Dairy Outlook Overview

Dairy producers have experienced volatility with decreased milk prices and sustained high feed prices so far in 2012. Milk production has outpaced demand on both the national and global levels causing dairy product prices to dip and cold storage to climb. Demand of dairy products has lost some steam in early 2012 compared to the record export levels of 2011. These factors have led to tight margins in mid-2012 for producers which could lead to rebalancing of supply and demand.

**Milk Supply:** Favorable weather at the start of 2012 has attributed to increased milk production by 4.71 percent for January through April over 2011 (Figure 1). Rolling annual milk production is up 2.34 percent at the end of February at 198 billion pounds. Rolling herd average at the end of April is at 21,888, up from 21,600 at the end of 2011 for the 23 selected dairy states.

**Figure 1 U.S. Milk Production, Billion Pounds**

The total number of milk cows in the U.S. is just over 9.27 million cows at the end of April, up 49 thousand cows from the end of 2011. The U.S. milk cow herd has maintained stable growth at or just less than one percent so far in 2012.

However, in the past year the industry has a large replacement heifer inventory and stable percentage of cows leaving the herd. Growing cow inventory and a mild winter and early spring has resulted in a larger than normal spring flush of milk on the market. Excess milk has oversupplied the market causing processors run at plant capacity and increase storage stocks.
Iowa milk production continues to increase per cow on a rolling annual basis; production increased 745 pounds per cow when comparing annual production at the end of April. When looking at the increase of milk production per cow among the 23 dairy states, Iowa continues to be a leader behind Texas. The number of cows in Iowa has increased by four thousand head since December 2011 to 207,000.

Young milk cow herd, strong heifer inventory, and favorable weather conditions has increased U.S. milk production from 2011. However, tightened margins in early summer months may encourage producers to take advantage of favorable beef prices, and anticipated above average summer temperatures may cause milk production growth to slow for the remainder of 2012.

**Milk Product Demand:** Export sales helped to drive dairy product demand in 2011. Total exports have subsided slightly in early 2012, with a reduction of 0.8 percent of total milk production in export products, 12.5 percent for January through February down from 13.3 percent for 2011. However, this level of exports so far in 2012 is stronger than expected. Global dairy prices continue to soften as world supply of milk is up and storage of butter and milk powder is growing. A growing global supply, increasing stocks in storage, and existing insecurities in the global market have contributed to the declining product prices. Continued development of product markets that are nutrient enriched and meet demand of those in the middle class of foreign markets is key for long term strength of the U.S. dairy industry. A newly built plant in Nevada will process Whole Milk Powder, a product specifically for the export market; this is the first processing plant for this product in the U.S.

**Dairy Profitability:** The U.S. All Milk Price for May was $16.40 per hundredweight, down from $19.00 at the start of the year. Iowa producers saw an additional $0.50 on All Milk Price at $16.90 in March. Iowa producers typically see about a $2.00 positive basis between All Milk Price and Announced Milk Price, based on CME closing futures price. Figure 2 below displays the All Milk Price for producers in Iowa from 2009 forward on a monthly basis. As shown in the chart below, producers have seen decreased prices from the start of 2012 with expected prices closing out the year around 2010 level prices.

**Milk Prices:** Class III milk prices on the Chicago Mercantile Exchange have regained strength from May holding at $15.50 to $16.50 for the next year. Current feed prices remain high with current corn above $6.00 and high quality dairy alfalfa hay moving down or below $200 per ton. Although milk prices may settle at levels close to 2010, feed price outlook for the 2012/2013 marketing year are giving producers a hope for
improved margins. Income over feed cost measures and increasing variable costs, other than feed, over time may cause decisions to be made concerning longevity of operations over the next few months. However, the period of tightened margins are not expected to last or reach the levels of 2009 due to continued, retained global demand and slowing production in the coming summer months. Financial viability, working capital, net worth, and debt load should be closely monitored with dairy operations moving ahead with the current and short-term tight margins.

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A Very Quick Start

The crop markets have been under significant pressure on several fronts. From the increase in total crop acreage to the rapid planting pace and the lackluster economic growth, there are several factors pushing corn and soybean prices downward. However, the 2012 crop year still projects to be profitable, just not nearly as profitable as the preceding two crops.

With the March Prospective Plantings report showing roughly 96 million acres of corn and 74 million acres of soybeans, the markets were already preparing for big crops. But the pace of fieldwork this spring definitely added to that feeling. As Figure 1 shows, this has been one of the fastest planting seasons over the last thirty-three years. Usually early planting leads to better yields. Thus, USDA has already bumped its corn yield projection by two bushels this spring, to 166 bushels per acre.

So with projected production of 14.79 billion bushels of corn and 3.2 billion bushels of soybeans, the markets see the strong potential for large crops. And those projected production increases don’t stop at the border. Worldwide, corn production is projected to increase by nearly 9 percent and soybean production is expected to grow by nearly 15 percent. The stronger crop prices this winter and spring provided incentives for crop producers around the world to increase production. A sizable portion of the worldwide increase is expected to come from South America as producers there continue to recover from the impact of La Niña. However, there is still a lot of time left in the growing season. Given the dry fall and winter, the crops will continue to need timely rains throughout the summer. The advantages of early planting could be undone if the weather does not cooperate.

And while production looks robust, demand looks to rebound. USDA’s projections show feed, sweetener, and export demand for corn increasing over the coming marketing year. Ethanol demand is expected to maintain at a 5 billion bushel level. But the surge in supply is more than enough to meet these increases and build up stock levels. For soybeans, crush and export demand are projected to rise. And unlike corn, the gains in demand are expected to reduce ending stocks to very tight levels.
Looking in more detail, corn feed and residual demand is expected to rise by 900 million bushels. But most of that gain is in the residual category. For most of the past year, wheat and other feed grains have challenged corn in the feed market. But that challenge from wheat is declining as wheat prices have strengthened in comparison to corn.

Corn and soybean exports have struggled this marketing year. As Figure 2 shows, both crops are down approximately 12 percent from last year. Corn exports increased with the price drop last fall, but failed to gain on to those gains this winter and spring. While China has become one of our major buyers, the growth in Chinese demand has not been enough to offset the general decline in exports. But the export projection for 2012/13 has exports growing by 200 million bushels. And advance sales for the upcoming crop are ahead of last year’s pace.

Figure 2. Export Pace Compared to Last Year (Source: USDA-FAS)

Soybean exports dramatically fell last fall, but have been steadily recovering ever since. Again, the key has been China. Over the past several months, China has picked up its pace of soybean purchases. The projections for 2012/13 show the possibility of a return to record exports. However, with the concerns of a Chinese economic slowdown building, that rebound to record exports may not occur.

Corn demand via ethanol has settled in at the 5 billion bushel level for the past two years and USDA projects next year will be in that range as well. While blender margins have been good, margins at the plant level have been weak. Ethanol production has outpaced demand and as Figure 3 shows, stocks have built up to record levels. As the summer driving season picks up, ethanol stocks will fall as they did last year. But with the 10% blend market basically filled, it will take higher blending levels (such as E-15) or a continued increase in ethanol export demand to push ethanol to use corn above the 5 billion bushel level.

Pricewise, both crops have lost ground over the past month. Corn has been on a downward trend since last fall. Based on futures prices, the 2012 corn crop hit its peak last September. Then, futures indicated a 2012/13 season-average cash price of over $6.50 per bushel. Now, futures project $4.75 per bushel. Soybean prices have been on a see-saw ride over the past eight months. Last September, futures projected a $13.25 season-average cash price for 2012/13. That fell to nearly $10.50 per bushel by December, rallied to $13 in April, and now sits at $12 per bushel. But given production cost estimates of $4.41 per bushel for corn and $10.96 per bushel for soybeans, both crops still offer some profit. As Figure 4 shows, based on trend-line yields, both
crops have margins around $50 per acre. So decent pricing opportunities still exist, but they are not as attractive as earlier prices.

Figure 3. Ethanol Stocks (Source: DOE-EIA)

Figure 4. Projected Crop Margins

USDA’s current price outlook has 2012 corn in the $4.60 range and soybeans around $13. So USDA and the futures market are roughly in agreement on corn, but the futures market is more pessimistic about soybeans than USDA. The global economic concerns seem to hit soybeans harder as that market is more dependent on exports. Price rallies are built on higher demands and/or dwindling supplies. Right now, we are hoping for the higher demands, but also see surging supplies. Weather patterns likely hold the key to any near-term price
rallies. The current U.S. Drought Monitor shows most of the country is abnormally dry, including most of Iowa. If that continues, we could see crop conditions deteriorate and crop prices rebound.

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