014). Rising Food Prices Pinching Consumers. *USA Today*, April 16, 2014. Doering, C. (2014). If It's What's for Dinner, Expect to Pay More. *USA Today*, September 23, 2014.

Fitzgerald, J. (2015). While Oil Plunges, Other Prices Rise. *The Boston Globe,* January 16, 2015.

Flynn, H. (2015). Gas Prices Are Down While Food Prices Are Up? *My 9 NJ.com,* January 26, 2015. Retrieved from <u>http://www.my9nj.com/story/27942142/gas-prices-are-down-while-food-prices-are-up</u>.

Goldstein, D. (2015). Why Food Prices Won't Fall as Fast as Gas Prices. *Market Watch,* January 29, 2015. Retrieved from <u>http://www.marketwatch.com/story/why-food-prices-wont-fall-as-fast-as-gas-prices-2015-01-29</u>.

Hipolit, M. (2014). Why Plunging Gas Prices Won't Mean Lower Prices at the Grocery Store. *CBS 6 News*, Richmond, VA, December 16, 2014. Retrieved from <u>http://wtvr.com/2014/</u>12/16/dont-expect-plunging-gas-prices-to-mean-lower-prices-at-the-grocery-store/.

Höges, C., Jung, A., Laub, M., Schiessl, M., & Traufetter, G. (2012). The Cost of Hunger: Drought Only One Factor Behind High Food Prices. *Spiegel Online,* August 21, 2012. Retrieved from <u>http://www.spiegel.de/international/business/drought-not-the-only-factor-driving-up-agricultural-prices-a-851068.html</u>.

Jordon, S. (2014). Gas Prices Are Falling, But That Hasn't Meant Other Savings for Consumers. *Omaha.com World Media Company*, October 7, 2014. Retrieved from <u>http://www.omaha.com/money/gas-prices-are-falling-but-that-hasn-t-meant-other/article_7fece4</u> <u>a9-628b-50dd-bcac-954048854412.html</u>.

Layne, N., & Bose, N. (2014). Rising Food Costs Eat into Consumers' Savings at the Pump. *The Daily Finance*, November 10, 2014. Retrieved from <u>http://www.dailyfinance.com/2014/11/10/rising-food-costs-eat-into-savings-cheaper-gas-prices/</u><u>#!slide=2808981</u>.

Leubsdorf, B., & Hilsenrath, J. (2014). As Food Prices Rise, Fed Keeps a Watchful Eye. *The Wall Street Journal,* July 6, 2014.

Loria, K. (2014). Bye, Bye OJ? The World's Citrus Is Being Destroyed – Here's What Scientists Are Doing About It. *Business Insider*, July 18, 2014. Retrieved from <u>http://www.businessinsider.com/citrus-greening-destroying-orange-juice-2014-6</u>.

McKenzie, A. (2015). Lower Gas Prices Does Not Mean Lower Food Prices . . . Yet. *News 13*, Orlando, FL, January 14, 2015. Retrieved from <u>http://www.mynews13.com/</u> <u>content/news/cfnews13/news/article.html/content/news/articles/cfn/2015/1/14/orlando_gas_prices_f.html</u>.

Marquez, D. (2014). Falling Gas Likely to Continue But May Not Impact Grocery Prices, Local Experts Say. *Lubbock Avalanche-Journal,* December 6, 2014. Retrieved from <u>http://lubbockonline.com/filed-online/2014-12-06/falling-gas-likely-continue-may-not-impact-grocery-prices-local-experts-say#.VMuts2jF9yU</u>.

O'Neill, E. (2015). Think Low Gas Prices Will Tank Airfare or Make Milk Cheaper? Not So Fast. *NJ.com,* January 15, 2015. Retrieved from <u>http://www.nj.com/news/index.ssf/2015/01/</u> <u>think_low_gas_prices_will_tank_airfare_or_make_milk_cheaper_not_so_fast.html</u>.

Osborne, J. (2014). Dramatic Drop in Gas Prices Doesn't Carry Over to Diesel. *The Dallas Morning News,* December 10, 2014.

Steiner, S. (2011). Is Inflation Higher Than You Think? *Bankrate,* March 15, 2011. Retrieved from <u>http://www.bankrate.com/finance/personal-finance/is-inflation-higher-than-you-think-1.as</u> <u>px</u>.

Taschler, J. (2014). Diesel Fuel Prices Remain Stubbornly High. *Milwaukee, Wisconsin Journal Sentinel,* December 3, 2014. Retrieved from <u>http://www.jsonline.com/business/diesel-fuel-prices-remain-stubbornly-high-b99401777z1-284669531.html</u>.

U.S. Department of Agriculture, Economic Research Service. (2014). *California Drought 2014: Food Prices and Consumers.* Retrieved from <u>http://www.ers.usda.gov/topics/in-the-news/california-drought-2014-farm-and-food-impacts/california-drought-2014-food-prices-and-consumers.aspx</u>.

U.S. Department of Agriculture, Food and Nutrition Service. (2012). *New Meal Pattern Requirements and Nutrition Standards: USDA's National School Lunch and School Breakfast Programs.* Retrieved from <u>http://www.fns.usda.gov/sites/default/files/LAC_03-06-12_0.pdf</u>.

U.S. Department of Labor, Bureau of Labor Statistics (2014). *Frequently Asked Questions (FAQs)*. Retrieved from <u>http://stats.bls.gov/cpi/cpifaq.htm#Question_1</u>.

U.S. Department of Labor, Bureau of Labor Statistics. (2015). *Consumer Price Index Summary*. Retrieved from <u>http://www.bls.gov/news.release/cpi.nr0.htm</u>.

White, M.C. (2015). Meat Prices Expected to Keep Climbing in 2015. *NBC News*, January 1, 2015. Retrieved from <u>http://www.nbcnews.com/business/economy/meat-prices-expected-keep-climbing-2015-n276906</u>.

World Bank Group. (2014). *Food Price Watch,* Issue 17, May 2014. Retrieved from <u>http://www.worldbank.org/content/dam/Worldbank/document/Poverty_documents/FPW_May_20</u> 14_final.pdf.