

FOOD FOR THOUGHT

A Resource Guide for Reporting on Food Prices, Supplies

The Michigan Farm Bureau (MFB) understands that consumers are naturally interested in why their grocery bills are increasing, and we're committed to helping news organizations like yours accurately tell the story.

To aid in this process, we've developed this resource guide of facts and subdivided it into the most common areas of reporting. They include:

- *A look at the farmer's share of the retail food dollar; a brief overview of a farmer's costs of doing business; and how the soaring commodity prices often reported by media may never make it into a farmer's pocketbook.*
- *A "big picture" look at food prices in the United States that suggests food remains affordable in spite of recent price increases.*
- *A rundown of some of the major contributors leading to today's increase in food costs.*
- *An executive summary of key points for consumers to keep in mind.*

Also included with this resource guide is contact information for MFB spokesmen and their areas of expertise, along with contact information for MFB media staff who can help arrange interviews with local farmers or provide other assistance as needed.

Please keep in mind that food pricing is a complex issue, and this resource guide does not delve into each issue comprehensively. Rather, it provides some fundamentals that can be easily lifted to help round out your stories.

The farmer's limited share of the retail food dollar

The farmer's share of the retail food dollar varies depending on the product, but has hovered around a modest 25 percent since the 1970s, increasing slightly only in the last couple of years.

USDA Economic Research Service data shows that for every \$1 spent on food in the United States, 19 cents goes to the upfront costs of farming. The remaining 81 cents covers costs associated with food processing, wholesaling, distributing and retailing.

What's the farmer's share of common food items? Consider these examples.*

- *Corn today sells for about \$5.50 a bushel. An 18-ounce box of corn flakes contains 12.9 ounces of milled field corn, so the actual value of the corn in that 18-ounce box of cereal is 7.9 cents. The cereal, however, sells for about \$3.30 at the grocery store, so the farmer's retail share is a mere 2 percent. In other words, if the price of corn rises \$1 per bushel and all other factors remain the same, the commodity impact on the box of cereal would be less than 1.5 cents.*
- *In the bread aisle, a 20-ounce loaf of bread sells for \$1.78. At a going rate of \$9.10 for a bushel of wheat, a farmer receives about 16 cents for the wheat used to produce the loaf, or only 9 percent of the retail price.*
- *In the grocer's dairy cooler, milk sells for about \$3.81 a gallon. With a farm-level price of \$1.62 per gallon, the farmer's share of the retail price is less than half at 43 percent.*

Often, changes in the price of corn have no direct relationship to changes in the retail price of meat and milk, and history has shown this. For example, between November 1994 and July 1996, the farm-gate price of corn more than doubled due to declines in corn acreage and yield, yet the price of ground beef,

pork chops, and whole chicken rose only moderately or declined. Between August 2000 and April 2004, the farm-gate price of corn again nearly doubled, and again during this period the price of pork chops dropped, while the prices of whole chicken and milk rose very modestly. A different scenario occurred from July 1996 to August 2000, when corn prices collapsed. Under today's mainstream rationale, one would have expected retail prices to fall too, yet the retail price of meat and milk actually rose. The same thing happened between May 2004 and November 2005 when corn prices fell again, yet retail prices for meat and milk rose.

Current market prices vs. futures contracts

*The farm-gate prices quoted in the above section assume that a farmer is able to capitalize on current market prices, but many farmers are not reaping record commodity prices. More often than not, a farmer — wanting some economic stability — has already entered into a contract to sell a future crop at an already established price. So while corn today may be selling for a highly publicized price of about \$6 a bushel, for example, a farmer might have inked a deal a year ago to sell his crop at half that price.

While current market prices reflect opportunities for significant profit potential for grain farmers, a large portion of the 2008 crop, which will be planted this spring, has already been sold at prices in the \$3 to \$4 a bushel range.

The futures price and the actual spot, or cash, price paid for a commodity historically converge or come close to equaling each other at the maturity of a futures contract. Historically, any gap has amounted to a few cents per bushel or pound. But lately, for some products that gap has been measured in dollars per bushel, partly reflecting an influx of new money in the futures market whereby investors are looking to buy commodities as a hedge against inflation. Rather than putting their money in the stock market, some investors see buying commodities as more lucrative. This, in turn, has contributed to higher commodity prices.

Farmers' rising input costs

Farmers are not getting rich at the expense of consumers. If anything, their profit margins continue to narrow as they face the same escalating costs for fuel as consumers, along with rising costs for business necessities, such as fertilizer and livestock feed.

Consider that the cost of diesel fuel has risen 120 percent and the cost of fertilizer has jumped 90 percent over the past five years. Meanwhile, repair costs to replace worn equipment such as tillage parts are 50 to 70 percent higher from a year ago due to increasing steel costs.

Just how expensive is standard petroleum-based fertilizer? Nitrogen fertilizer, which is commonly used in Michigan for corn production, now costs about \$880 per ton compared to \$375 per ton just two years ago. The amount of nitrogen fertilizer required to produce an acre of corn depends on soil conditions, nutrient needs and crop rotation schedules but, on average, it takes about 120 to 150 pounds of nitrogen per acre, translating to a cost of \$60 to \$80 an acre.

As mentioned above under the “current market prices vs. futures contracts” section, many farmers are already locked into grain production contracts, so they are not able to take full advantage of currently high spot prices for much of this year's expected production. However, they will be forced to pay higher costs for crop inputs this spring, fuel this summer, and harvesting, drying and transportation expenses this fall.

Big picture, food remains a bargain in U.S.

It takes about 37 days, or five weeks, for most Americans to earn enough disposable income to pay for food they consume at home and away from home for an entire year. In comparison, U.S. consumers must work much longer each year to pay for other necessities, including 77 days to pay their federal taxes, 62 days to pay for housing/household operation, and 52 days for health and medical care.

It's been estimated that U.S. consumers spend just 10 percent of their disposable income on food each year, the lowest average of any country in the world. Of that 10 percent, an average of 5.8 percent is spent on food eaten at home and 4.1 percent is spent on food eaten away from home.

According to USDA's "Agricultural Projections to 2017" report released in February, adjustments in retail prices due to higher energy and agricultural commodity prices are projected to continue for the next two years, and "lead to food price increases somewhat larger than general inflation in 2008 and 2009." However, the report predicts that for the rest of the projections period, retail food prices will increase less than the general rate of inflation.

USDA's "Agricultural Projections to 2017" report, released in February, provides long-term projections for changes in consumer food prices as measured in year-to-year percentage changes in the Consumer Price Index for food. According to USDA, annual food inflation for the next five years (2008-2012) is expected to average 2.6 percent, and for the 10-year-period from 2008-2017, 2.43 percent. These percentages fall below a 25-year (1982-2006) annual average of 2.9 percent, and compare to an average annual food inflation rate of 8.9 percent between 1972 and 1981.

Even if food prices increase another 4.5 percent this year, U.S. consumers will spend 19 percent less of their disposable income on food compared to 1974. In other words, even with today's food price increases, Americans will spend less of their disposable income on purchasing food today than they did 34 years ago. (Disposable income spent on food in 1974: 13.4 percent. Disposable income spent on food in 2007: 10.3 percent. Projected disposable income spent on food in 2008: 10.8 percent.)

A Merrill Lynch commodity specialist recently interviewed by the Wall Street Journal pointed out that oil and gas prices would be about 15 percent higher than they are currently if it weren't for ethanol production, and that the savings more than balances the limited role of higher corn prices on food price inflation.

Factors leading to higher food prices

Increased ethanol production has been unfairly blamed as the sole or leading cause of today's increased food costs, but many factors have contributed to the situation, namely runaway energy prices. Highlighted here are some of the main contributing factors.

- We live in a global economy where drought, population growth, growing protein demand in developing countries, war, political decisions, transportation costs, crop acreage shifts, the value of the U.S. dollar, and many other factors affect food prices and supplies.
- Record crude oil prices have significantly raised fertilizer and transportation costs in the agriculture industry, and this has contributed to higher commodity prices. At the same time, surging petroleum prices and American's reliance on foreign oil has provided more incentive for the production of biofuels, such as ethanol, and this in turn has had ripple effects within the agriculture industry, namely putting a squeeze on livestock producers by raising the cost of grain-based livestock feed.
- Ethanol is one of many causes lifting commodity prices, however several independent think tanks say ethanol typically only accounts for somewhere between 10 and 30 percent of the individual percentage increases in the price of food. In other words, for food items rising in price by 2 to 3 percent, for example, ethanol might be responsible for a third or less of that 2 to 3 percent increase in price.
- Adverse weather in major production areas across the world, including a multi-year drought that devastated Australia's grain exports, has caused shortages in global food supplies.

- Consumers in China, India and other newly prosperous areas of the developing world are not only consuming greater quantities of staples such as rice and wheat but are also demanding more meat from grain-fed livestock. Consider, for instance, that per capita meat consumption in China doubled between 1990 and 2005 and is still growing.
- Recently, some countries such as China, India, Egypt, Vietnam and Cambodia have imposed tariffs or export bans in attempts to stockpile staples in short supply globally, such as rice, thus driving world prices higher for remaining supplies.
- In general, there is rapidly growing demand for food and just about all raw materials such as energy, steel, precious metals and crop inputs as global agriculture expands to respond to market signals.
- Market demand for wheat and cheese is typically a contributing factor to the retail cost of food, and market demand for these products remains strong in the United States and abroad.
- There is much that can be said about the “food vs. fuel” debate, or ethanol’s impact on food prices, however we direct your attention to a new report by Texas A&M University’s Agricultural Policy and Research Center which concludes that high-priced oil, not ethanol production, is “the primary driver of higher food prices.” The 40-page report, titled “The Effects of Ethanol on Texas Food and Feed,” found only a tiny correlation between higher corn prices and food price inflation. It further concludes that even without the ethanol boom, corn prices would have risen substantially as petroleum-based input costs like fertilizer went up. The full report is available online at www.afpc.tamu.edu. For more on this issue, visit www.ethanolfacts.com.

Putting things in perspective: Additional points to ponder

The last time a bushel of corn and a barrel of oil sold for the same price was in 1947, when corn sold for \$2.16 per bushel and oil was \$2.16 a barrel. On April 23, 2008, corn was selling for \$6.01 per bushel, up 178 percent, or \$3.85, from its 1947 price of \$2.16 a bushel. In comparison, a barrel of oil on April 23, 2008, was selling for \$119.90, up a whopping 5,450 percent, or \$117.74, from the 1947 price of \$2.16 a barrel.

Farm policies have helped the United States maintain domestic agricultural production and generate surplus supplies that have helped keep food affordable for Americans over the years. U.S. Bureau of Labor statistics show, for example, that a gallon of milk in 1974 cost \$1.39 compared to \$3.78 in 2007. However, when you factor in the rate of inflation and apply the cumulative 2008 Consumer Price Index to the 1974 retail price of milk, a gallon of milk “should” cost \$5.95 a gallon, so milk at \$3.78 a gallon is actually \$2.17 less or 57 percent cheaper than it would be expected to cost given all inflationary factors. Looking at raw commodities, a bushel of corn in 1974 sold for \$3.58 a bushel. Currently it sells for \$5.55, but the 2008 CPI suggests it should be selling for \$15.32 a bushel by today’s standards. So a bushel of corn is selling for 176 percent cheaper than it what should be if you factor in the CPI. Looking at fuel, gasoline today retails for \$3.28 a gallon when the CPI suggests it should sell for only \$2.27 a gallon. That’s a price difference of 31 percent.

U.S. rice stocks

Farm Bureau continues to examine reports of some U.S. retailers restricting sales of rice, but from what we understand, there is no shortage of rice in the United States. USDA estimates a slight increase in total planted acres of rice, 2.77 million acres, in the United States this year. However, due to the exceedingly high cost of transporting bulk agricultural commodities around the world, there will likely be ebbs and flows of certain specialty products, such as imported rice. The decision of retailers to limit bulk purchases

— not the sizes used in most households — is emblematic of the historically tight world stocks of almost all grains and oilseeds.

It's important to keep in mind that rice supplies available for export are limited even in normal times. Worldwide, little rice is actually exported, as more than 90 percent of what is grown is consumed in countries where it is grown. So when countries restrict exports, it only exacerbates an already tight supply, leading to higher prices for remaining stocks.

In the last quarter century, rice consumption has outpaced production, with global reserves plunging by half since 2000. Consider, for instance, that a six-year drought decimated Australia's rice production by 98 percent. The largest rice mill in the southern hemisphere had been located in Australia and had processed grain to meet the needs of 20 million people around the world, but closed in December 2007 due to the reduction in rice production.

Executive summary

Contrary to popular belief, farmers are price-takers, not price-makers. John F. Kennedy best summed this up when he said, "The American farmer is the only man in our economy who buys everything he buys at retail, sells everything he sells at wholesale, and pays the freight both ways."

Farmers are not reaping the benefits of higher retail prices for food products made from farm commodities, especially those that are highly processed. After corn, wheat, soybeans, milk and livestock leave the farm, ever-higher costs for energy, fuel and transportation are being passed along to consumers by processors and retailers — not the farmer.

Record crude oil prices remain a major contributing factor behind the higher retail cost of food, however we live in a global economy where drought, population growth, growing protein demand in developing countries, war, political decisions, transportation costs, crop acreage shifts and many other factors affect food prices and supplies.

No farmer wants to see anyone struggle to put food on the table; that's not in their nature. Farmers are in the business of feeding consumers, and they take great pride in providing Americans with a high-quality, affordable, diverse and reliable food supply.

The rapid transition from a period of generous supplies and steady prices in most major agricultural commodities to one of historically tight supplies and corresponding market volatility has already had and will continue to have profound impacts on the food and agriculture industry both domestically and internationally. However, the agriculture industry around the world will respond to the market's call for more production. It may take time for production to ramp up to meet demand, but the challenges experienced today will be overcome. Farmers — perhaps better than anyone else — know the cyclical nature of the industry.

While agriculture cannot simply add a "third shift" like many other industries to help solve some of today's challenges overnight, agriculture doesn't operate in a vacuum either. It will take time, but consumers will see the agriculture industry ramp up its own "assembly line" per se to respond to changing market demands. Over the next several years, additional resources, combined with the adoption of modern farming practices, will lead to dramatic increases in the production of food, fiber and fuel supplied by the world's agriculture industry.

The heightened awareness of global food supplies underscores the need to make public funding for crop research in areas such as improved production and disease/pest management a top priority. Worldwide investment in agricultural research has not kept pace with rising demand for food and agricultural products. As a result, rice research, for example, has slowed significantly, and wheat yields have reached

a plateau due to lack of research. There is obvious need to re-energize investment in agriculture research initiatives at the international, national and even state level with Michigan's very own land grant university, Michigan State University.

Even with recent increases in food prices, Americans still enjoy the cheapest food supply of anywhere in the world.

Michigan Farm Bureau commodity resources

The following MFB staff members are available for interviews and to assist with your reporting needs in their areas of expertise. Each is available by calling (800) 292-2680.

- **General food trends, grains, biofuels, farm bill**
Bob Boehm, Commodity and Marketing Department Manager, ext. 2023
- **Meat and dairy products, livestock issues**
Ernie Birchmeier, Livestock and Dairy Specialist, ext. 2024
- **Fruits and vegetables, farm bill, global trade**
Ken Nye, Horticultural and Forestry Specialist, ext. 2020

Michigan Farm Bureau media resources:

The following MFB staff members can help arrange interviews with local farmers and provide additional media assistance. They are available by calling (800) 292-2680.

- Jill Corrin, Media Support Services Manager, ext. 6585
- Jeremy C. Nagel, County Communications Manager, ext. 6584
- Dennis Rudat, Information and Public Relations Division Director, ext. 6586