

# Retail Realities: Corn Prices Do Not Drive Grocery Inflation



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In the summer of 2007, higher prices at supermarket checkout lines have drawn the attention of consumers, the media, and politicians. During the first half of 2007, food prices rose by 6.2 percent and contributed to almost one-fifth (17 percent) of the total increase in consumer prices.<sup>1</sup> Prices at the grocery store rose almost a third faster than food prices overall (both at restaurants and retail outlets), growing by 8.0 percent in the first half of the year.<sup>2</sup> These trends are likely to continue. USDA estimates that consumer price increases for red meat, poultry, milk and eggs will stay above the general inflation rate from 2008 to 2010.<sup>3</sup>

Consumer anxiety over higher grocery prices is heightened by more modest wage and economic growth. During the first half of the year wages grew only a third as fast as food prices – 1.9 percent.<sup>4</sup> Overall economic growth was also relatively flat, at under 1 percent in the first quarter of 2007.<sup>5</sup> Consumers are legitimately nervous when the cost of eating is rapidly outpacing the means of paying for food.

The food industry has been capitalizing on these fears by focusing on higher costs for one of their key ingredients: corn. Food and meat processing companies have blamed the increase in food prices on the increased price of corn, which is used as a basic ingredient in livestock feed and processed food. They claim that higher demand for corn by ethanol refineries is contributing to the increased corn prices. This summer's protracted congressional debates over energy policy and the automotive industry's relentless "Live Green, Go Yellow" advertising campaign may lend credence to these allegations in the minds of consumers.

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These claims contain some truth that shields several decades of deception when it comes to the link between the price of corn and retail food prices. Although corn prices have risen over the past year in part as a result of

increased ethanol demand, the correlation between crop prices and retail grocery prices remains elusive. The prices farmers receive for corn have risen this year, but over the past decade, the real price of corn has been extremely low. During that period, livestock producers, slaughterhouses, and grocery manufacturers benefited from artificially low corn prices but did not pass these savings on to consumers. Now, food and meat processors are using the ethanol smokescreen to justify grocery price increases that are unlikely to decline when corn's historically volatile price falls.

The reality is less simplistic than agribusiness interests suggest. Pundits and food and meat processors have lamented this year's rise in corn prices with little attention to the long-term declining trends in the real price of corn. The implication that rising corn prices warrant grocery price hikes ignores the historical grocery price insensitivity to corn prices. Over the past three decades, grocery prices have steadily trended upwards regardless of significant price volatility for corn.

Food & Water Watch has examined and compared the monthly farmgate price of corn and retail price of ground beef, chicken, pork chops, and milk since 1980 and found:

- **The Long-Term Farmgate Price of Corn Has Fluctuated Significantly and Has Predominantly Exceeded \$2 Per Bushel:** Contrary to media accounts, the farmgate price for corn has not been stable, nor has it remained at \$2 per bushel. The nominal – non-inflation adjusted – farmgate price of corn has been above \$2 per bushel 75 percent of the months between 1980 and 2006. The average nominal farmgate price of corn since 1980 has been \$2.37 per bushel, but that includes two agricultural recessions that required significant federal emergency intervention. During the 1980s and 1990s, including the farm crises, nominal farmgate corn prices were about \$2.50 per bushel – or at least 50 cents higher than the \$2 that the pundits contend is the baseline.
- **The Real, Inflation-Adjusted Price of Corn Has Trended Downwards Since 1980:** Commentators have entirely relied on the nominal price of corn to justify the contention that its price has remained in the \$2 per bushel range. But \$2 was worth

more at the beginning of the Reagan administration than it is nearly 30 years later. The real farmgate price of corn in 2006 dollars, taking inflation into account, has averaged \$3.63 per bushel between 1980 and 2006. Moreover, the real price of corn has fallen sharply over the last three decades. In the 1980s, the real price of corn averaged \$4.88 per bushel; during the 1990s, the real price of corn averaged \$3.30 per bushel; and between 2000 and 2006, it averaged \$2.31. This decline has coincided with a shift in U.S. farm policy to promoting overproduction of commodities.

- During Comparable Times of Farmgate Corn Price Increases, There Has Been Little Interplay with Retail Food Costs:** Food & Water Watch examined four historical examples of farmgate corn and retail food prices when there were dramatic shifts in corn prices and found that food prices were completely unresponsive to changes in corn prices. In many cases, retail meat and milk prices rose even when the farmgate corn price declined. Even when corn prices rose significantly, retail meat and milk prices rose, but not as significantly as the increase in corn prices. In many cases they rose less than the current increase in retail food prices. In fact, prior to the 1996 Farm Bill when the change in corn prices most mirrors the past fourteen months, farmgate corn prices more than doubled from \$1.99 in November 1994 to \$4.43 in July 1996, but the price of ground beef fell by 1.3 percent while the price of whole chicken and pork chops rose by only 7.5 and 7.2 percent, respectively.

- Retail Food Prices for Meat and Milk Are Disconnected from Farmgate Corn Prices:** Three other case studies support the idea that retail grocery prices are insensitive or unresponsive to the cost of corn that is used to produce them. In one example, corn prices rose three times faster than retail grocery prices. In two other examples, farmgate corn prices fell sharply, but most retail meat and milk prices grew modestly. This suggests that meat and milk producers are operating a sticky pricing scheme which allows prices to drift up when input costs rise but do not pass on savings to consumers when the costs of inputs fall.

- Farmer Share of Food Dollar Decreasing:** The share of grocery revenues going to farmers has been steadily declining for years. Instead, more of the grocery sales are going to branding and marketing every year. Between 1984 and 2000, the share of domestic food dollars that went to farmers fell from 35 percent to 19 percent, according to USDA figures.<sup>6</sup> If farmers received the same share of domestic food dollars in 2000 as they did in 1984, an additional \$98.9 billion would have gone to agricultural producers instead of the agribusinesses marketing food to consumers.<sup>7</sup>

This white paper reviews the current price environment and examines the empirical evidence between the prices farmers receive for their crops and the prices consumers pay at the supermarket. Certainly, corn prices have risen over the past eighteen months and increased demand for corn by ethanol refineries has tightened the supply of corn. Consumers know that they are paying more at the grocery store for the food they put on their families' tables. However, the notion that higher corn prices justify hiking supermarket prices needs closer examination.

Food & Water Watch's examination of historical farmgate and retail price trends disproves the allegation that there is a causal relationship between farmgate prices and retail grocery prices. In fact, in many cases there is not even a correlation between farm prices and grocery prices – in some cases corn prices increase and some meat and milk prices have declined. In other cases, corn prices fall steeply and some meat and milk prices continued to rise.

In part, this disconnect between farmgate prices and retail grocery prices reflects the failure of federal farm policy to ensure an equal footing for America's farmers against the giant agribusiness companies that purchase raw agricultural products. Federal farm policy has promoted overproduction of basic farm commodities for the last 20 years. Overproduction drives down prices, which is bad for farmers but good for the meatpackers that feed their livestock cheap feed made from those commodities and the grocery manufacturers that buy cheap cereals and grains. Simultaneously, there has been an intense concentration in the agribusiness sector. Fewer buyers are less likely to bid up the price for commodities and farmers are less likely to get decent prices for their crops.

The combination of federal policy promoting overproduction and low crop prices and agribusiness consolidation has concentrated the benefits of the farm and food system in a tiny number of special interest hands. Consumers do not see the alleged benefit of the agribusiness economies of scale. Retail consumer food prices generally continue to rise steadily with inflation – except when they rise faster than the overall inflation rate. Farmers have received historically low prices for their crops for most of the past decade and a declining portion of retail grocery sales actually make it back to the farm. Instead, the meatpacking and food processing industry can capture the benefit of low-priced farm goods by increasing retail prices regardless of their input costs.

The price of corn is not entirely responsible for the rising prices in the grocery store. An improved federal farm policy could address the imbalances in the agriculture sector and stabilize farmgate price volatility. As long as federal farm policy promotes overproduction and ignores

agribusiness consolidation, farmers and consumers will be at the mercy of pricing decisions made by a few powerful agribusiness interests.

## Corn Prices, Ethanol Demand, and the Grocery Store

### Rising Ethanol Demand and Corn Prices

Market and food industry analysts have been forecasting higher food prices as the result of increased demand for corn from ethanol refineries. Increased demand for corn from ethanol competes with the demand from livestock producers, meatpackers, and grocery manufacturers and drives up the market price of corn. Over the past few years, ethanol demand has increased and is projected to increase further in coming years. For the first time in recent memory, farmers are consistently receiving prices for their crops like corn, soybeans, and wheat that are above the cost of production.

The increased demand for ethanol has undisputedly tightened up the market for corn and contributed to the rise in the corn price on the commodity markets. In early 2007, domestic ethanol refineries could produce 5.6 billion gallons and if all of the plants already under construction

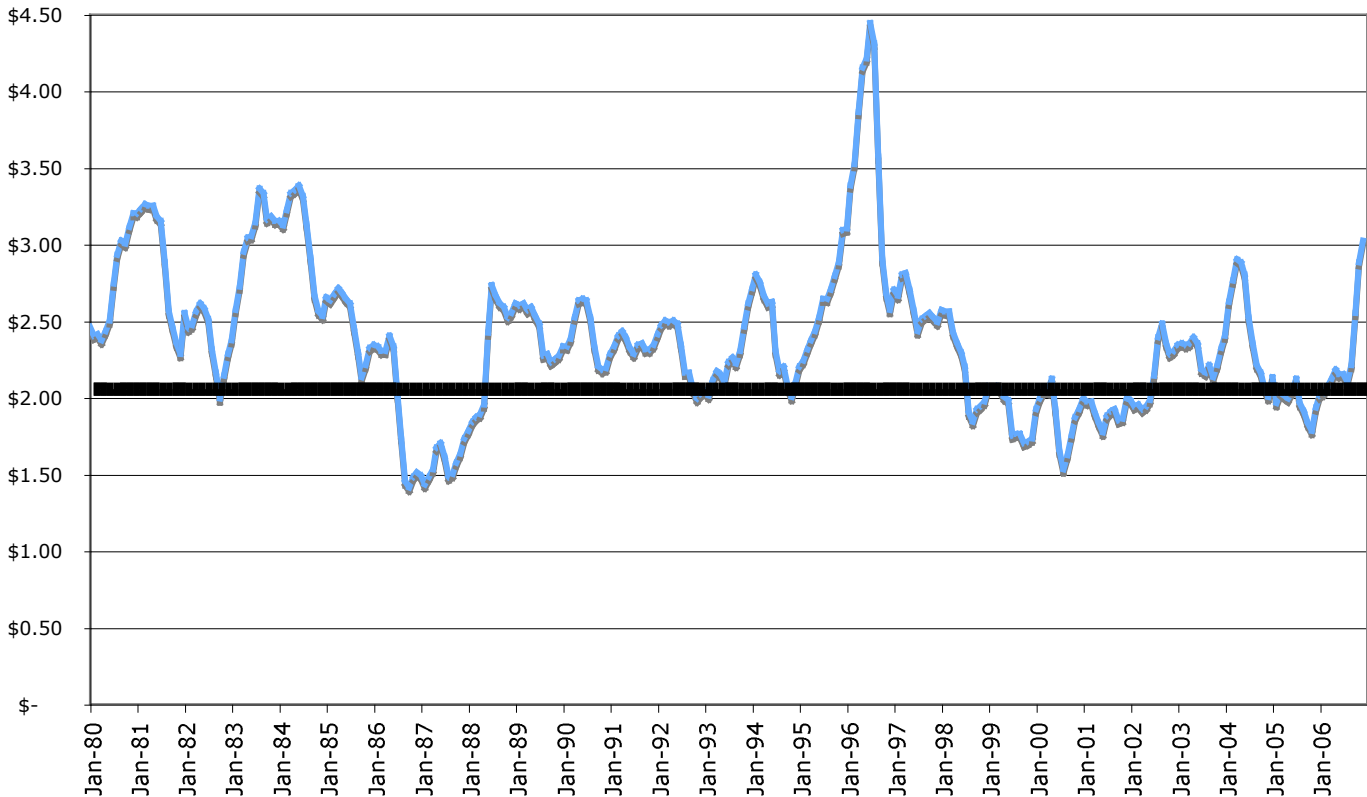
come online, total ethanol capacity could be 11 billion gallons by 2011.<sup>8</sup> Recent congressional energy legislation both provides loan guarantees for new ethanol refineries and sets mandatory targets for renewable transportation fuel, which in the short term will be nearly entirely ethanol. During the 2005/2006 crop year, about one seventh (14 percent) of the corn crop was refined into ethanol and that could double by 2016.<sup>9</sup>

Corn prices have been higher in 2007. Corn prices rose to about \$3.50 per bushel in the summer of 2007 compared to prices hovering around \$2.00 a bushel since the 1996 Farm Bill. Contrary to the claims of the food and meat processing industries, these prices are not completely out of historical ranges of nominal or real, inflation-adjusted corn prices. Food and meat producers as well as media outlets have described the recent rise in corn prices as out of synch with historic trends. For example, the Washington Post reported that corn prices had risen above the “historically stable \$2 per bushel” baseline.<sup>10</sup>

### Historic Nominal Corn Prices Volatile But Above \$2 Per Bushel

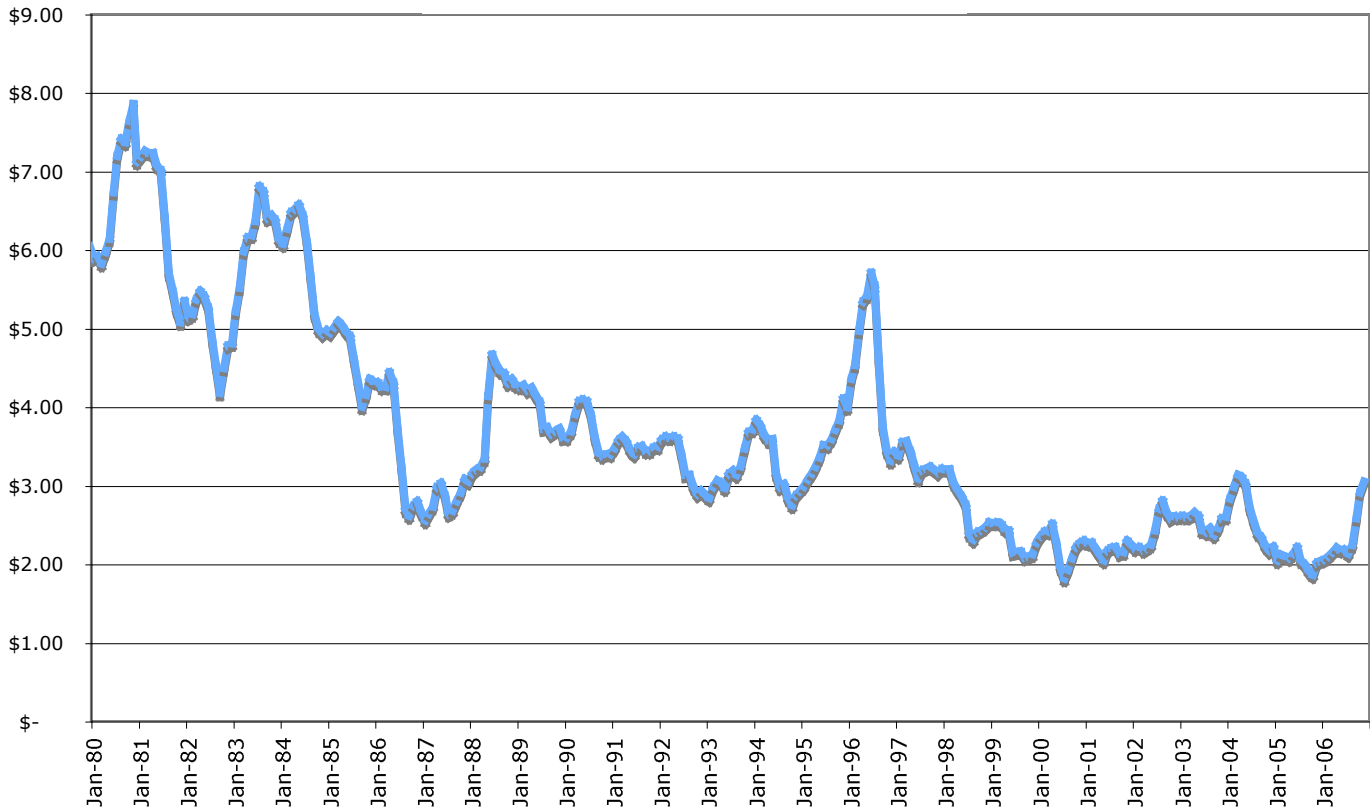
Corn prices have neither been historically stable nor hovered around a \$2 per bushel baseline. The USDA considers \$2 a bushel prices to be on the low end of the

**Nominal Farmgate Corn Price 1980-2006 (\$/BU.)**



Source: USDA National Agricultural Statistical Service Agricultural Prices

Real Farmgate Corn Price (2006 Dollars)



Source: USDA National Agricultural Statistical Service; Minneapolis Federal Reserve CPI Calculator

scale. According to USDA, corn “prices have been low, around \$2.00 per bushel” because of robust production in the most recent seasons (2004/2005 and 2005/2006).<sup>11</sup> Nominal corn prices – the current price measured in non-inflation adjusted dollars – have been above \$2 a bushel for the majority of the past several decades and real corn prices (adjusting for inflation) were considerably higher. Nominal corn prices have been low and declining since the 1996 Farm Bill shifted U.S. commodity policy to promoting over-production.

*In 1980, the farmgate price for corn was \$2.70 and a new Ford Mustang cost about \$6,000. Today, the base model Mustang runs about \$19,000 and corn is selling for as much as \$3.70 – meaning the price of Mustangs more than tripled and the price of corn increased by a little more than a third.*

In fact, the nominal price that farmers received for corn has been above \$2 a bushel during three quarters of the months between 1980 and 2006.<sup>12</sup> Between 1980 and 2006, the

corn price averaged \$2.37 per bushel, but that includes two significant agricultural depressions in the late 1980s and late 1990s. The average corn price in the 1980s and 1990s was about \$2.50 per bushel (\$2.47 and \$2.44, respectively), although it was lower in recent years averaging \$2.12 between 2000 and 2006.

### Real Corn Prices Declined for Three Decades

Nominal prices tell a poor story because they do not account for inflation. Even if corn prices had remained at an illusory \$2 per bushel historic prices, \$2 was worth more in prior decades than it is today. The real price of goods has been rising for several decades, so, in theory, average corn prices of \$2.47 per bushel in the 1980s should be much higher now.

In 1980, the farmgate price for corn was \$2.70 and a new Ford Mustang cost about \$6,000. Today, the base model Mustang runs about \$19,000 and corn is selling for as much as \$3.70 – meaning the price of Mustangs more than tripled and the price of corn increased by a little more than a third.<sup>13</sup> Additionally, the cost of the fuel, fertilizer, and labor used to produce corn has risen much faster than the nominal farmgate corn price.

The historic real, inflation-adjusted price of corn has been considerably higher than \$2 a bushel. Between 1980 and 1984, the real price of corn averaged \$6 per bushel compared to \$2.37 per bushel between 2000 and 2004. Even over a longer period, the real price of corn was higher than today. Between 1980 and 2006, the average farmgate corn price was \$3.62 in 2006 dollars.<sup>15</sup>

The real farmgate price of corn has been declining for the past several decades. The real price of corn during the 1980s was \$4.88 per bushel – more than a dollar more than farmers are receiving today.

In the 1990s, the real price of corn was \$3.30 per bushel, which is comparable to today's prices which have been criticized as unusually high. Examining five-year averages since the 1980s, the real farmgate price of corn has declined during every period, falling from \$6.00 per bushel between 1980-1984 to \$2.37 between 2000-2004. Contrary to many media reports, the real price of corn has only hovered around \$2 a bushel since the 1996 Farm Bill.

Although corn farmers are receiving higher prices in the summer of 2007, they are not guaranteed to last – historic volatility and the potential for increased production could depress corn prices. Higher market corn prices and higher anticipated demand from ethanol refineries have already encouraged farmers to plant more corn than ever. In 2007, farmers planted 92.9 million acres of corn, 19 percent more than in 2006 and the highest level since the United States was feeding war-torn Europe in 1944.<sup>16</sup> The higher projected supply from the additional acres being brought into production is likely to increase supply, loosen demand, and lower farmgate prices. When the USDA released the near-record corn acreage for 2007, corn commodity futures contracts slid to their lowest price in eight months.<sup>17</sup> Additionally, international corn production is expected to rise as well, further dampening global corn prices.

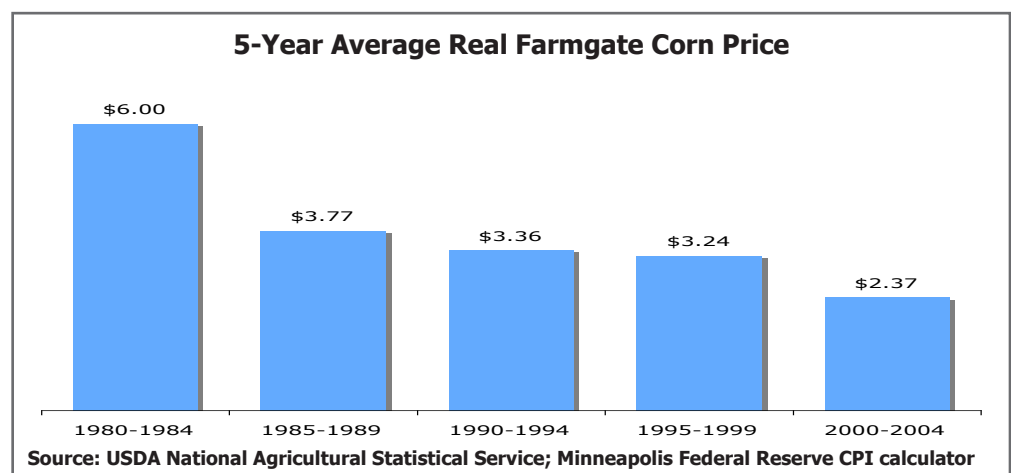
## Rising Food Prices Blamed on Ethanol Demand and Corn Prices

The current increases in consumer retail food prices have been attributed in part to the rise in the price of corn used as an input for meat and processed foods. There is a certain logic to this argument. The price of corn can have an impact on other food prices because corn is a basic building

block of much of processed food and milk. Corn is a key livestock feed and an ingredient in cereals, starches, and sweeteners. Additionally, farmers planting additional corn acres to capitalize on higher prices can displace production of other crops like soybeans, oats, sorghum and vegetables, tighten their supplies, and increase their prices.<sup>18</sup>

Clearly, retail food prices have been increasing. During the first half of 2007, food prices rose by 6.2 percent and contributed to almost one-fifth (17 percent) of the total increase in consumer prices.<sup>19</sup> Prices at the grocery store rose almost a third faster than food prices overall (including restaurants and grocery stores), growing by 8.0 percent in the first half of the year.<sup>20</sup> These trends are likely to continue. USDA estimates that consumer price increases for red meat, poultry, milk, and eggs will stay above the general inflation rate from 2008 to 2010.<sup>21</sup>

Much of the corn fed livestock products are expected to rise, but well within the overall food inflation forecast. By mid-2008, beef prices are expected to rise by 2.0 to 3.0



percent, pork prices are forecast to rise 1.0 to 2.0 percent, poultry prices are expected to rise 1.5 to 2.5 percent and dairy prices are forecast to rise 2.0 to 3.0 percent.<sup>22</sup>

However, the prices of some foods without corn inputs are rising even faster than for corn-fed livestock-related foods. By mid-2008, fish and seafood prices are anticipated to rise 3.5 to 4.5 percent and fresh fruit and vegetable prices are expected 3.0 to 4.0 percent.

Some of the nation's largest livestock processing companies have increased their prices in the summer of 2007, primarily blaming the increased price of feed corn.<sup>23</sup> Meat processing companies including Tyson Foods, Smithfood Foods and Pilgrim's Pride have responded to higher corn prices by either raising their retail prices or maintaining the possibility that prices could rise in the future.<sup>24</sup> Smithfield

Foods, the nations largest pork producer, has raised prices by 5.5¢ per pound to cover the market corn price of \$4 a bushel.<sup>25</sup> Hormel reported the second quarter that it was “not able to pass on higher grain costs through pricing” at its turkey operations.<sup>26</sup> Hormel reported to investors that the price of turkeys needed to rise by 4 to 5 percent to recoup the rising corn feed costs in the summer of 2007 on top of the second quarter 2 percent price increase.<sup>27</sup> Milk prices have risen 19 percent between April and June 2007, in part because of rising corn prices and in part because of a hot, humid summer in dairy areas and rising demand and declining global supplies.<sup>28</sup>

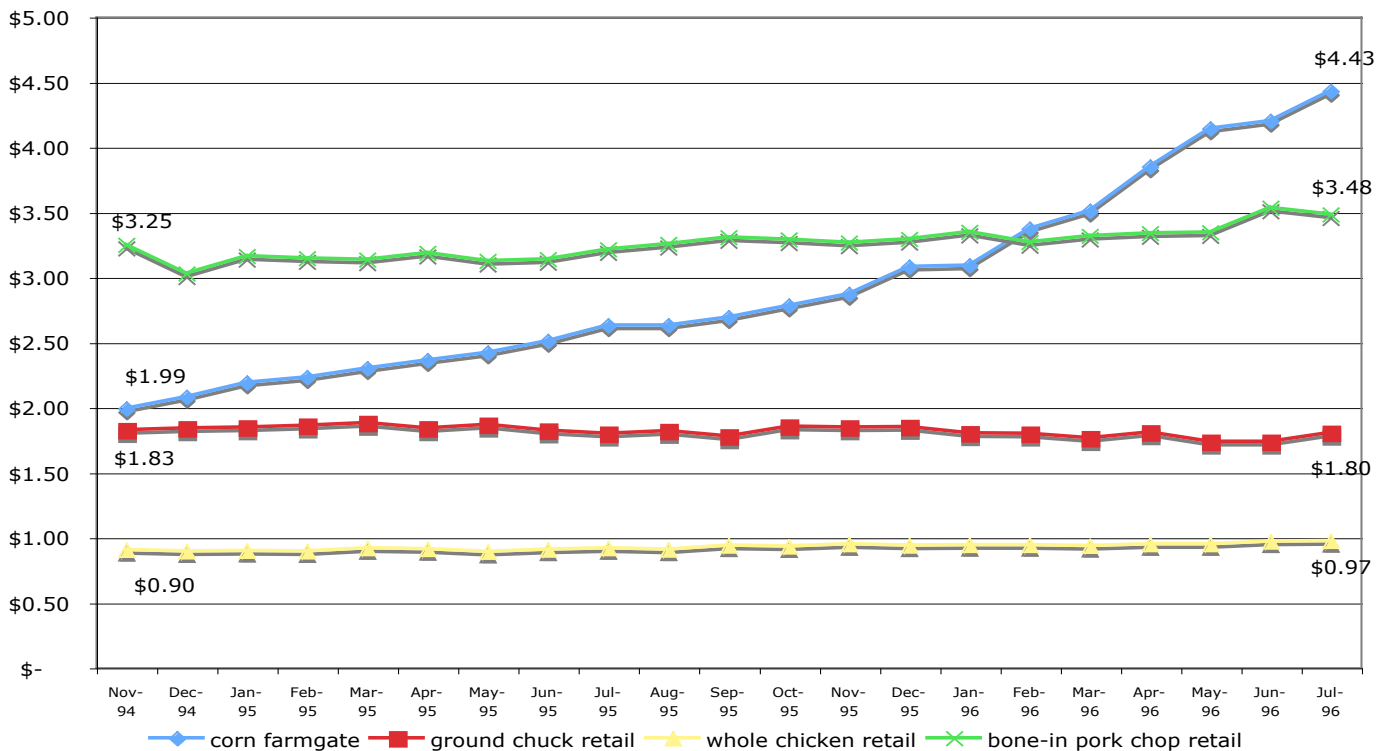
Although the price of corn has increased and the price of groceries has risen, it does not necessarily follow that higher corn prices cause higher food prices. Over the past three decades, meat and milk prices have been relatively non-responsive to changes in corn prices. Moreover, other factors are contributing to the rise in retail grocery prices as well. Rising energy costs for transportation, operating farm equipment, and producing agrochemicals has had a significant impact on the cost of producing food. Additionally, harsh weather conditions, especially the late 2007 freeze and protracted drought in the Western Plains, have contributed to rising food prices. Milk and meat companies may be using the 2007 corn price increase as their scapegoat to raise grocery prices, but these price hikes may merely fatten their bottom lines rather than compensate them for higher input costs.

## Historic Disconnect Between Farmgate Corn and Retail Meat and Milk Prices

Grocery price increases are a consumer reality. Retail prices should reflect the cost of production, so it is reasonable for grocery prices to increase when the price of key agricultural inputs increase. The current justification for increasing retail grocery prices implies that there is a causal and direct link between the price of corn and the price of meat and milk – rising corn prices cause rising meat and milk prices. Unfortunately, the empirical evidence cannot support even a direct correlation between farmgate corn and retail meat and milk prices. Rising meat and milk prices do not follow rising corn prices and falling corn prices do not lead to declining grocery prices. Changing meat and milk prices occur independently of changing corn prices. Grocery prices sometimes rise when corn prices fall and sometimes fall when corn prices rise.

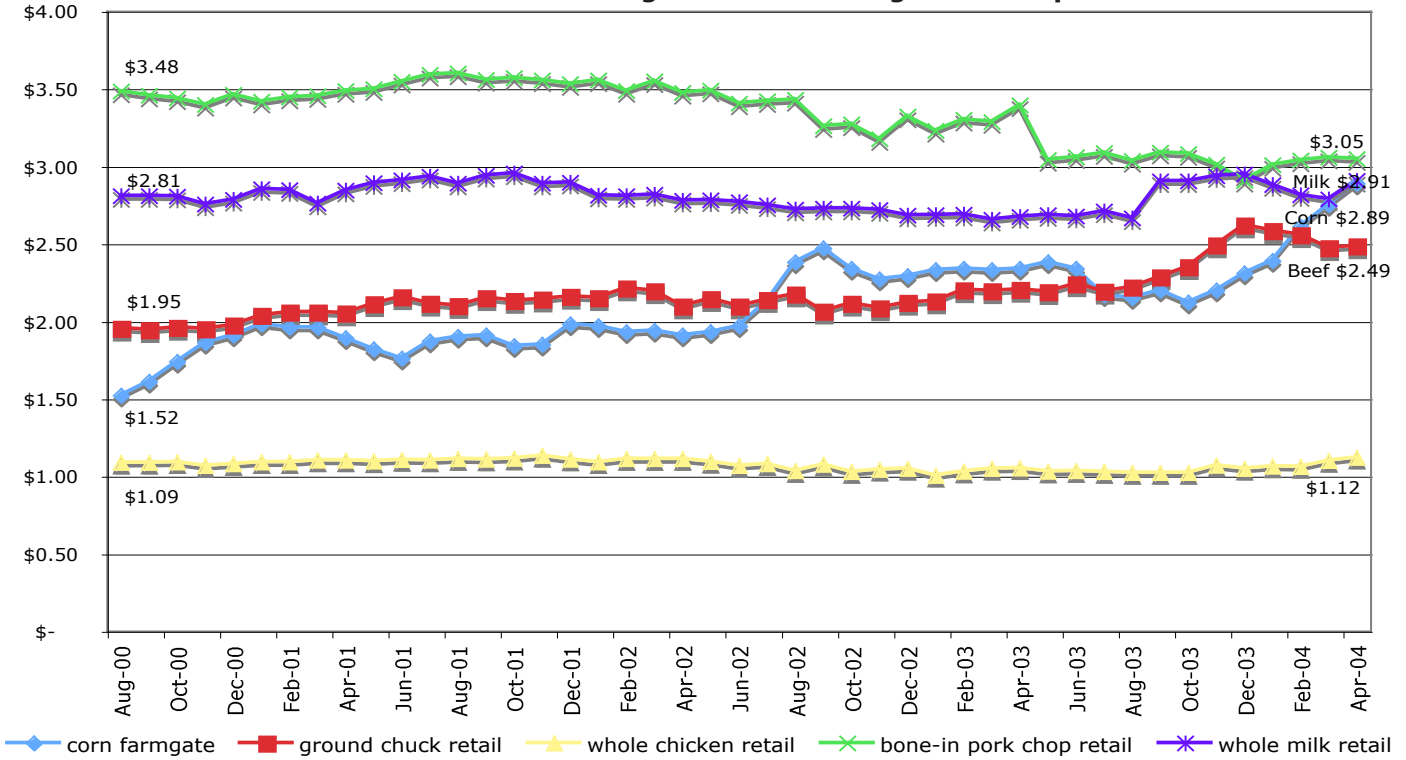
Instead, the retail prices of meat and milk that rely on corn feed have had little relation to the farmgate price of corn. Whether the price of corn rises or falls, the price of meat and milk has generally trended upwards. This reflects the sticky pricing of retail food products – prices may rise when costs increase but they do not fall when the cost of inputs falls. In some cases, the retail price of food increases

**Retail Meat and Farmgate Corn Price November 1994-July 1996**



Source: USDA NASS, Bureau of Labor Statistics

**Retail Meat and Milk and Farmgate Corn Price August 2000-April 2004**



Source: USDA NASS, Bureau of Labor Statistics

even when there are precipitous declines in the farmgate price of corn. As the following examples demonstrate, the disconnect between the cost of the primary livestock operations' input cost (feed) and retail food prices contradicts claims by the meat and food processing industry that prices were increasing because of feed cost increases.

Food & Water Watch examined four periods when the farmgate price of corn fell or rose dramatically without significantly impacting retail meat and milk prices.<sup>29</sup> In many cases, retail meat and milk prices rose even when the farmgate price for corn declined. Even when corn prices rose significantly, retail food and milk prices sometimes rose, but not as significantly as the increase in corn prices and in many cases grew less than the current increase in retail food prices.

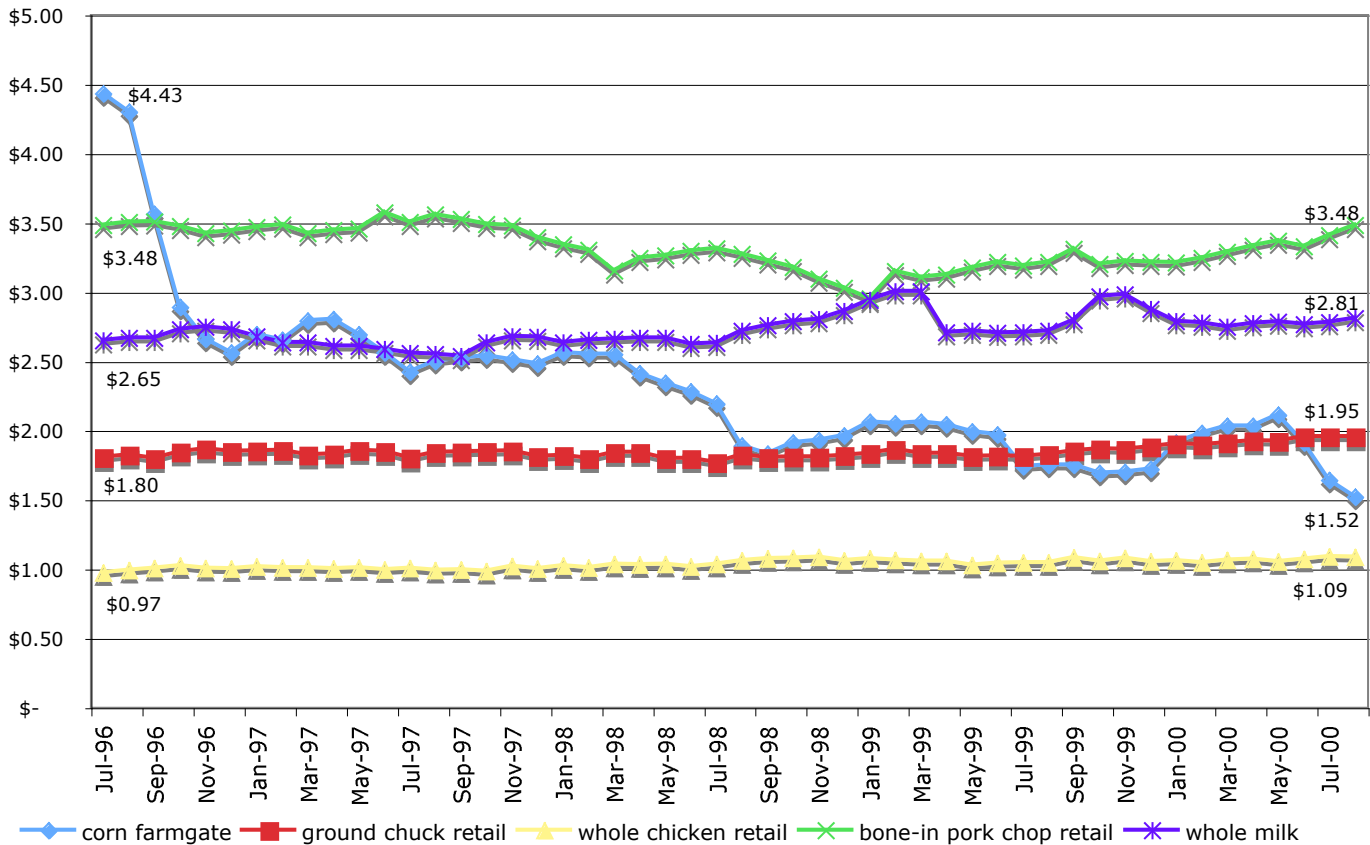
**Case 1: November 1994 to July 1996: Corn Prices Rise Significantly, Retail Meat and Milk Prices Stable**

Between November 1994 and July 1996, the farmgate price of corn more than doubled because corn acreage and yield fell between 1995 and 1996,<sup>30</sup> but the price of ground beef, pork chops and whole chicken rose moderately or declined. The farmgate price of corn rose from \$1.99 to \$4.43 during this period, a 122.6 percent increase that is larger than

the recent farmgate corn price increase. However, during this period, the price of ground beef declined slightly (by 1.3 percent) from \$1.83 to \$1.80 per pound and the price of pork chops and whole chicken rose by about 7 percent (7.5 and 7.2 percent respectively). During this period, the farmgate price of corn rose more than 17-times faster than the price of pork or chicken.

This period is especially relevant because it mirrors the current corn pricing environment and the political timing for farm legislation (the 1996 and 2007 Farm Bills). First, the change in the corn price is similar but larger than the increase over the past 18 months but the retail price of food did not see significant price increases. Second, rising prices in the mid-1990s were used to justify the elimination of farm safety nets in the 1996 Farm Bill. After the 1996 Farm Bill went into effect, corn production soared, prices collapsed and billions of dollars in emergency payments were required to stabilize hundreds of thousands of farm families. The current corn price environment is also being touted by some editorial pages and members of Congress as an opportunity to eliminate or significantly reduce farm commodity programs. Although the current farm policies have many shortcomings, including the encouragement of overproduction that can depress prices and the lack of permanent disaster assistance, elimination of the current policies without an adequate farm safety net could put farmers in jeopardy just as they were in the years following the 1996 Farm Bill.

Retail Meat and Milk and Farmgate Corn Prices July 1996-August 2000



Source: USDA NASS, Bureau of Labor Statistics

**Case 2: August 2000 to April 2004: Corn Price Rises Three Times Faster than Ground Beef; Pork Chop Prices Fall, Very Modest Increases in Milk and Chicken**

Between August 2000 and April 2004, the farmgate price of corn nearly doubled, increasing 90.1 percent from \$1.52 per bushel to \$2.89 a bushel.

During that period, the price of pork chops declined by 12.5 percent, from \$3.48 to \$3.05 per pound. The price of whole chicken and milk rose very modestly (3.1 and 3.5 percent respectively) over the period. The largest retail price increase was in ground beef, which rose by 27.3 percent from \$1.95 to \$2.49 per pound – but still less than a third of the increase in farmgate corn prices.

**Case 3: July 1996 to August 2000: Corn Price Collapses, Retail Meat and Milk Prices Mostly Modestly Rise**

After the 1996 Farm Bill went into effect, the farmgate price of corn collapsed but the retail price of meat and milk rose. Between July 1996 and July 2000, the farmgate price of corn fell by two thirds (65.7 percent) from \$4.43 per

bushel to \$1.52 per bushel as corn production surged. Beef cattle, hog, poultry, and dairy operations that rely on corn to feed their livestock reaped considerable savings during this period, but retail prices did not decline for any of these products. Whole chicken prices rose by 11.7 percent during this period from \$0.97 per pound to \$1.09. Milk and ground beef prices also rose, by 6.0 percent and 8.3 percent respectively. Although pork chop prices declined briefly, pork chops cost \$3.48 per pound at the start and the end of the period.

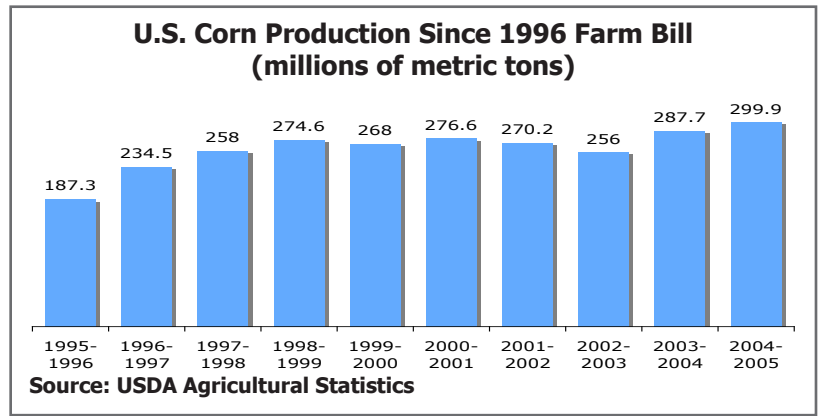
**Case 4: Corn Prices Fall Between May 2004 and November 2005, Most Retail Prices Rise**

Between May 2004 and November 2005, the farmgate price of corn declined 38.8 percent from \$2.87 per bushel to \$1.77 a bushel. During this period, the price of ground beef, pork chops, chicken, and milk rose modestly. The price of ground beef rose \$0.05 per pound or 1.8 percent, and the price of chicken rose \$0.02 per pound or 1.9 percent. Pork chop prices rose 9.4 percent from \$3.05 to \$3.33 per pound. Milk prices declined about one eighth as much as corn prices, falling by 4.8 percent from \$3.37 to \$3.21 per gallon.

These four case studies demonstrate that, often, changes in the price of corn have no direct relationship to changes in the retail price of meat and milk. Agribusiness interests have been justifying price increases based on higher corn prices, but it is likely that they are merely resistant to paying the actual cost of production for corn. Federal farm policy has created a long-term corn glut that has kept prices artificially low. When corn prices were low or falling, meat and milk producers did not pass these savings on to consumers, but instead retained the savings as corporate earnings.<sup>31</sup> Now that corn prices have rebounded, corn buyers are passing these minor costs directly to consumers.

### Winners and Losers in U.S. Farm Policy and Agricultural Consolidation

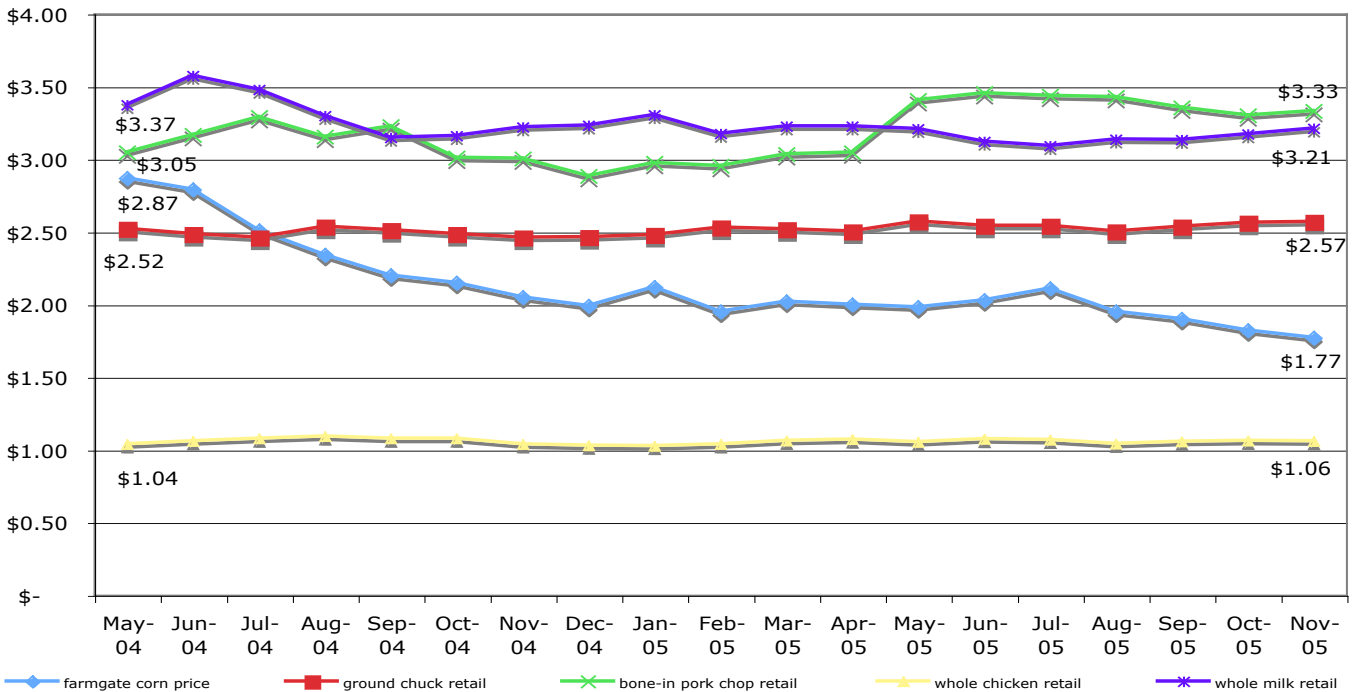
Until the summer of 2007, meat packers and food processors did not complain about the price of corn because commodity prices had been in a long-term slump. Since the 1996 Farm Bill, U.S. farm policy encouraged overproduction which all but guaranteed prices would remain very low. The 1996 Farm Bill and, to a lesser extent, the 2002 Farm Bill encouraged overproduction by eliminating supply management and price floors for commodity crops and encouraging farmers to bring as



many bushels to market as possible. As prices slid, farmers attempted to make up for low prices by bringing more bushels to market, further depressing prices.

This flawed farm policy promoted surging corn production and allowed prices to drop precipitously. Between the 1995/1996 crop year and 2004/2005 crop year, corn acreage increased by 13 percent from 65 million acres to 75 million acres.<sup>32</sup> Increased acreage significantly increased production. Between the 1995/1996 crop year and 2004/2005 crop year, corn production rose by 60 percent. The first year after the 1996 Farm Bill went into effect, corn production jumped by 25.2 percent from 187.3 million metric tons to 234.5 million metric tons.

Retail Meat and Milk and Farmgate Corn Prices May 2004-November 2005



Source: USDA NASS, Bureau of Labor Statistics

In the first year after the 1996 Farm Bill went into effect, corn prices fell by 35.0 percent from \$4.14 per bushel in May 1996 when the bill went into effect to \$2.69 in May 1997. Production continued to increase throughout the decade. During much of this period, farmgate corn prices were very low since supply was overabundant. Under the 1996 Farm Bill, real corn prices averaged \$2.50 per bushel and, since the 2002 Farm Bill went into effect, real corn prices averaged \$2.36.

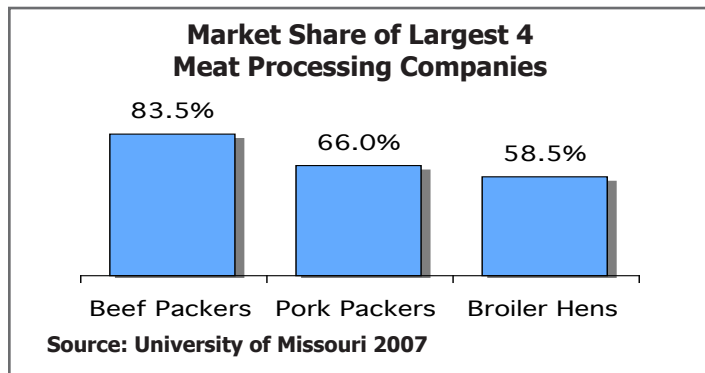
The buyers of food and feed crops benefited from corn sold at historically low prices. Since the 1996 Farm Bill went into effect, meat packers and processors and companies that mill, process and export grains were buying corn at real prices that were at historic lows, often below the cost of production. Grain and cereal processors, feedlots and meatpackers as well as grocery manufacturers all benefit when over-production lowers the price of the raw commodities they purchase as inputs. For example, the cost of feed accounts for more than 60 percent of chicken, 47 percent of hog, and 17 percent of beef production costs.<sup>33</sup> Lower-priced feed amounts to a significant savings for factory farms – chicken operators saved \$11.25 billion between 1997 and 2005 by paying corn farmers less than it cost to produce their crop.<sup>34</sup>

The demand for a continued source of cheap grain has led some agribusiness trade associations to promote even more corn production in the face of higher corn prices in 2007. The National Grain and Feed Association testified in favor of “policies that foster production” to ensure that grain and feed prices remain low.<sup>35</sup> One of the Corn Refiners Association’s top 2007 Farm Bill legislative priorities “is to ensure sufficient acreage planted to corn given the growing demand for this versatile starch source.”<sup>36</sup>

### Consolidation and Concentration in Agribusiness Capture Farm Payments

Farm policies that endanger farm incomes by promoting over-production are exacerbated by an excessively concentrated marketplace where a small number of buyers prevents the price of corn from being bid up on the open market. The agriculture sector has become increasingly consolidated and concentrated in the hands of a few corporate interests that sell inputs to farmers and others

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that buy their crops. Corn farmers are dependent on a tiny number of firms that sell seeds and agrochemical inputs, as well as a concentrated livestock industry that buys corn as feed and a small number of corn milling operations and grocery manufacturers that buy corn to make food products.

In 2006, only two firms controlled nearly three-fifths (58 percent) of the corn seed market, which makes it hard for farmers to shop for affordable seed.<sup>37</sup> For the nearly three quarters (73 percent) of corn farmers that plant genetically modified corn varieties, the concentration is much higher.<sup>38</sup> One company – Monsanto – sells 90 percent of genetically modified corn seeds, meaning that two-thirds (65.7 percent) of corn seed is purchased from just one firm.<sup>39</sup> The agrochemical market is similarly concentrated, with four firms controlling 60 percent of the global agrochemical sales in 2004.<sup>40</sup>

Once the corn crop is harvested, farmers sell it to livestock feeders and, to a lesser extent, food processing and corn milling companies. Livestock feed consumes a significant portion of the U.S. corn crop. In 2006, livestock feed consumed 5.85 billion bushels of corn – or 55.5 percent of that year’s domestic corn production.<sup>41</sup> The more than 267,000 corn farmers that sell their crop market it to a highly concentrated meatpacking and food processing industry.<sup>42</sup> In 2006, the top four beef packers controlled 84 percent of the market, the top four pork packers controlled 66 percent of the market, and the top four broiler chicken processors controlled 59 percent of the market.<sup>43</sup>

About a twelfth (8.5 percent) of the corn crop is dedicated to food for humans (in the form of cereal, beverages, high-fructose corn syrup and starch), but this marketplace is concentrated as well.<sup>44</sup> Four wet corn milling firms control more than two-thirds (68.7 percent) of the market and the top four breakfast cereal companies control more than three-quarters (78.4 percent) of cereal sales.<sup>45</sup> The market disparity of more than a quarter of a million corn farmers selling to a few powerful livestock feed buyers and food processors, combined with the overproduction of corn over much of the past decade, has helped to keep corn prices artificially low.

## Conclusion

Consumers are facing higher prices at the grocery store, but there is little evidence that this grocery inflation can be blamed primarily on the cost of corn. Historically, meat and milk prices have been unresponsive to significant price swings in the cost of corn and there is scant evidence that the price of corn alone is primarily responsible for driving up the cost of food at the supermarket. The small number of dominant meat and food processing companies have been benefiting from artificially low-priced corn and other commodities for the majority of the past decade. Now that crop prices have rebounded slightly, these companies are raising their prices and driving up grocery costs for consumers, although consumers never received lower prices when commodity prices were at record lows.

America needs agriculture and food policies designed for farmers and consumers and not just agribusiness interests. Practical supply and price management policies could stabilize farm economies and ensure that farmers receive prices that exceed the costs of producing their crops. Additionally, federal farm policy should address the imbalance in the agricultural economy between the largest agribusiness and family farmers by including competition provisions to solve long-standing market failures in the agricultural sector.

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*America needs agriculture and food policies designed for farmers and consumers and not just agribusiness interests.*

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## Endnotes

1 U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index: June 2007, July 18, 2007 at 2.

2 Ibid.

3 Westcott, Paul C., USDA Economic Research Service, "Ethanol Expansion in the United States: How Will the Sector Adjust?" FDS-07D-01, May 2007 at 17.

4 Bureau of Labor Statistics, Employment Cost Index – June 2007, July 31, 2007.

5 "Inflation Concerns Dominate Fed Discussions," New York Times, July 19, 2007.

6 USDA, Agriculture Fact Book 1996, 1996 at 11; USDA, Agriculture Fact Book 2001-2001, March 2003 at 21.

7 Ibid.

8 Baker, Allen and Steven Zahniser, "Ethanol Reshapes the Corn Market," Amber Waves, Vol. 5, May 2007 at 68.

9 Westcott, Paul C., USDA Economic Research Service, "Ethanol Expansion in the United States," FDS-07D-01, May 2007 at 5.

10 Rosenwald, Michael S., "The Rising Tide of Corn," Washington Post, June 15, 2007.

11 Hoffman, Linwood, Allen Baker, Linda Foreman and C. Edwin Young, Economic Research Service, USDA, "Feed Grains Backgrounder," FDS-07c-01, March 2007 at 14.

12 Monthly corn prices derived from from USDA's National Agricultural Statistical Service's annual Agricultural Prices report for the years between 1980 and 2006.

13 <http://www.motortrend.com/cars/2007/ford/mustang/pricing/>; USDA Economic Research Service, World Agricultural Outlook Board, "World Agricultural Supply and Demand Estimates," WASDE-447, June 11, 2007 at table 12.

14 <http://www.motortrend.com/cars/2007/ford/mustang/pricing/>; USDA Economic Research Service, World Agricultural Outlook Board, "World Agricultural Supply and Demand Estimates," WASDE-447, June 11, 2007 at table 12.

15 The real price of corn was calculated using a consumer price index deflator based on the monthly farmgate price of corn CPI calculation was performed with the software at the Minneapolis Federal Reserve available at <http://www.minneapolisfed.org/research/data/us/calc/>.

16 USDA, National Agricultural Statistics Service, "Acreage: Corn Planted Acreage Up 19 percent from 2006," June 2007.

17 Saefong, Myra P., "Soybeans, Cotton Rally, But Corn Wilts on USDA Data," MarketWatch, June 29, 2007.

18 Runge, C. Ford and Benjamin Senauer, "How Biofuels Could Starve the Poor," Foreign Affairs, May/June 2007.

19 U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index: June 2007, July 18, 2007 at 2.

20 Ibid.

21 Westcott, Paul C., USDA Economic Research Service, "Ethanol Expansion in the United States: How Will the Sector Adjust?" FDS-07D-01, May 2007 at 17.

22 USDA Economic Research Service, "Food CPO, Prices, and Expenditures: CPI for Food Forecasts," July 23, 2007 available at [www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/cpiforecasts.htm](http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/cpiforecasts.htm).

23 Although feed is the largest cost for livestock producers, corn is not the only animal feedstock. According to an Iowa State University Extension study, corn represents about two-thirds of the feed for finishing feeder hogs and steers. See Iowa State University, University Extension, "Livestock Enterprise Budgets for Iowa – 2007," March 2007.

24 "Meat Producer Shares Climb After USDA Report Raises Hopes for Corn Price Drop," Associated Press, June 29, 2007.

25 "Smithfield Manages Rising Corn Costs," Associated Press, June 28, 2007.

26 McGuire, Kara, "Food Hikes Take a Bite," Scripps Howard News Service, June 5, 2007.

27 "Hormel: More Turkey Price Hikes Ahead," Minneapolis-St. Paul Business Journal, June 25, 2007.

28 Herman, Charles, "Mil Prices Start to Soar," ABC News, June 27, 2007.

29 Food & Water Watch examined the average retail price data from the Bureau of Labor Statistics for all categories of ground beef (ground chuck), whole chicken, bone-in pork chops and gallons of whole milk. F&WW would have looked at other foods, but the BLS does not track the most obvious corn-based foods such as tortilla chips and other foods that rely on corn such as soda has more brand value than input value.

30 USDA Economic Research Service, "Feed Outlook," July 17, 1996.

31 For example, Smithfield Foods, the nation's largest pork producer and fifth largest beef producer, noted in its Securities and Exchange filing that it generates higher profits when "corn and soybean meal prices are low." See Smithfield Food Inc., SEC 10K filing, May 1, 2005 at 6.

32 USDA, National Agricultural Statistical Service, Agricultural Statistics, annuals 1998-2006.

33 Olsen, Dennis, Institute for Agriculture and Trade Policy, "Below-Cost Feed Crops: An Indirect Subsidy for Industrial Animal Factories," June 2006.

34 Wise, Timothy A. and Elanor Starmer, Tufts University Global Development and Environment Institute, "Industrial Livestock Companies' Gains from Low Feed Prices, 1997-2005," February 26, 2007.

35 Kapraun, Joseph, Testimony before the House Committee on Agriculture Subcommittee on General Farm Commodities and Risk Management on behalf of the National Grain and Feed Association, April 26, 2007 at 2.

36 Erickson, Audrae, Corn Refiners Association, Testimony before the House Agriculture Subcommittee on General Farm Commodities and Risk Management, April 26, 2007 at 1.

37 Hendrickson, Mary and William Heffernan, Department of Rural Sociology, University of Missouri, "Concentration of Agricultural Markets," April 2007.

38 USDA, National Agricultural Statistical Service, "Acreage," June 29, 2007.

39 Hendrickson and Heffernan, 2007.

40 United Nations Conference on Trade and Development, "Tracking the Trend Towards Market Concentration: The Case of the Agricultural Input Industry," UNCTAD/DITC/COM/2005/16, April 20, 2006 at 3.

41 Economic Research Service, USDA, Feed Grains Database: Yearbook Tables, Table 4. Corn: Marketing Year Supply and Disappearance, accessed June 28, 2007.

42 Hoffman, Linwood, Allen Baker, Linda Foreman and C. Edwin Young, Economic Research Service, USDA, "Feed Grains Backgrounder," FDS-07c-01, March 2007, Appendix Table 4 at 52.

43 Hendrickson, Mary and William Heffernan, Department of Rural Sociology, University of Missouri, "Concentration of Agricultural Markets," April 2007.

44 Westcott, Paul C., USDA Economic Research Service, "Ethanol Expansion in the United States," FDS-07D-01, May 2007 at 5; Baker, Allen and Edward Allen, USDA Economic Research Service, "Feed Outlook," FDS-07e, June 13, 2007 at 8.

45 U.S. Census Bureau, "Concentration Ratios 2002: Manufacturing," ECO2-21SR-1, at 2-3.