# The Feed

***Farmer Mac's Quarterly Perspective on Agriculture***

## Fall 2015

FARMER MAC

FINANCING RURAL AMERICA

## INTRODUCTION

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Greetings and a warm welcome to Farmer Mac's inaugural edition of The Feed, our quarterly perspective on U.S. agriculture. For over a quarter century, we've enjoyed working alongside America's rural lenders to help meet the evolving needs of their customers by bringing the financial strength of the nation's premier secondary market for agriculture right to their customers' farms and we couldn't be more excited to broaden this valued relationship even further.

For the past ten years, Farmer Mac's resident agricultural economist, Jackson Takach, has been preparing a quarterly agricultural economic report for the company in an effort to keep everyone well-informed of current market conditions and ensure prudent risk management practices within the company. We have come to realize that the information contained in our report is both relevant and valuable to a wider audience – the ag community at large, who may not have the time or the resources to curate their own comprehensive economic assessment. To that end, we have created The Feed, a compilation of the most relevant research from trusted ag resources, combined with insightful commentary and analysis from our own team of experts all relating to the current economic landscape of rural America. Our goal of The Feed is to neatly encapsulate all of the most pertinent topics geared towards the rural banking community and their farm clients into a single, reliable source.

The timing of the launch of this publication is no coincidence. The ABA National Ag Lenders Conference is in its 63rd year, and Farmer Mac is proud to be a longstanding partner with a group so committed to the financial health and well-being of our nation's farmers, ranchers, and rural economy. In keeping with this spirit of collaboration, The Feed shares Farmer Mac's research efforts with lenders, producers, agribusinesses, and others interested in the economic conditions of rural America.

Inside this first edition of The Feed, you will find sector analyses of conditions in the ag economy with a focus on what is relevant for Fall 2015. In future editions, we will continue to cover key commodity sectors across America, the drivers for current market conditions, seasonal trends, our views on where these sectors are headed, and special features.

So please enjoy this and future editions of The Feed knowing that we share your passion and commitment for rural America. You will find future releases on our website or you can subscribe by sending an email to TheFeed@farmermac.com. As a final thought, we approach a very special time of year, Thanksgiving. We are thankful for the bounty of this country and especially the community lenders that provide the capital American farmers, ranchers, and rural residents require. We appreciate your support and are so happy to have you as a reader of The Feed.

*— Curt & Jackson*

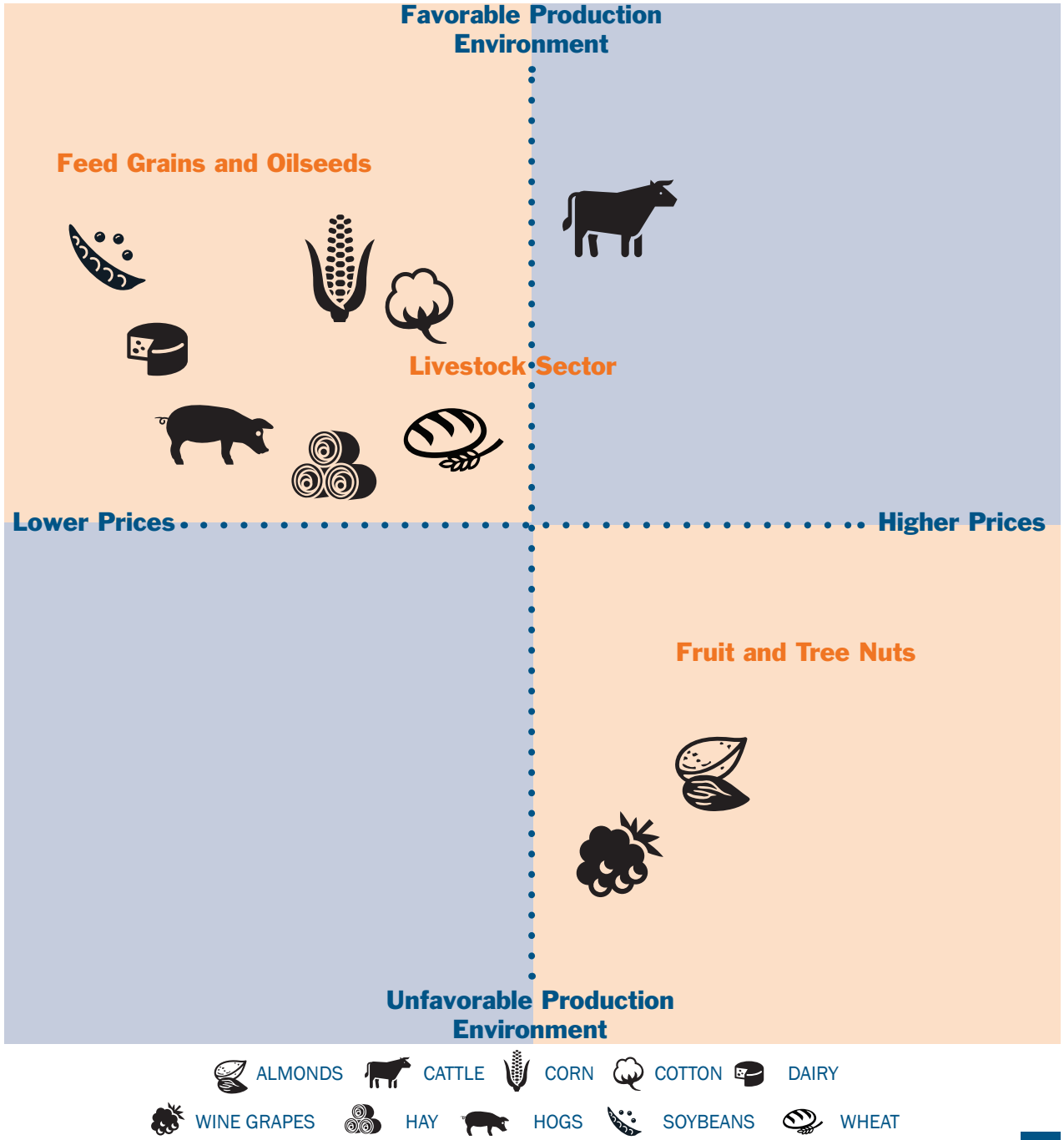
## EXECUTIVE SUMMARY

As expected, net farm income is forecasted to decline significantly in 2015 based on lower commodity prices and increased supplies at a global level. Land values are holding up under the adverse economic conditions, but softening is in-process in the grain belt, particularly in Iowa and Minnesota. Pasture rents, on the other hand, are on the rise as cattle prices have improved the profitability of cow/calf operations. U.S. corn and soybean crops are in good condition and the harvest is proceeding roughly in line with historical averages. Dairy prices continue to be depressed on lower demand from China and greater competition with European producers due to the Russian ban on European and U.S. dairy products. Fruit and tree nut prices are holding up due to strong overseas demand, but the increasing value of the U.S. dollar should create a ceiling for nut prices. Yields are off in California due to the persistent drought, although relief could come soon as the El Niño expectations continue to build hope of a wet winter and spring.

The perceptual map to the right plots major agricultural sectors on two dimensions: market prices and the favorableness of the production environment. The grain sector is largely seeing a good production environment and, as a result, lower market prices. The livestock sector is somewhat mixed with hogs and dairy down in prices with good production and cattle still seeing strong profitability. Finally, many fruit and tree nut producers are experiencing tough growing conditions due to drought, but their prices have held up in the face of lower production.

***Farm income is down again in 2015, but the farm balance sheet shows some strength.***

**Production and Market Price Perceptual Map**



## FARM INCOME

### Key Highlights

**Lower incomes expected in 2015 due to lower commodity prices and ample supplies.**

**Dairy producers are feeling the pinch due to more overseas competition.**

**Two-year decline of over 50% from 2013 record high income levels.**

**Producers liquidate some of cash assets on farm balance sheets to supplement lower incomes.**

**Land values flat to down slightly, primarily in Corn Belt states.**

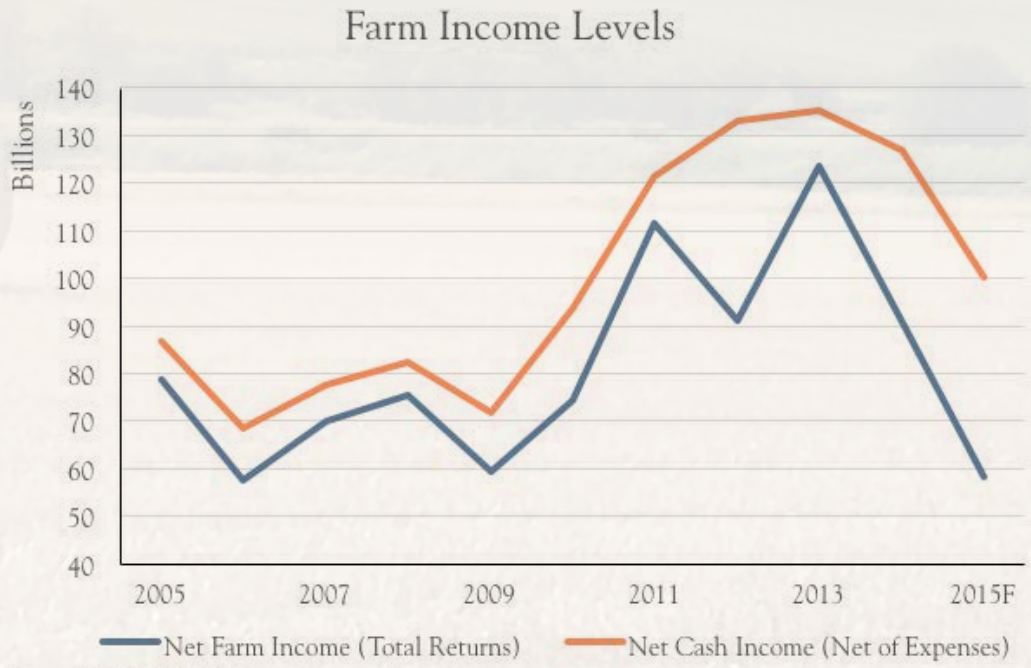
**Debt levels are on the rise but significantly slower increases than the 1980s.**

Farm incomes are under pressure again in 2015. The USDA projects net farm income, the economic return to farm operators after all production expenses have been paid, to fall by 36 percent in 2015 making it a two-year decline of 53 percent from highs in 2013. If realized, the two-year change is the second largest in recorded history behind only 1921. Despite the large declines, net farm income levels in 2015 are likely to resemble those in 2006 and 2009 (see Figure 1)[11].

The decline in farm profitability is a function of lower commodity prices and mulish expense levels. Receipts generated by the major field crops are expected to fall by over ten percent. Corn, soybean, wheat, and cotton prices are down compared to recent periods on global supply growth and a stronger U.S. dollar. Livestock producers are also feeling the pinch with dairy receipts down 29 percent, hog prices off over 30 percent, and poultry prices down nearly ten percent. Cattle prices are currently holding steady in 2015, but herd inventories showed signs of a rebuild in July 2015 with the first increase in nearly ten years. Combined, the expected decline in agricultural cash receipts for crops and livestock in 2015 totals $32.3 billion in lost revenue[11].

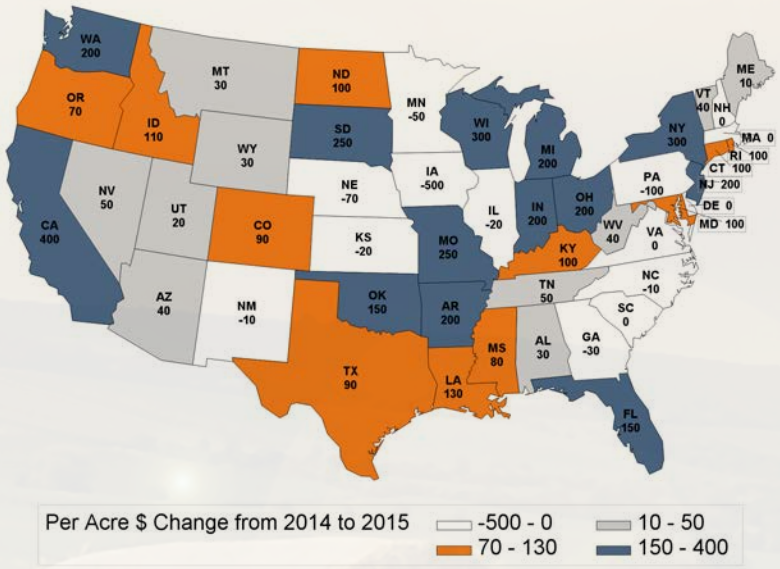
Additionally, operators can expect little reprieve in farm expenses – producers are expected to trim about $10 billion in direct farm production expenses during the year but increase $5 billion in stakeholder payments. Feed prices have offered livestock producers some savings, and lower energy prices are a benefit to both livestock and crop producers. However, rent is little changed and labor costs have increased in 2015 on labor shortages throughout Western states. Interest expenses are also up on higher debt loads[11].

**Figure 1: Net Farm Income and Net Cash Income**




Source: USDA ERS 2015 Farm Income Forecast

## Figure 2: Change in Average Farmland Values from 2014 to 2015 (per acre)




Farm asset levels are off recent-year highs as a result of lower cash reserves, inventory values, and land values. Cash reserves and liquid financial assets will be used to offset declines in farm income levels. The decline in commodity prices during the year has pushed down the value of carry-in from 2014, chiefly oil crops in storage and some livestock herds like hogs and broilers. Inventories are still on the historical high side as cattle prices remain elevated during most of 2015.

The value of farm real estate, the bulk of all farm assets, is projected to fall by approximately two percent during 2015. Changes in land values are driven by conditions specific to regions and localities. Figure 2 shows the per acre change from 2014 to 2015 for each state from the National Agricultural Statistics Service (NASS) Annual Land Value Survey. The largest average declines are in the Midnorth region where growers are more exposed to changes in crop prices. NASS survey results are largely echoed by research coming out of major university and professional group studies, although the regional studies show slightly dourer results (see Figure 3). Land values in the West are stable to up, but results are highly localized with access to water dictating any change in perceived value.

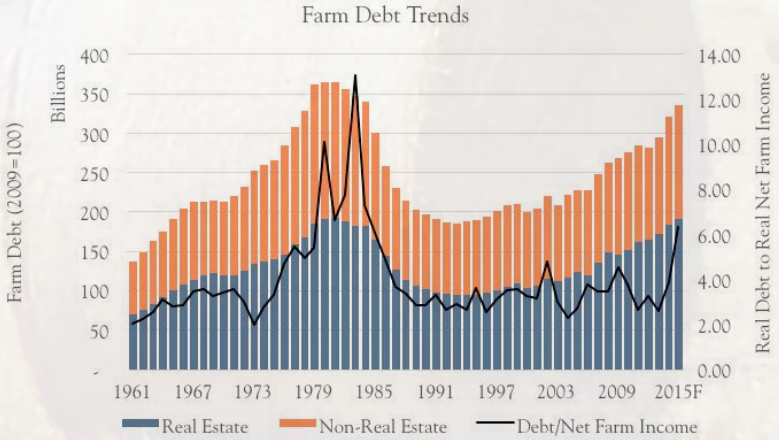
The use of farm debt is increasing as producers require additional financing to augment lower income levels. The USDA projects total farm debt to increase by $20 billion in 2015 (a 5.8 percent increase) split almost equally between real estate financing and non-real estate debt (i.e., operating and intermediate). Figure 4 below shows the composition of farm debt over time adjusting for inflation.

Even with the recent growth in farm financing, the industry is far from the conditions experienced in the 1980s. Total farm debt remains nearly ten percent lower than its peak, and the absolute level of farm assets is approximately 15 percent higher today than in 1980. Furthermore, total sector debt-to-income is well below the levels witnessed prior to the farm crisis[11].

## Figure 3: Recent Farmland Value Studies

| Study | State/Area | 2014 Change | 2015 Change |
|---|---|---|---|
| Iowa State University Farmland Value Survey (March) | IA | -5% | -11% |
| Federal Reserve Bank of Chicago (June) | IL | 3% | -4% |
| Purdue University Economics Report (June) | IN | 7% | -4% |
| Federal Reserve Bank of Chicago (June) | WI | 8% | -3% |
| Federal Reserve Bank of Kansas City (June) | Tenth District | 7% | -3% |
| University of Nebraska - Lincoln (Feb) | NE | 9% | -2% |
| South Dakota Agricultural Land Market Trends (Feb) | SD | 6% | 1% |
| University of Minnesota Land Economics | MN | 10% | 1% |

## Figure 4: Farm Debt Trends




Source: USDA ERS Farm Sector Historical Financial Data

## WEATHER

Hot, dry weather persists in much of the western U.S. Late summer brought very regional rains in southern California and parts of Oregon, but the water deficit for the region remains, most notably in central California, Oregon, and Washington. Conditions are ripe for widespread wildfires in the Pacific Northwest and throughout California, and the 2015 summer wildfire season has been one of the worst on record. El Niño conditions are increasing the likelihood of some intense winter and spring moisture in parts of California, with the southern part of the state receiving the better part of the precipitation. As a result of the El Niño conditions, the drought intensity in California may lessen into early 2016, but it is unlikely to erase the significant deficits that exist today[5]. The rebuilding of the snowpack in the West will be of great interest as the water cycle out West begins. Unfortunately, conditions do not look to improve significantly in the Pacific Northwest as temperatures are forecasted to be above average and precipitation below average through the first half of 2016.

Weather conditions have been largely positive in the Midwest as harvest began in mid-September. Soil moistures from South Dakota down to Texas are above average this summer with good precipitation and cooler weather than recent years. Harvest was slowed by some of this excessive moisture, but a warmer September helped to progress the crops along. Weather patterns from here until spring look to be fairly in-line with recent experience, and the harvest should proceed quickly. At the end of September, corn harvest was behind by five percentage points compared to the historical average, and the soybean harvest was comparable to historical averages[5,9].

Looking ahead, the southern U.S. is expected to receive below average temperatures and above average precipitation through the spring months, a result of the El Niño weather pattern, and the northern U.S. is likely to see higher temperatures and lower levels of precipitation. Pasture conditions in western Texas and the lower plains should be quite good heading into 2016, although some dryness may develop in the upper plains into North Dakota[5,9].

**Figure 5: Drought Monitor Map**
**(USDA, NOAA, University of Nebraska-Lincoln)**

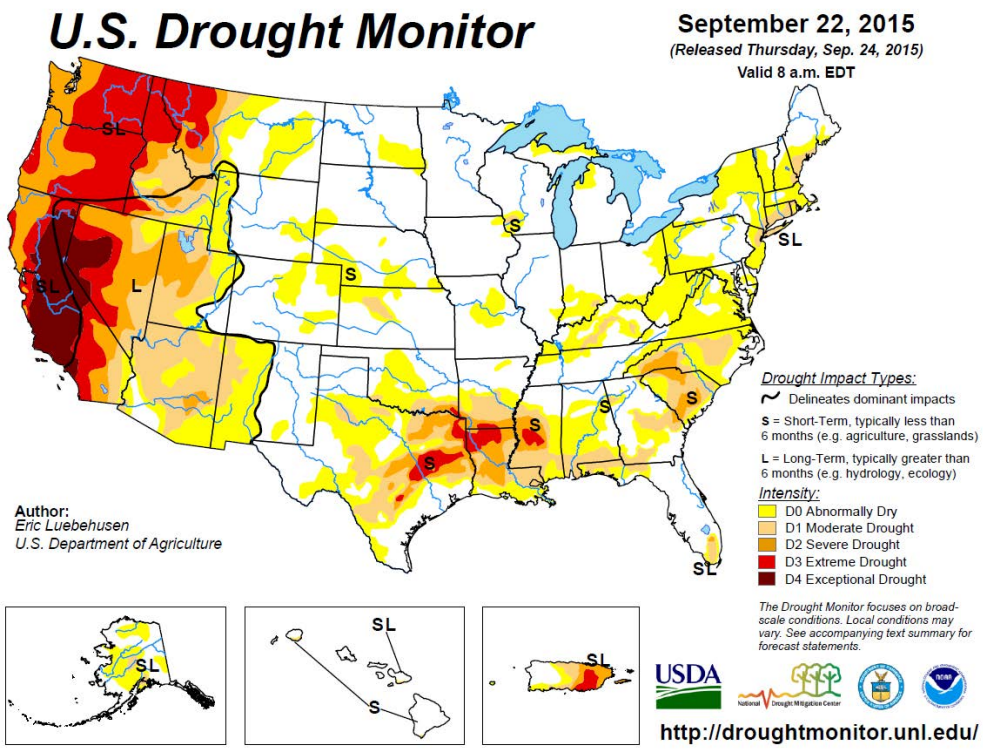
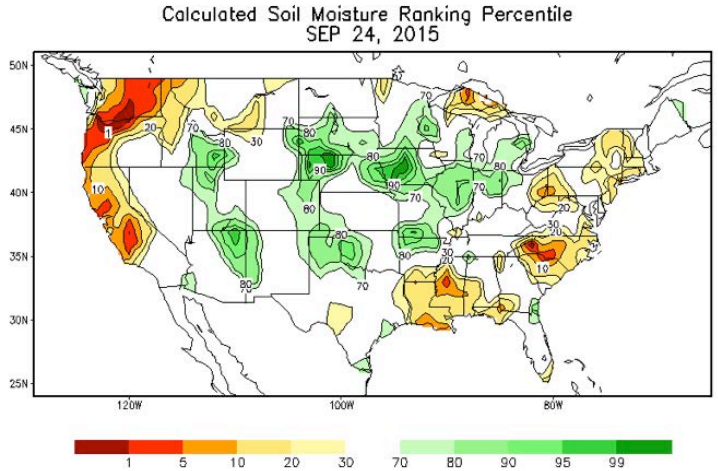



**Figure 6: Soil Moisture Anomaly Map**
**(NOAA, National Weather Service)**




### Key Highlights

***Hot, dry conditions persist in western states.***

***El Niño expected to bring some relief this winter but may miss much of northern California and the Pacific Northwest.***

***Some drought in east Texas but largely good conditions in the Midwest.***

## Key Highlights

**Crop conditions are down from 2014, but remain above average.**

**Market prices remain below $4/bushel due to higher global ending stocks.**

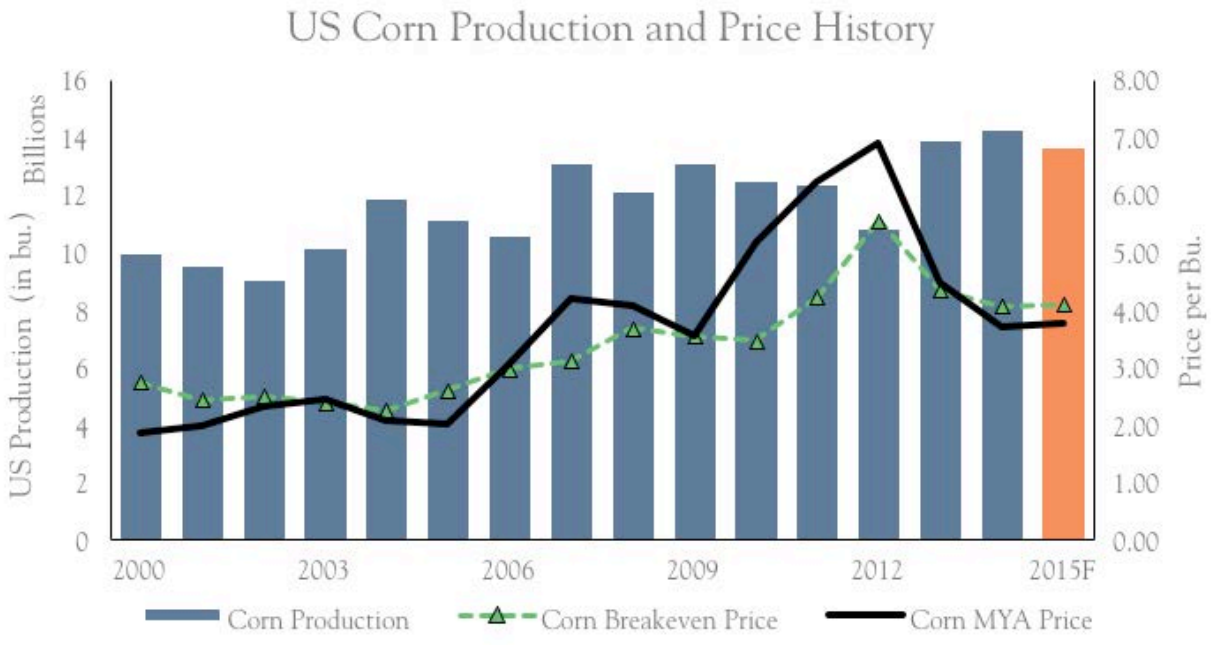
**The current market price is below average breakeven price, indicating negative profitability again in 2015.**

***Corn prices are currently near $3.75 per bushel, but ultimately the size of the crop will have a big impact on prices.***

The U.S. corn crop looks to be of fairly high quality heading into the high harvest months. Reported crop quality is below that experienced in 2014, but on average is of higher quality than in 2013 and 2011, according to USDA surveys. The fall harvest got off to a slow start, but caught up somewhat in mid-September. Based on current conditions, the USDA estimates production at 13.6 billion bushels, which is lower than in previous years but still the third largest crop on record. Both yield and acres harvested are expected to be down from last year[14].

With demand for corn relatively flat and supply down slightly, corn prices could rise by the end of 2015 and into 2016. Exports are down somewhat on a strong U.S. dollar and greater competition from producers in Brazil and the Ukraine[12]. Domestic usage for ethanol, feed, and food usage is largely unchanged from 2014. On balance, the ending stocks for corn (i.e., corn supply less usage) are expected to be down from the 2014 rebound[11]. Prices tend to move opposite ending stocks, so a reduction in ending supplies will likely be associated with an increase in price. The USDA expects a market year average corn price between $3.45 and $4.05 per bushel for the 2015/16 crop. Those prices are below the estimated average breakeven for corn ($4.08 per bushel in 2015), and thus, 2015 is likely to generate losses for many producers, particularly those with a high percentage of rented acreage[11].

**Figure 7: U.S. Corn Production**




Source: USDA NASS QuickStats Production Data, ERS Commodity Costs and Returns

## SOYBEANS

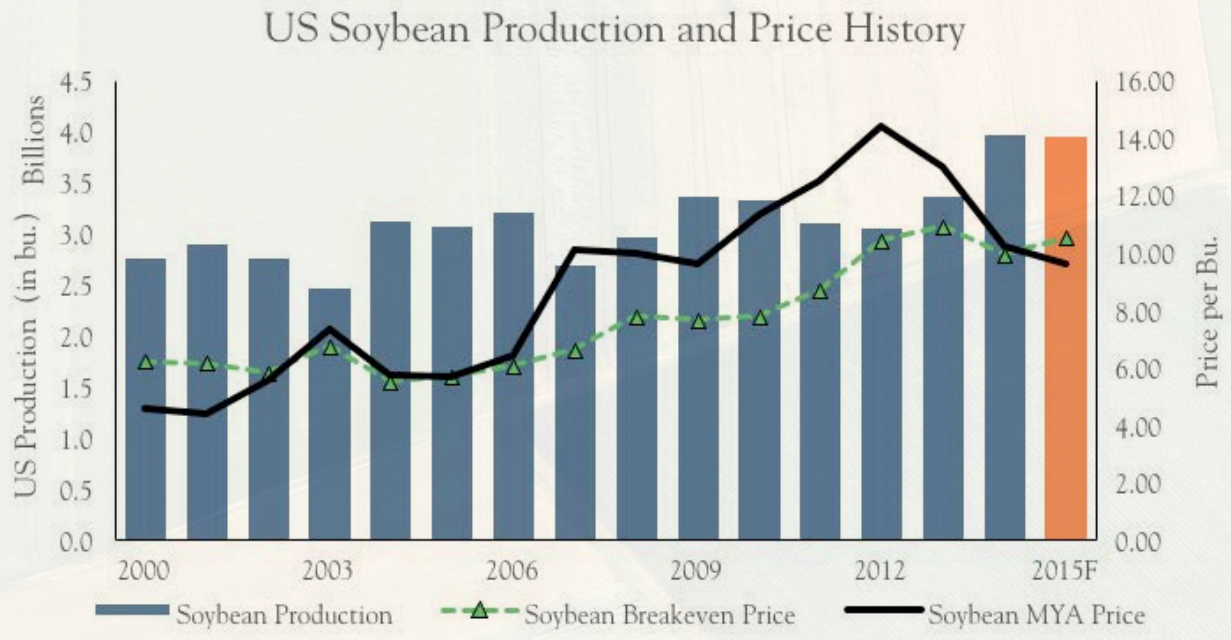
Soybean production in 2015 is likely to rival the record crop from 2014. Late August heat in the grain belt helped crop development, and as a result, yield expectations rose in September. With more acres planted in 2015 than ever before, the year-end soybean supply is likely to be robust. Global soybean stocks are expected up as a result of the large U.S. crop despite yield declines resulting from a cooler, wetter growing season[11].

Demand for U.S. soybeans is down sharply in 2015. The export markets are a primary driver of the reduction – sales in China are down over 250 million bushels in 2015 compared to August 2014. The explanation is two-fold: the rebuilding of global stocks and currency movements. Since 2010, the number of global hectares planted to soybeans has increased by 17 percent and world production has increased by 21 percent. Brazil's productive capacity rivals that of the U.S., and their delivery capabilities have improved tremendously with investments in port systems. Concurrently, the value of the U.S. dollar has moved from historically low to historically high on sour economic expectations coming out of emerging markets. The Brazilian Real has lost 41 percent of its value to the dollar since 2014, and similarly, the Chinese Yuan has lost five percent of its value to the dollar during that same time frame[12,13].

Large supplies and lower exports combine for a negative profitability outlook for the near term. The current average breakeven price is higher than market price, and until some major input costs like net rent and seed costs come down, losses could mount for higher-cost producers. Market prices are unlikely to move higher until there is a supply-side correction or market disruption. However, producers that have actively managed their costs and own a higher percentage of their land will still see profits even in these leaner times.

***Big adjustments in the soybean markets as the near $9.00 per bushel price demonstrates the excess supply.***

**Figure 8: U.S. Soybean Production**




Source: USDA NASS QuickStats Production Data, ERS Commodity Costs and Returns

**Key Highlights**

**Crop conditions are down from 2014 but yields are still likely to be strong.**

**Decreased demand from China has reduced market prices.**

**Market prices are below average breakeven price for the first time in over a decade.**

## Key Highlights

**Profitability in feedlot operations remains elusive due to the continuation of high animal costs.**

**There still exists good profitability for cow/calf operators.**

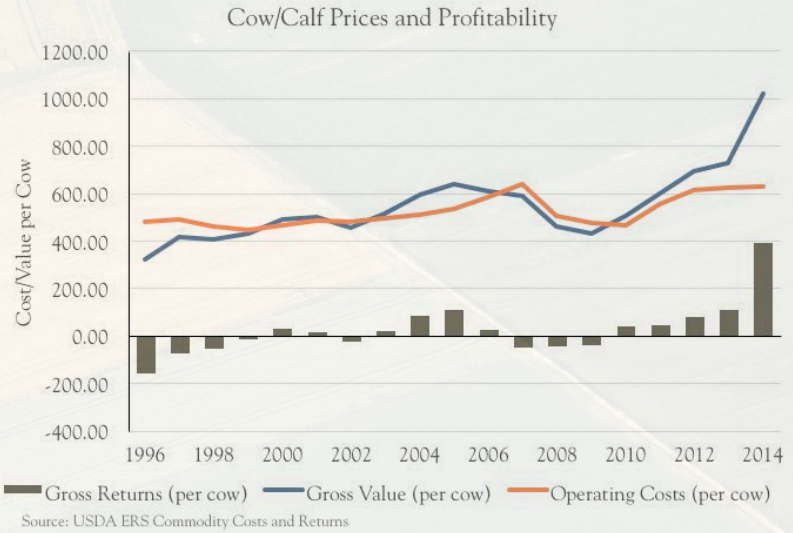
**Cattle and beef prices fell in the third quarter on reduced demand.**

Supply conditions in the cattle industry are beginning to turn. During the last decade, cattle herds have contracted to levels not seen since the 1950s, and the reduction in available cattle for slaughter played a major role in the significant increases in beef prices from cow/calf operators on up the value chain to retail prices. There are now signals of herd expansion, including an increase in cattle inventories in the USDA July 1 survey and a decline in commercial heifer and beef cow slaughter rate compared to 2014. It may take several years to fully rebuild the U.S. cattle inventory, but the increasing supply will eventually put downward pressure on cattle and beef prices, most likely making a noticeable impact in late 2016 and into 2017[11,14].

Demand for beef is a more immediate concern for the industry. Consumer demand is finally buckling under historically high beef prices and cheaper protein substitutes in swine and poultry. According to USDA data, per capita disappearance for beef fell two percent in the second quarter compared to 2014, while consumption of pork and chicken increased by seven and six percent, respectively. To compound problems for beef producers, the stronger U.S. dollar reduces foreign demand for American beef products and cheapens imports, particularly from Canada and Mexico. Beef exports are down year-to-date driven largely by reductions in shipments to Asia.

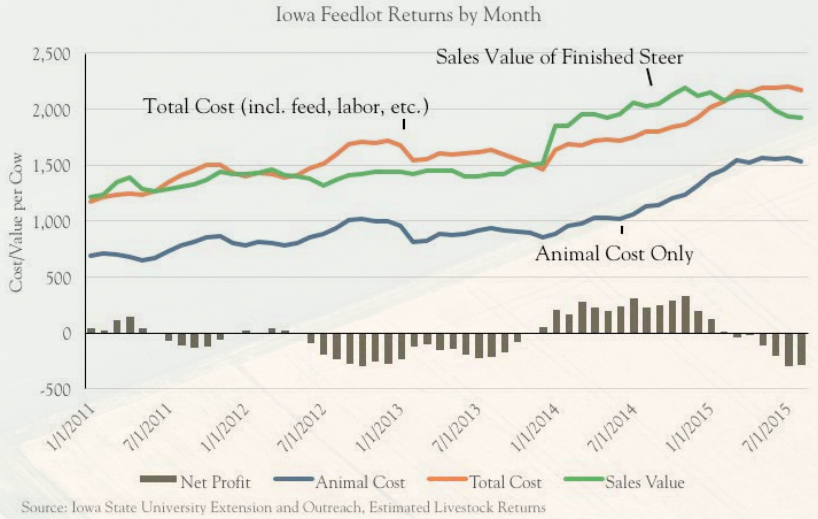
When combined, the supply and demand pictures imply future declines in profitability for cow/calf operators and mixed impacts for feedlot operators. Cow/calf operators are likely to see reduced values per cow on lower margins in the supply chain, and costs are unlikely to move much as low grain prices are largely baked into projected expenses. Profitability for 2015 and 2016 is not likely to turn negative but will certainly be lower than the records seen in 2014. Feedlot operators have seen some improvements in profitability in August on lower animal prices; that trend is likely to continue as the supply picture continues to change and herds are rebuilt. The challenge for finishers and processors is the decline in consumer beef demand if retail prices continue to abate.

**Figure 9: Historical Cow/Calf Operation Profitability**




Source: USDA ERS Commodity Costs and Returns

**Figure 10: Historical Feedlot Operation Profitability**




Source: Iowa State University Extension and Outreach, Estimated Livestock Returns

## DAIRY

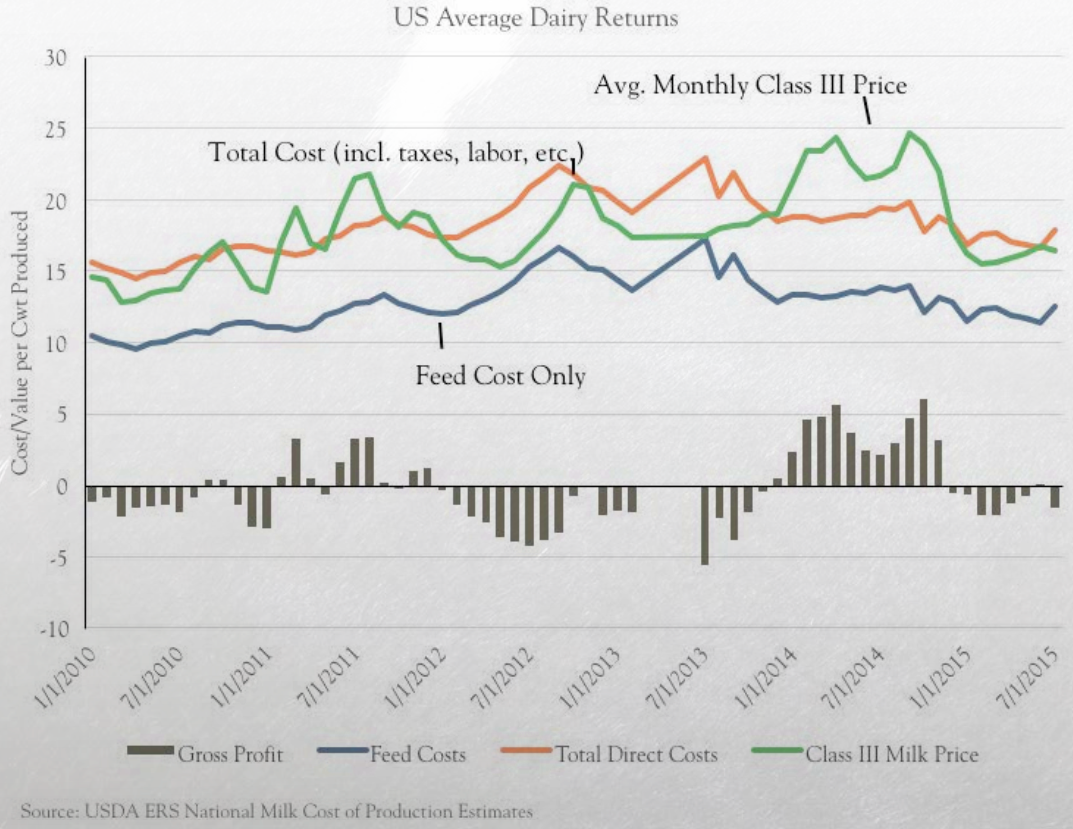
An extremely profitable 2014 incented U.S. dairy producers to expand production into 2015. The USDA estimates milk production up nearly two percent in 2015 on a larger dairy herd and more output per cow. Production increases are regional and California production is actually down in 2015 on lower output per cow due to hot, arid conditions. Increases in production in Minnesota and Wisconsin more than offset the decline in the West[10,11].

Demand for U.S. dairy is fairly good domestically, but the international markets still present a challenge. Demand for butter and cheese is up, boosting Class III prices in the second quarter. Consumer sentiment is turning on traditional butter and other fats-based dietary items to a more favorable position. However, exports of dry milk products are down in 2015 as cheaper alternatives from Europe, Australia, and New Zealand are increasingly competing in Asian markets that were once firmly rooted in U.S. products[12,13].

Excess dairy on the global markets is the primary driver of lower profitability in 2015 compared to 2014. The Russian ban on Western food imports is likely to continue in the near term, so the competition for Asian and other foreign markets will continue into 2016. Total cost of production on average exceeds the Class III milk price in third quarter 2015, and it is unlikely that milk prices will rise dramatically in the near term.

***Excess dairy on the global markets is the primary driver of lower profitability in 2015 compared to 2014.***

**Figure 11: Historical Dairy Profitability**




Source: USDA ERS National Milk Cost of Production Estimates

### Key Highlights

**U.S. producers increase supply in 2015 and signal expansion in 2016.**

**Exports are down in 2015 on greater competition from the EU and Oceania.**

**Class III prices are below the breakeven price for the average producer for much of 2015, indicating a strong possibility of losses for producers.**

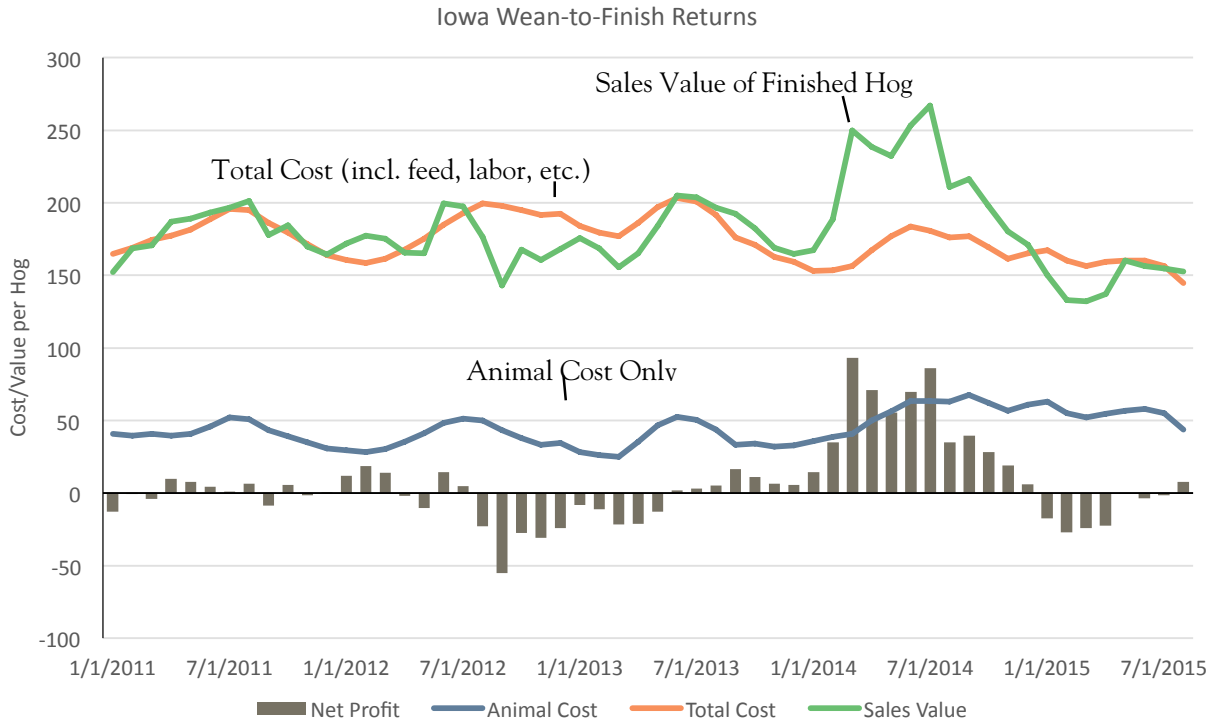
## HOGS

Hog inventories are up compared to 2013 and 2014 as recovery from the outbreak of Porcine Epidemic Diarrhea virus (PEDv) continues. Pig crop totals increased in both 2014 and 2015 year-to-date, and the increasing litter counts have put downward pressure on barrow and gilt prices. Prices peaked at $93 per hundredweight in July 2014 at the height of the PEDv outbreak. In August 2015, barrow and gilt prices averaged $59 per hundredweight, a decline of 37 percent[11,14].

Pork demand remains robust with retail prices down between five and ten percent from 2014 highs. Much of the demand increase is coming domestically on higher per capita consumption as consumers substitute pork for higher-priced beef. Export quantities are down five percent year-to-date due to the strength of the U.S. dollar, but value of exports is down by 17 percent due to the combination of lower quantities at lower prices. International demand growth is strongest in Mexico, South Korea, and Hong Kong, with quantities up 6, 39, and 63 percent, respectively, in 2015.

Sector profitability is down in 2015, largely as a result of the higher hog supplies. Producer profitability for hog producers is largely driven by the market value of finished hogs and feed costs. A glut of marketed hogs decreases their market value, and thus hurts top-line revenues for finishing operations. Feeding costs are down from 2012 and 2013 highs, but remained largely stable in 2014 and 2015. Seasonal feeding costs declined in late summer and continue to decrease as the harvest progresses, and the slight dip in August helped producers back to breakeven. But as Figure 12 highlights, final sales values of finished hogs have limited sector profitability throughout 2015[3]. Hog prices are likely to remain under pressure throughout 2015 and into 2016, so any gains in profitability will have to come from improvements in feeding costs and operating efficiencies.

**Figure 12: Historical Hog Operation Profitability**




Source: Iowa State University Extension and Outreach, Estimated Livestock Returns

***Sector profitability is down in 2015, largely as a result of higher hog supplies.***

**Key Highlights**

**Hog inventories are up in 2015 as producers rebound from the PEDv.**

**Market prices are down as a result of the inventory rebuild.**

**Current finishing operation economics are near breakeven levels on seasonally lower feed costs.**

## ALMONDS

### Key Highlights

**Profitability remains good with strong demand bolstering high prices.**

**Yields down this year due to poor growing conditions.**

**Export markets strengthen despite stronger dollar.**

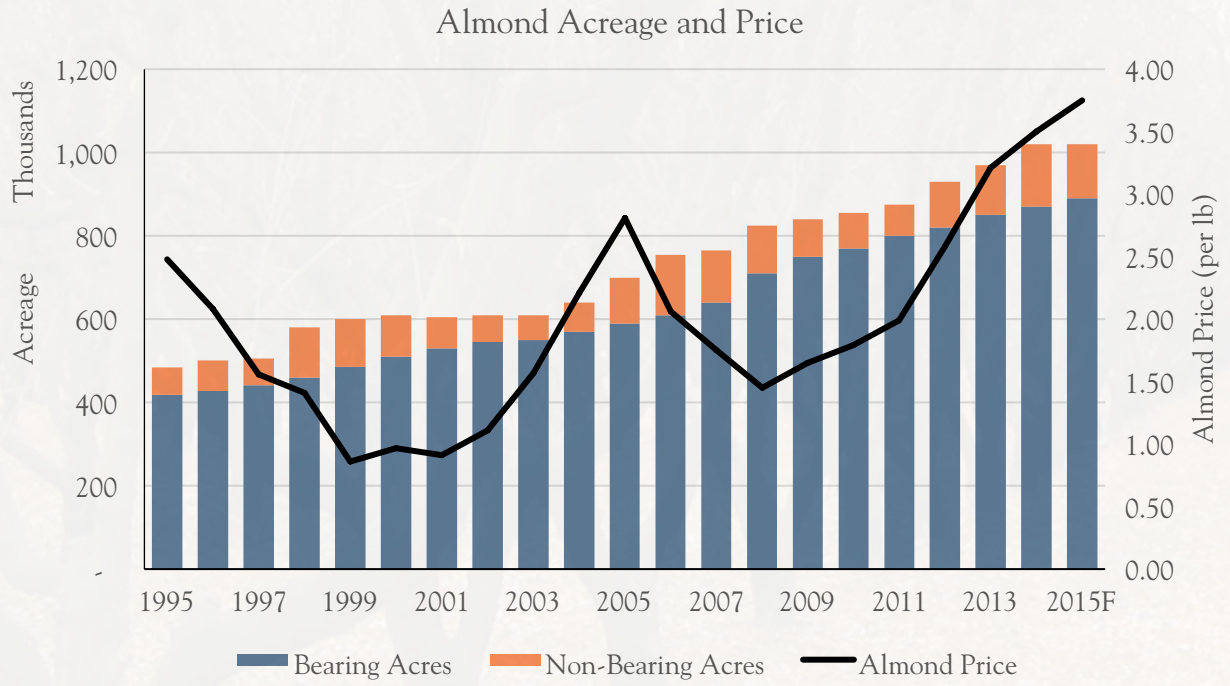
***Nut demand has been seemingly immune to currency effects, but a continued strong dollar may eventually reduce overseas demand.***

U.S. almond production is down in 2015. The extended California drought has dug into crop yields for the second consecutive year as many report smaller yields and nut sizes during an early harvest. Orchards, up 39 percent in acreage over the last ten years, are under stress from less water, higher salinity, and hotter conditions. In mid-September, the Almond Board of California estimated that yields could be down ten percent in 2015, while some growers estimate that yields are off between 15 and 20 percent[15].

Demand remains strong for U.S. almonds, particularly in overseas markets. Export quantities are up seven percent through July, and the value of almond exports is up 23 percent. The implied price of almond exports tops $4.00 per pound compared to $2.00 per pound in 2010. Regional export volumes are mixed, with some EU countries up in 2015 and others down. The United Arab Emirates has been a good source of growth for the industry with a 31 percent increase in quantity imported. Asian demand is off somewhat in both Japan and South Korea but up in Hong Kong[12,13].

Almond industry profitability is likely to remain strong, although producers will face headwinds in the next year. Nut demand has been seemingly immune to currency effects, but a continued strong dollar may eventually reduce overseas demand. Currently, exports represent approximately half of U.S. production, and should foreign buyers begin to balk at the recent run-up in prices, that export demand could dry up quickly. From the production side, drought concerns linger. Even with a good El Niño event this winter, orchards that have been too long deprived of low salinity water could have lower yields for years. Conditions look good for the near term, but the long-term visibility is somewhat murky.

**Figure 13: Historical Almond Plantings and Prices**




Source: USDA NASS California Almond Reports, USDA FAS Trade Prices

## AREAS OF INTEREST

### Drought Conditions in California

The current water deficits caused by the California drought will take years to erase, and the Central Valley is one of the areas hardest hit. Hopes are pinned to the current El Niño weather conditions to alleviate some of the dryness, but the precipitation could be focused on the southern part of California rather than the central. The water year is just beginning in the West, and any potential benefits of a wet winter should appear in the coming months.

### Greenhouse/Nursery Operations Nationally

Greenhouse and nursery operations are heavily reliant upon residential and commercial development, and the Great Recession of 2008/09 dramatically reduced industry profitability and sustainability. The industry is still working out equilibrium after going through six years of lower demand and supply-side consolidations. Many reports indicate 2015 will be a profitable year for the industry, but housing starts and consumer confidence have stalled in the last quarter.

### Citrus Greening in Florida, Texas, and California

Citrus greening is a plant-based disease believed to be caused by a bacterium that can affect all varieties of citrus trees. The primary symptom is a yellowing of the affected plant's leaves, referred to sometimes as "blotchy mottle." The disease suppresses root system development as well as annual fruit production. The fruit that does develop from an infected tree tends to be small and oddly colored and it often falls from the tree prematurely. The disease is spread by small insects called Asian citrus psyllids who feed on the leaves and stems of citrus trees. The application of heat has been the most successful treatment employed. The disease has been recorded for over 200 years, but until 1998, reports of citrus greening were isolated to China and Indochina. Reports of citrus greening in the Americas began in 1998 in Brazil, and in 2005, an operation in Florida reported the first U.S. case. Since 2005, the disease has been confirmed in nearly all citrus-producing states, most recently in Texas and California. The damage from the disease can be extensive as an orchard can be affected in part or in whole. The primary tool for preventing the spread of the disease is USDA federal quarantine. More research dollars are being appropriated in Florida, but cases of greening are still being reported from the Gulf to California.

### The Return of Avian Influenza this Winter

A relatively new strain of Avian Influenza (AI) emerged in early 2015, spreading quickly in Midwest turkey and egg-laying operations. Between December of 2014 and June 2015, over 48 million birds were destroyed as a result of disease. The first few cases were discovered in the Pacific Northwest along the Pacific flyway, but cases began popping up soon afterwards along the Mississippi flyway in March. Minnesota turkey producers have fared the worst, but Iowa started showing more cases in April. The disease has not been found in humans and is currently not thought to be a human safety concern, but operations with confirmed outbreaks can generate extensive losses if their flocks have to be exterminated (extermination is the primary means of preventing the spread of the disease). Although largely under wraps during the summer months, there is renewed concern that more instances will appear as birds carrying the strain migrate south for the winter. Extra care is cautioned for poultry producers as we head into the migratory season.

## RESOURCES

1. Federal Reserve Bank of Chicago (https://www.chicagofed.org/publications/agletter/index)
2. Federal Reserve Bank of Kansas City (https://www.kansascityfed.org/research/indicatorsdata/agfinancedatabook)
3. Iowa State University Extension (http://www2.econ.iastate.edu/estimated-returns/)
4. Iowa State University Farmland Value Survey (https://www.extension.iastate.edu/agdm/wholefarm/html/c2-75.html)
5. NOAA/National Weather Service (http://www.cpc.ncep.noaa.gov/)
6. Purdue University Agricultural Economics Report (https://ag.purdue.edu/agecon/Pages/Purdue-Agricultural-Economics-Report.aspx)
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11. USDA Economic Research Service Data and Reports (http://www.ers.usda.gov/)
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13. USDA Foreign Agricultural Service Production, Supply, and Distribution Online (http://www.apps.fas.usda.gov/psdonline/)
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15. Western Farm Press (http://westernfarmpress.com/)

## ABOUT THE FEED

For over 10 years Farmer Mac's research department has produced a quarterly agricultural economic outlook report designed to keep management abreast of current events and conditions in the ag economy. The report is broad-based and covers multiple regions and commodities to reflect the diversity in the company's portfolio. It incorporates data and analysis from numerous sources to present a mosaic of the leading industry information, with a focus on the latest information from the United States Department of Agriculture and their Economic Research Service. There are several regularly included sections like weather and major industry segments, but the author rotates through other industries and topics as they become relevant in the seasonal agricultural cycle. Where the report adds value to readers is through its unique synthesis of these multiple sources into a single succinct report. In 2015, the Farmer Mac management team found the research so valuable that they decided to share the company's quarterly perspective on agriculture with customers, investors, and the general public. Please enjoy.

## ABOUT THE AUTHORS

Jackson Takach, Farmer Mac's resident economist, is a Kentucky native whose strong ties to agriculture began while growing up in the small farming town of Scottsville. He has since dedicated a career to agricultural finance where he can combine his passion for rural America with his natural curiosity of the world and his lofty desire to explain how we interact within it. He joined the Farmer Mac team in 2005, and has worked in the research, credit, and underwriting departments. Today, his focus at Farmer Mac currently includes quantitative analysis of credit, interest rate, and other market-based risks, as well as monitoring conditions of the agricultural economy, operational information systems analysis, statistical programming…and writing The Feed. He holds a Bachelor's degree in economics from Centre College, a Master's degree in agricultural economics from Purdue University, and will receive a Master's of Business Administration from Indiana University's Kelley School of Business upon completion of the program later this year. He has also been a Chartered Financial Analyst charterholder since 2012.

Curt Covington, Farmer Mac's Senior Vice President - Agricultural Finance, leads the company's business development efforts in the Farm & Ranch and USDA Guarantees business segments, in addition to overseeing the company's credit administration and underwriting functions. Curt's passion for rural America developed at a young age on his family's grape and tree nut farm in Selma, California. His extensive experience in ag lending spans over three decades. He most recently served as the managing director for the Ag and Rural Banking Division at Bank of the West. In addition to his role at Farmer Mac, Curt is a respected leader in the agricultural lending industry and is actively involved in leadership roles within industry trade groups. He has served as the chairman of the ABA Ag and Rural Bankers Committee and is the present chairman of the RMA Agricultural Lending Committee. Curt also serves as co-chair and manages two agricultural lender programs: The Agricultural Lending Institute, a joint venture with California State University, Fresno, and The Agricultural Banking Institute of the Americas, a joint venture with Universidad del Pacifico, in Peru. Curt studied finance at the University of Southern California and earned a Masters in Agribusiness from Santa Clara University.

## ABOUT FARMER MAC

Farmer Mac is the stockholder-owned company created to deliver capital and increase lender competition for the benefit of American agriculture and rural communities.

For more than a quarter-century, Farmer Mac has been a vital partner in helping America's rural lenders meet the evolving needs of their customers, bringing the financial strength of the nation's premier secondary market for agriculture right to their customers' farms and ranches.

Lenders of all sizes use Farmer Mac's broad portfolio of loan products to offer more financial choices to their rural customers, helping them keep pace with today's capital-intensive agricultural industry.


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