Staff Paper

2015 ANNUAL
AGRICULTURAL OUTLOOK

Coordinated by
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2015 Annual Agricultural Outlook

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THE GENERAL ECONOMY
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U.S. Economy

The U.S. economy started out with a whimper, but ended with a relative big bang in 2014. The first quarter of 2014, saw anemic economic activity as the country was buffeted by drastically cold weather which negatively impacted both consumer consumption and business investment which translated into a slight contraction in GDP. The economy in quarters two and three, however, rebounded significantly and closed out the year with a 3.5% annual growth rate in the fourth quarter. Ultimately, the economy recovered on the back of strong business investment, improved vehicle sales, and a labor market that is now seeing growth in disposable incomes (which is finally good news for the consumer). The question going forward in 2015 is; will the economy experience continued growth in the New Year?

Currently, investors and economists seem hyper focused on dramatically lower (year-over-year) oil prices and every word that is written or spoken by the Federal Reserve Bank (FED). In the short-run, lower energy prices are a welcomed relief at the gas pump for the consumer (myself included). The Energy Information Administration (EIA) reported on January 26, 2015, that the average U.S. gallon of gas was $2.04 compared to a year ago price of $3.20 per gallon, a non-trivial decline of 28%. Some economists are predicting that the consumer will, on average, have savings of $675.00 in their annual gas budget in 2015. This sounds nice, but what is the likelihood that gas prices could actually increase from current levels? In reality, gas prices aren't likely to remain at the depressed prices by the end of the year. Energy prices can be very volatile in the short-run because of the small volume of energy that is placed in storage/inventory. Presently, we are faced with higher than normal supplies of energy (oil, gasoline, and diesel) inventories, but these excess supplies can be easily consumed in a short period of time such that prices can rebound quickly. What is more important is the longer-run cost of energy production and the global supply and demand balance for energy. Overall, markets will most certainly respond to the lower price signals, where producers will either cut back on production or consumers will consume more energy given the lower prices. In the short-run, the cheaper energy prices will not cause financial collapse of our financial markets or the failure of numerous oil-producing countries.

Since the end of the "Great Recession" FED watching has been taken to a completely new level as a spectator sport. Talking heads in the media are constantly trying to read the economic tea leaves of the FED's every policy move in order to divine the potential impact on the U.S economy. The FED's various tranches of quantitative easing (QE) programs since 2009 have been economists and the media's favorite target for conjecturing the future path of the U.S. economy. QE is a type of monetary policy that has been used by the FED when standard monetary policies become ineffective. A central bank implements quantitative easing by buying specified amounts of financial assets from commercial banks and other private institutions; thus raising the prices of those financial assets and lowering their yield, while simultaneously increasing the monetary base all in the hope of reinvigorating an anemic economy. This past year, most pundits were spot on regarding their predictions of the FED regarding QE3 (the third QE program since 2009) and their actions to begin tapering bond purchases and their telegraphing of the need to start raising interest rates because the economy was becoming stronger. The problem however, was interest rates actually fell rather than increased in 2014. What does this apparent disconnect between FED actions and the economy mean going forward?

The real issue facing the U.S. economy in 2015 and beyond is not the FED and energy prices, but rather the role of the consumer and how demographics (an aging population that will limit employment growth) are continuing to shift and change. The consumer now accounts for 70% of the U.S. GDP, compared to only 60% post World War II. The real key to ascertaining the direction of the U.S. economy is looking at the rate of growth of consumer consumption which is a function of income growth. During the 80's and 90's, consumers leveraged their modest income gains with ever-increasing levels of debt because of lax lending practices and low interest rates beyond fiscal reason - and we all know how that story ended. Going forward in 2015, the recent recessionary mess is being cleaned up and the consumer is finally in a position where we are seeing increases in total wage growth and real disposable income while consumption levels should remain in check. This anticipated expansion in real wages bodes well for the economy. In 2015, the economic outlook is for an annual GDP growth rate of between 2.0% to 2.5%. GDP would be even higher; however, the economic problems in the Euro zone and other emerging countries, plus continued slack activity in commercial construction will keep a lid on higher levels of GDP growth. Inflation should rise only modestly by 1.0% to 1.5% for the year as most major commodities have backed off considerably from their long-run highs over the last decade. Despite the head fake concerning lower interest rates in 2014, we should begin to see rates firming by year end (third and fourth quarters) with an annual average rate on the 10-year Treasury bill nearing 2.8% to 3.0% from current January levels of 1.75%.

Michigan Economy

The Michigan economy is currently in the fifth year of recovery since the end of the Great Recession in June 2009 (as defined by the National Bureau of Economic Research). Heading into 2015, there is no reason to believe that the economic strength seen, at the end of 2014 will falter. During the third and fourth quarters of 2014, Michigan added 22,000 jobs and an estimated 15,000 jobs; this after a slow start in quarters one and two of 2014, that yielded no net job gains. This job creation momentum should persist in 2015, with the addition of 59,400 new net jobs. Since the bottom of the downturn June 2009, through the forecasted end of 2015, Michigan will have added 389,400 jobs. While the direction of change in net jobs shows the recovery has been extremely encouraging, the State has recouped, however, less than half of the jobs lost from spring of 2000 to the summer of 2009, this highlights the severity of the impact of the Great Recession and the structural changes that have occurred to State's economy.

The new jobs in the state being created are principally in two sectors, professional and business services (25% of the total) and trade, transportation and utilities (20% of the total). Within each of these sectors, are two subsequent categories of primary job growth; in the professional and business services sector, two-thirds of the growth is forecasted to come from the knowledge-based professional, scientific, and technical category (highly skilled) while in the trade, transportation and utilities sector three-quarters of the growth is expected to be in retail trade. Along with strength in the job markets, incomes are also forecast to increase in 2015. The combination of relatively benign inflation levels coupled with modest federal personal tax increases and expansion of nominal wages should lead to progressive higher real disposable incomes. Real income growth is forecast to rise 3.0% in 2015, this compares to an increase of 2.5% in 2014 and a decline of 1.2% in 2013.

POLICY OUTLOOK
David B. Schweikhardt

With the passage of the Agricultural Act of 2014 (the 2014 farm bill), the policy agenda for 2015 will be dominated by two issues. First, producers will be active in the implementation of the 2014 farm bill's new commodity programs. Second, international trade issues will be on the Congressional agenda in 2015.

Farm Bill Implementation: Time for Decisions

The 2014 farm bill included a major change in U.S. commodity policy for covered crops (corn, soybeans, wheat, oats, and barley in Michigan). The direct and countercyclical (DCP) payment programs were eliminated and replaced with the Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC-County and ARC-Individual) programs. Producers are permitted to choose any of the three programs. In addition, landowners are permitted to update their program yields and reallocate the base acres on their farms. These upcoming decisions are:

1. Owners on an Farm Service Agency (FSA) farm may exercise either of the following options:
    a. Retain all of a farm's base acres, as listed on the farm record as of September 30, 2013, for each covered commodity; <u>or</u>
    b. Reallocate the base acres on a farm, based on the four-year average planted and considered planted acres in the 2009 through 2012 crop years. The reallocation is permitted among base acres of covered commodities on the farm.
2. Owners on an FSA farm may exercise either of the following options:
    a. Retain the CC yield, as listed on the farm record as of September 30, 2013, for each covered commodity with base acres; <u>or</u>
    b. Update the yield for each covered commodity to 90% of the simple average of the covered commodity's yield per planted acre on the farm for the 2008 to 2012 crop years, excluding any year in which the covered commodity was not planted.
3. Producers on an FSA farm may elect one of the following options:
    a. The Price Loss Coverage (PLC) program, which is a price-based program with payments being made when the effective price of a covered commodity (the national average market price for the crop year), falls below the commodity's reference price ($3.70 for corn, $8.40 for soybeans, and $5.50 for wheat); <u>or</u>
    b. The Agricultural Risk Coverage County Option (ARC-CO) program, which is a revenue-based program with payments being made when the actual revenue (calculated using the county average yield and the national average market price for the crop year), falls below the county benchmark revenue; <u>or</u>
    c. The Agricultural Risk Coverage Individual Coverage Option (ARC-IC) program, which is a revenue-based program with payments being made when the actual revenue (calculated using the individual farm's yield and the national average market price for the crop year), falls below the individual farm's benchmark revenue <u>or</u>
    d. A combination of PLC and ARC-CO for the covered commodities on the farm (if ARC-IC is elected on the farm, then ARC-CO and PLC cannot be used on the farm).

The decisions on yield update and base reallocation must be made with the FSA by <u>no later than February 27, 2015</u>, while decisions on the ARC-PLC election must be made with the

FSA no later than March 31, 2015. These decisions are one-time irrevocable decisions that apply to the farm for the 2014 to 2018 crop years. If these decisions are not made by the deadline, a default decision will apply to the farm. For the yield update and base reallocation decisions, the default option will be to retain the existing program yield and base acres on the farm. For the ARC-PLC decision, the default option will be that (1) the farm will receive no program payments for the 2014 crop year; and (2) the farm will be enrolled in the PLC program for the 2015 to 2018 crop years.

Decision Analysis

As a starting point, it should be noted that there are no "automatic iron clad" decision outcomes that will apply to all farms in all locations and at all times. Instead, making the best decisions for a farm requires analysis of the farm's details under a range of possible scenarios. Because this article can only outline the analysis of these decisions, readers are referred to the MSUE website http://msue.anr.msu.edu/program/info/farm_bill for additional publications and decision tools for simplifying the analysis of these decisions.

In general, there are the "rules of thumb" about these three decisions that provide a background for a more detailed analysis. On the yield update and base reallocation decisions, the following rules of thumb apply:

1. On the yield update decision, the larger the gap between the farm's program yield (the CC yield) and the farm's actual yields in recent years, the more favorable will be the decision to update the farm's program yields (i.e., the updated yield will better reflect the farm's actual yield, thereby providing greater payments and better risk management protection).
2. On the base reallocation decision, the larger the difference between the farm base acres and the farm's actual crops planted in recent years, the more favorable will be the decision to reallocate the farm's base acres (i.e., the reallocated base acres will better reflect the farm's actual plantings, thereby providing greater payments and better risk management protection).
3. On the base reallocation decision, if the farm has base acres for crops that are no longer planted (for example, base acres for oats or barley), then the more favorable will be the decision to reallocate the farm's base acres (i.e., the reallocated base acres will better reflect the farm's actual plantings and risk profile, thereby providing greater payments and better risk management protection).

On the ARC-PLC election decision, there are several factors that could affect the choice of the best alternative for a particular farm. These include:

1. The PLC program provides greater price protection in a very low-price scenario. If prices are expected to go far lower than current levels during the 2015-2018 period, then the more favorable will be the decision to elect the PLC program. On the other hand, the PLC program provides no price risk protection for changes in prices above the reference price level (again, $3.70 for corn, $8.40 for soybeans, and $5.50 for wheat).
2. The ARC-CO and ARC-IC programs provide partial price risk protection for prices changes above the PLC reference price level.
3. The ARC-CO and ARC-IC programs provide partial yield risk protection. The PLC program does not provide yield risk protection at any time.
4. If the farm's yield is highly correlated with the county average yield, then the ARC-CO program would provide a higher level yield risk protection. If the farm's yield is poorly

correlated with the county average yield, then the ARC-IC program could provide a higher level of yield risk protection.

5. Because the ARC-IC program is based on a farm's actual plantings and yield history, the ARC-IC program could provide a closer match to the actual risk exposure of some farms.
6. The ARC-CO, ARC-IC, and PLC programs are not intended to serve, and cannot serve, as a substitute for crop insurance or other risk management tools. Decisions about the choice of ARC-CO, ARC-IC, or PLC should be made within the farm's overall risk management strategy, including other risk management tools such as crop insurance, futures contracts, or other contracts

No Time to Waste or to Wait

The deadlines for yield update, base reallocation, and ARC-PLC decisions are looming on the immediate horizon. Producers who wait until the last minute to meet with the FSA will likely meet with frustration. Though some sources in the farm press are suggesting that there will be an information advantage to be gained by waiting to make these decisions, serious analysis of these decisions is almost certain to reveal that the decisions are unlikely to change between now and the decision deadlines.

On the yield update and base reallocation decisions, owners and producers already have all of the information needed to reach a conclusion about these decisions. Because market prices are unlikely to affect these decisions, the sooner these decisions are made and reported to the FSA, the better and less frustrating for the producer. On the ARC-PLC election decision, market price outlook is a key factor in electing ARC or PLC. At the same time, serious analysis of these programs is likely to reveal that only major changes in price outlook will affect this decision. For example, if the programs are analyzed in detail for an individual farm, then the order of the three options is likely to result in a very clear order of preference. Moreover, analysis of alternative price scenarios (significantly higher than existing prices, existing prices, and significantly lower than existing prices) is very likely to reveal that this order of preference will only change under drastically different price scenarios. As a consequence, the likelihood that the market price outlook will change enough to change the order of preference between now and the ARC-PLC election deadline appears to be minimal.

A final reality that is little recognized should also be noted. During the past decade, the FSA has experienced major reductions in funding for staff resources. Consequently, waiting to make these decisions will result in greater producer frustration, not less.

Outlook for the Congressional Policy Agenda

The Congressional policy agenda for 2015 is likely to include trade issues that are relevant to agricultural producers. The negotiation of Trans-Pacific Partnership (TPP) began in 2009 and the negotiation of the Transatlantic Trade and Investment partnership (TTIP) began in 2013. Progress in negotiation of both agreements has been slow, but President Obama has asked Congress for Trade Promotion Authority to complete these agreements and to assure a vote by Congress on the agreements.

Both agreements hold the potential to have a significant effect on agricultural exports. In particular, the countries in the TPP include several Asian countries that have relatively strong population growth and have significant barriers on imports of agricultural and food products from the United States. At this time, however, two major issues could affect progress on these

agreements. First, many of the same agricultural issues (agricultural subsidies and trade barriers) that contributed to the demise of the Doha Round of negotiations of the World Trade Organization (WTO) are present in the TPP and the TTIP talks. Thus, negotiators still must overcome these issues that could not be overcome earlier.

Second, Congressional approval of Trade Promotion Authority and final approval for these agreements is far from certain. After the 2014 mid-term elections, many observers contended that the trade agreements could be an issue for cooperation between the Obama administration and the new Congress. In addition, observers have noted that these agreements compare to the approval of NAFTA in 1993, when a Democratic president and Republicans in Congress cooperated in achieving passage of that agreement. This view ignores that the relationship between the President and the Congress is significantly different than in 1993 and that very few members of today's Congress have ever voted on a major trade agreement. Thus, their views on trade issues are largely unknown. Given the significant stake that agriculture has in the approval or failure of these agreements, producers should monitor news on these issues as the year unfolds.

2015 INPUT COSTS
Bill Knudson and John Whims

In general, prices of major commodities such as corn and soybeans have retreated in 2014. Unfortunately, with the exception of diesel fuel and interest rates, input costs continue to rise. The anticipation of mostly higher input prices in 2015, coupled with continued downward pressure on commodity prices, will likely lead to margin pressure for Michigan farmers, especially those that grow field crops.

Summary:

- Fertilizer (urea, anhydrous ammonia, potash, and MAP) prices increased modestly across the board in 2014. Fertilizer prices could come under pressure in 2015, as natural gas prices are expected to remain soft.
- Seed prices for corn and soybeans were up about 5% in 2014, while wheat seed prices are flat. Seed prices in 2015 should mirror similar price patterns as experienced in 2014.
- Current diesel prices are the lowest they have been in several years and there appears to be continued downward pressure on oil prices.
- Interest rates will remain low, and are likely to remain low, although access to credit may be difficult for some farmers.

Fertilizer

Fertilizer prices appear to be holding steady to slightly higher year-over-year, despite the downward pressure on natural gas prices which is a key input in the product of fertilizer. According to the USDA, the price of anhydrous ammonia in Illinois averaged $725 a ton (first week of January 2015), an increase of 11.9% from January 2014. The price of urea was $458 a ton, an increase of 4.3%. MAP averaged $573 a ton, an increase of 10.2%, and potash was $476 a ton, an increase of 6.2%. Seasonally, prices are expected to be firm in February, March, and April from January levels as farmers make their purchases ahead of planting. Note: these prices are for Illinois; prices in Michigan might be higher because of higher transportation costs.

Seed

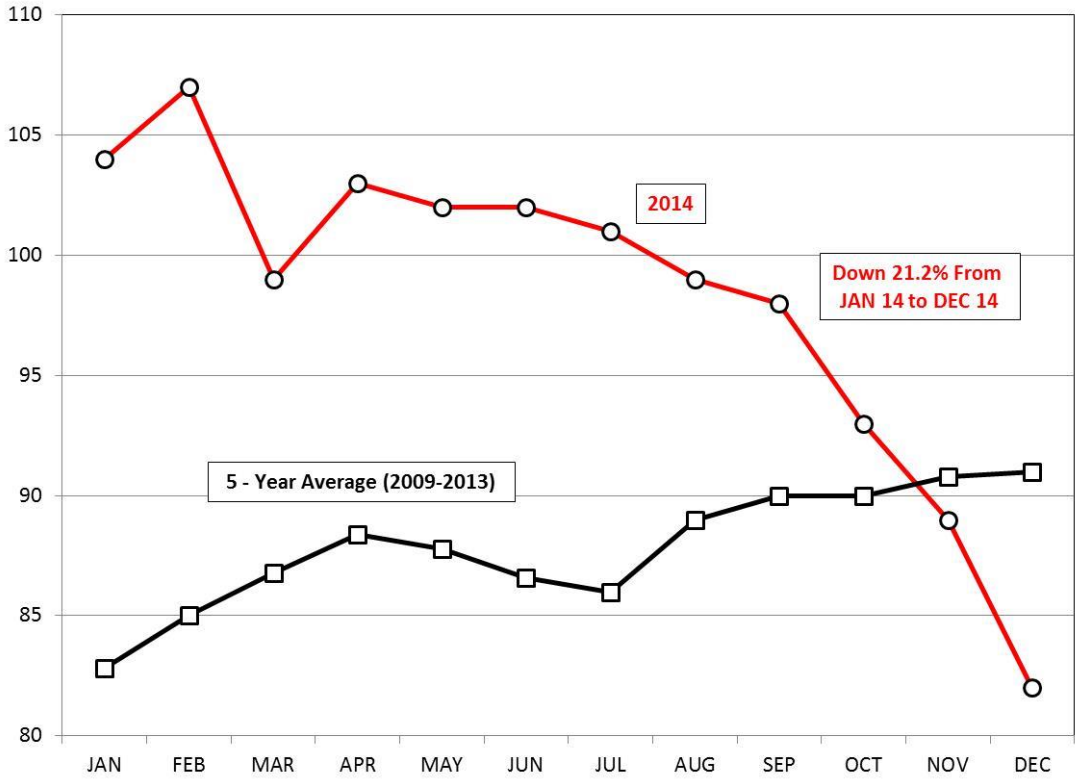
Corn and soybean seed prices increased in 2014, while the price of wheat seed remained fairly stable. Purdue University estimated the per acre cost of soybean seed to be $75 in 2014, an increase of 5.6% over 2013; the estimated per acre average cost of corn seed was $124, a 5.1% increase over 2013; and the per acre cost of wheat seed was estimated to be $44, which is unchanged from the previous estimate.

Overall, there appears to be sufficient quantities of seed available, however, there are shortages of some of the more popular varieties of corn and soybean seed; and supplies of dry bean seed are very tight such that seed may not be available to farmers that do not have a contract. Based on USDA surveys, U.S. seed prices, on average, have risen at an annual rate of 8.1% for the last 15 years. Seed prices are expected to rise again in 2015, yet at a more modest increase in the 5% range.

Fuel

According to the U.S. Energy Information Administration (EIA), the retail price of diesel was $3.01 per gallon in the Midwest, January 12, 2015, $0.84 per gallon, or 21.8% lower than the previous year. Similarly, the USDA reported that the "Fuels" prices paid by farmer's index has declined 21.2% from January 2014 to December 2014; see Figure 1. As of November and December this year, the index has now fallen below the five-year long-run (2009-2013) average as seen in Figure 1. While there is long-term uncertainty with respect to diesel prices, in the short- term it looks as if there will be continued downward pressure on prices.

Figure 1: Index of Prices Paid by Farmers: Fuels



Source: USDA, National Agricultural Statistics Service
Fuels defined at diesel, gasoline, LP gas

Interest Rates

Interest rates remained low throughout 2014 and will likely remain low in 2015. According to the Federal Reserve Bank of Chicago, operating loan interest rates in the region (which includes the Lower Peninsula, most of Indiana and Illinois, Iowa, and the southern and western parts of Wisconsin) were 4.89% and 4.62% for real estate loans in the third quarter of 2014. Interest rates for farm loans were virtually unchanged; declining only slightly in 2014, by 0.05% to 0.06% from the third quarter of 2013, respectively.

Interest rates are likely to remain fairly stable in 2015. The economic recovery is slowly beginning to gain momentum in the U.S. but much of the rest of the world particularly Europe is facing continued recession. The Federal Reserve Bank will likely begin to consider raising rates only slightly heading into the third quarter of this year while keeping an eye on inflation.

MICHIGAN FARMLAND VALUES
Eric Wittenberg and Christopher Wolf

Michigan farmland values saw another year of growth in 2014. Michigan State University's annual land value survey has been conducted in the spring of each year since 1992 by the Department of Agricultural, Food, and Resource Economics. The 2014 survey reported that, on average, land values increased around 5% statewide over the previous year. The growth in the market was positive, but weaker than recent years across cropland, sugar beet land, irrigated land, and land with fruit bearing trees (ranging from 2.0 to 7.7%). Average farmland values in spring 2014 were reported to be:

	Southern Lower Peninsula	**Michigan**
Tiled field crop land	$5,090	$4,646
Non-Tiled field crop land	$4,250	$3,699
Sugar Beet land	$6,580	$6,550
Irrigated land	$5,666	$5,144
Land with fruit trees	$9,731	$8,516

The USDA, in its "Land Values 2014 Summary," reported that Michigan agricultural cropland prices increased 9.2% to an average price of $4,500 per acre for the calendar year 2014. The most recent data on land prices from the Federal Reserve Bank of Chicago found that Michigan land prices increased about 10% from October 1, 2013 to October 1, 2014. Besides Michigan, all other states in the Federal Reserve's Seventh District (Iowa, Illinois, Wisconsin, and Indiana) experienced some kind of decrease in farmland values.

Leasing continues to grow as a tool to control farmland. Last year, 72% of the crop acres were controlled through leasing arrangements compared to 48% a decade ago. According to the 2014 MSU survey, cash rent rates increased significantly across tiled cropland, non-tiled cropland, sugar beet, and irrigated cropland. Cash rents for land in the Southern Lower Peninsula and across the entire state averaged double-digit percentage increases over the previous year. Average Michigan cash rents in spring 2014 were:

	Southern Lower Peninsula	**Michigan**
Tiled field crop land	$156 per acre	$142 per acre
Non-Tiled field crop land	$122 per acre	$108 per acre
Sugar Beet land	$208 per acre	$208 per acre
Irrigated land	$220 per acre	$201 per acre

These are average rents and they vary significantly with location, competition, and expected yield. While cash leasing was the dominant form of land rental, 21% of crop acres utilized some form of share rental agreement and bonus arrangements have become increasingly common. Additional details on land values and cash rents across the state are reported in the Department of Agricultural, Food, and Resource Economics Selected Agricultural Economics Reports that can be found at http://ageconsearch.umn.edu/.

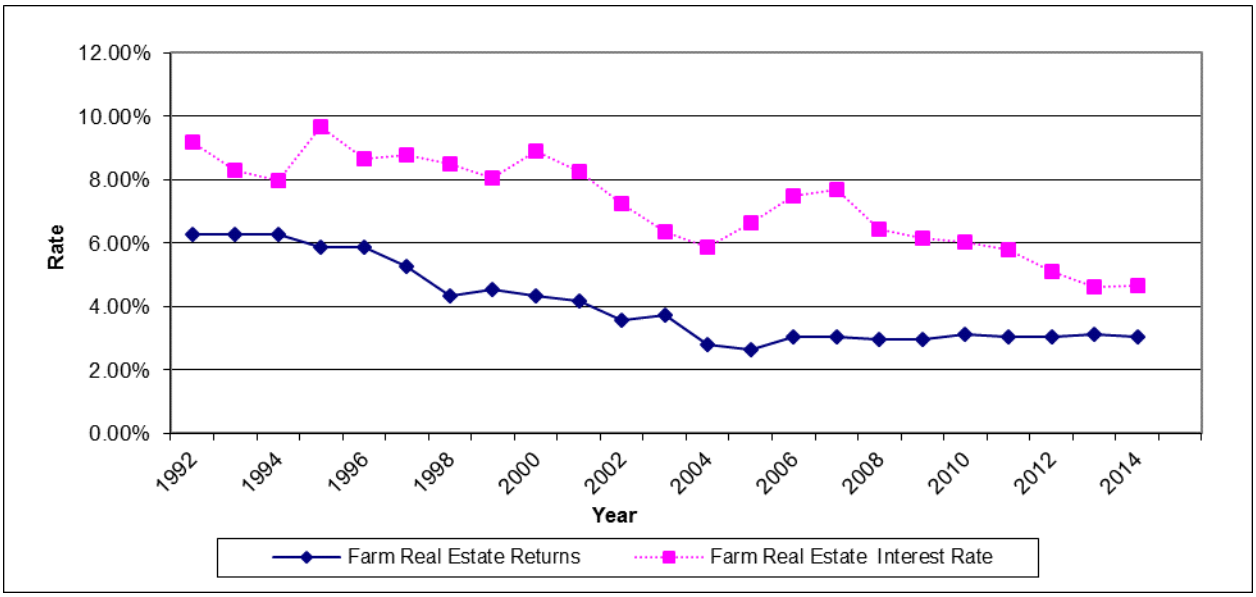
Michigan farmland values are influenced by both the agriculture and non-agriculture sectors. While Michigan agriculture is very diverse, major commodity crops, along with livestock, continue to play an important role in determining the value of farmland in many areas of the state. Respondents to the land value survey indicated that grain prices, farm expansion, milk prices, and livestock prices were the most important agriculture factors affecting the value of Michigan farmland. In 2014, many crop prices, in particular corn and soybeans, were lower than recent years, while milk and livestock prices were very strong.

Survey respondents indicated that interest rates were the most important non-agricultural factor affecting Michigan farmland value. The Federal Reserve continues to hold the Federal Funds Rate (the interest rate banks charge each other for overnight loans) constant at 0.25%. This action has been one factor helping to keep short-term interest rates low. The Wall Street Journal Prime Rate (the base rate on corporate loans posted by at least 75% of the nation's 30 largest banks) typically runs 3% above the Federal Funds Rate and is currently at 3.25%. This was the fifth year at this rate. Interest rates for farm real estate loans continued to decline to historically low levels. The Federal Reserve Bank of Chicago reports third quarter 2014 real estate loan rates averaged 4.62%. From these low levels, and given widespread inflation concerns, interest rates will inevitably rise at some point which will dampen demand for farmland.

The climb in farmland values has been primarily driven by high farm income. One way to examine land return is by looking at the rent-to-value ratio which is a simple way to measure the current rate of return to land ownership. We can use the MSU survey data to get an idea on what the return to Michigan farmland has been over time. The figure below displays the rent-to-value ratio for tiled cropland in the Southern Lower Peninsula since the MSU survey began in 1992. The current return to land has fallen from around 6% in the early 1990's to around 3% today. So in recent years, land prices have moved with cash rents so that the current rate of return has hovered right around 3%.

Return to land is linked to interest rates. The figure also shows the Chicago Federal Reserve interest rates for farm loans on real estate since 1992. During the early 1990's, farm real estate interest rates held in the 8-10% range. Like the current return to land, these rates have declined over time and are now slightly below 5%. It’s worth noting that the gap between the current return to land and farm real estate interest rates has narrowed some in recent years, which may be a signal that land returns are still relatively strong.

Figure 1. Farm Real Estate Returns and Interest Rate



The value for non-farm agricultural land increased slightly in 2014 as the Michigan economy shows signs of strengthening. The 2014 MSU survey found the average non-agricultural-use value for undeveloped land in Michigan to be $7,398 per acre for residential development, $13,923 per acre for commercial/industrial development, and $3,278 per acre for recreational development land.

Survey respondents expected a small increase, at 1.2%, in farmland value for the next year. As was mentioned above many surrounding states have experienced small decreases in farmland value. Decreasing growth in farmland values were likely due to row-crop commodities prices hovering at or below the cost of production in 2014. Nationally, there has been increasing concern that farmland values are a bubble about to burst. This concern may be driven, at least in part, by the outrageous sales prices of some tracts of land that gain media attention. However, patterns of land value show that these are anecdotes. The dramatic fall in land prices and subsequent crisis of the 1980's are often highlighted for comparison. There are at least a couple of important differences between the current situation and the 1980's including the fact that interest rates were 12-20% in the 1980's as compared to 5% currently. Another factor is that farms were highly leveraged in the 1980's compared to today. Many recent farmland purchases have utilized the profits generated in recent years. Farmland value increases have been heated over the past six years. Given the low row crop commodity returns and potential for higher interest rates, we are likely entering a period of relatively stable farmland values.

2015 ANNUAL CROPS OUTLOOK
Jim Hilker

Corn

The 2015 annual Corn Outlook presented here will include the 2014-15 and 2015-16 corn marketing years; the baseline numbers are presented in Table 1. By baseline, I mean, given what I know and expect to date, we all know a lot can and will happen to change these expectations. How the world debt continues to play out, world GDP growth, oil/gas prices, U.S. and world weather crisis, etc., etc., will all play a role, as, to a large degree, as they are all unknowns.

While I still expect price volatility to be higher than pre-2007, due to the large U.S. carryover expected for 2014-15, the rest of the world having a large carryover, and the large expected U.S. carryover expected for 2015-16, I expect volatility to be down relative to the past seven years, and the market is reflecting this. At this point, the market is projecting a 54% chance that December 2015 corn futures will be below today's $4.00 per bushel, and a 60% chance that December 2015 corn futures will be between $3.25 and $4.70 per bushel at harvest. Or, to put another way, there is a 20% chance December 2015 corn futures will be below $3.25 per bushel, and a 20% chance the December 2015 corn futures could be above $4.70 per bushel come harvest time. You need to adjust these for your local basis.

2014-15

U.S. Corn producers planted 90.6 million acres of corn for the 2014 crop, 1-2 million less acres than intended due to a wet planting season. But then the weather turned very good for much of the Corn Belt. Acres harvested for grain came in at 83.1 million acres. The average corn yield for the U.S. was record 171 bushels per acre, 8-10 bushels above the trend yield. Illinois averaged 200 bushels per acre. Multiplying the 171.0 bushel per acre yield by the 83.1 million harvested acres set a new U.S. record for total corn production of 14,216 million bushels, 387 million more bushels than last year on 4.8 million less acres. When you add beginning stocks, production, and imports, total supply is projected to be a record 15,472 million bushels.

Michigan planted 2.55 million acres of corn in 2014, 50,000 acres less than 2013, and below the June planted and intended to be planted acres report. The difference between the actual planted and the June report was due to prevented plantings. Michigan harvested for grain corn acres were 2.1 million, down 140,000 acres from the previous year. Michigan's average 2014 state yield was a record 161 bushels per acre, 6 bushels higher than the record 2013 yield. Michigan corn for grain production was a record 355.8 million bushels. However, Michigan corn yields varied significantly depending where you were located in Michigan.

U.S. feed use and residual is expected to be 5,275 million bushels, 4.7% above last year. Beef production is expected to be down nearly 2%, pork production is expected to be up 4-5%, poultry production is expected to be up nearly 3%, and milk production is expected to be up 2-3% for 2015. And, low prices always add up to more corn being fed.

Food, seed, and all industrial uses are projected at 6,555 million bushels for 2014-15. Seed use is expected to be down several million bushels as fewer acres of corn will be planted this spring. Corn used for food and industrial uses, other than ethanol, is expected to grow a bit. Corn projected to be used for ethanol and DDG's is 5,160 million bushels, up marginally from

2013-14 as it was very profitable in the first quarter. However, with low gas prices, profits have been trimmed and will likely limit growth.

Exports in 2014-15 are expected to drop-off 8.7% as the world has its third record crop in a row. Rest of the world demand is pretty decent; it is just that there is plenty of corn. Total use is expected to be 13,850 million bushels. When we subtract total use from total supply we end up with more than ample ending stocks of 1,892 million bushels. Ending stocks as a percent of use would be 13.9%, compared to 7-9% the previous three years, giving us a projected weighted average season price of $3.55 for 2014-15.

2015-16

My baseline projections for the 2015-16 corn marketing year are shown in Table 1 as well. I am projecting planted 2015 corn acres at 88.5 million acres, down about 2 million acres from last year, and down 3-4 million from what farmers intended to plant in 2014. I am projecting 81.2 million acres to be harvested for grain. This would still be the fifth highest total acres planted in the modern era. I am projecting fewer acres for several reasons; lower projected prices, fewer the continuous corn acres, and about a breakeven price relative to soybeans. I expect the reduced acres to come out of marginal corn and soybean ground, mostly on the fringes of the corn/soybean belt.

I am projecting a trend yield of 163.4 bushels per acre to use in my analysis, for a projected 2014 U.S. corn crop of 13,267 million bushels; this would be the third largest corn crop on record, behind the two previous years. When we add the projected production to the huge beginning stocks of 1,892 million bushels, and the 25 million bushels of projected imports, we would have a projected total supply of 15,162 million bushels, 300 million less than the record 2014-15 supply.

I am projecting total 2015-16 use to be 13,390 million bushels, down 75 million. I expect feed use to decrease marginally to 5,200 million bushels as the pork and broiler sectors continue to grow marginally going into 2016; beef production continues to shrink as we grow the beef herd, and a marginally higher corn price. I expect corn used for ethanol and DDG's to fall off about 250 million bushels as returns will continue to be marginal with low oil/gas prices. I expect U.S. corn exports will be about the same at 1,760 million bushels, given a "trend" world coarse grain yield, and continued growth in world demand. World beginning stocks are expected to be relatively large.

As shown in Table 1, this story would give us projected ending stocks of 1,669 million bushels, 12.4% of use, and an average price around $3.65. While $3.65 is my median price projection for 2015-16, there are still a lot of risks as we have seen of the past.

TABLE 1														
SUPPLY/DEMAND BALANCE SHEET FOR CORN														
												Est.	Hilker	Hilker
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
(million acres)														
Acres Planted	78.9	78.6	80.9	81.8	78.3	93.5	86.0	86.4	88.2	91.9	97.3	95.4	90.6	88.5
Acres Harvested	69.3	70.9	73.6	75.1	70.6	86.5	78.6	79.5	81.4	84.0	87.4	87.5	83.1	81.2
Yield/Bushels	129.3	142.2	160.4	148	149.1	150.7	153.9	164.7	152.8	147.2	123.1	158.1	171.0	163.4
(million bushels)														
Beginning Stocks	1596	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1892
Production	8967	10089	11807	11114	10531	13038	12092	13092	12447	12360	10755	13829	14216	13257
Imports	14	14	11	9	12	20	14	8	28	29	160	36	25	25
Total Supply	10578	11190	12776	13237	12510	14362	13729	14774	14182	13517	11904	14686	15472	15174
Use:														
Feed & Residual	5563	5798	6158	6155	5591	5913	5182	5125	4795	4557	4315	5036	5275	5200
Food, Seed & Ind	2340	2537	2686	2981	3490	4387	5025	5961	6426	6428	6038	6501	6555	6545
Ethanol for fuel	996	1168	1323	1603	2119	3049	3709	4591	5019	5000	4641	5134	5160	5140
Total Domestic	7903	8335	8844	9136	9081	10300	10207	11086	11221	10985	10353	11537	11830	11745
Exports	1588	1897	1818	2134	2125	2437	1849	1980	1834	1543	730	1917	1750	1760
Total Use	9491	10232	10662	11270	11206	12737	12056	13066	13055	12528	11083	13454	13580	13505
Ending Stocks	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1892	1669
Ending Stocks, %of Use	11.5	9.4	19.8	17.5	11.6	12.8	13.9	13.1	8.6	7.9	7.4	9.2	13.9	12.4
U.S. Loan Rate	$1.98	$1.98	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95
U.S. Season Ave Farm Price, $/Bu.	$2.32	$2.42	$2.06	$2.00	$3.04	$4.20	$4.06	$3.55	$5.18	$6.22	$6.89	$4.46	$3.55	$3.65
Source: USDA/WASDE and Jim Hilker. (2 - 1 - 15)														

WHEAT

The 2014-15 U.S wheat marketing year is eight months in, and while we will discuss the projections, it appears the present projections will hold for the most part. The more interesting part is discussing the 2014-15 prospects. The wheat story is a bit like corn, ample supplies in the U.S. and the world.

2014-15

We planted 56.8 million acres of wheat for the 2014 wheat crop, up almost 600,000 acres from 2013. Winter wheat accounted for 42.4 million of those acres, down 830,000 acres, spring wheat planted acres were up about 400,000 acres at 13.0 million acres, and durum wheat planted acres were about the same at 1.4 million acres as they had another wet planting season.

Harvested acres came in at 46.4 million acres, up 900,000 acres. This gave us an all wheat yield of 43.7 bushels per acre. This put 2014 total wheat production at 2,026 million bushels, down 109 million bushels from 2013 due to lower yields.

Michigan planted 570,000 acres of wheat for 2014, down 50,000 acres from 2013 due to a late soybean harvest. Michigan harvested 485,000 acres for grain. Generally, in Michigan the unharvested wheat acres run about 25-30,000 acres, not the 85,000 we saw in 2014 due to winterkill. Michigan's 2014 wheat yield was 74 bushels per acre, one bushel per acre below 2013 and two bushels below the record 2012 wheat yield.

Beginning stocks were a reasonable 590 million bushels, down for the fourth year in a row. Total 2014-15 wheat supplies were 2,796 million bushels when 180 million bushels of imports and beginning stocks are added to production. This is down 7.4% from 2013-14.

Domestic use of wheat in the U.S. for 2014-15 is projected to be down 71 million bushels from 2013-14 at 1,184 million bushels. Feed use is where the decrease in use came from, as it dropped 76 million bushels to 150 million bushels as corn continued to be relatively cheaper. Exports are projected to be down 251 million bushels from last year at 925 million bushels. This is due to the rest of the world having a record wheat crop for the second year in a row.

Projected 2013-14 U.S. ending stocks are 687 million bushels, 32.6% of use, up from last year's 24.3% of use, more than adequate. The 2014-15 average weighted wheat price is expected to be $6.10 per bushel. Check out Table 2.

2014-15

The winter wheat seedings report showed 40.5 million acres of winter wheat planted for 2015, down from 42.4 million acres last year. I expect spring and durum wheat plantings be 16.3 million acres versus this year's 14.4 acres, if planting conditions are more normal and some acres are shifted out of row crops. I expect total wheat planted acres to be 56.8 million acres for 2015-16 as shown in Table 2. I am projecting a normal percent harvested, which would put harvested acres at 47.9 million acres. Michigan planted 500,000 winter wheat acres, down 70,000 acres as the soybean harvest was really late.

Using a trend yield of 45.1 bushels per acre, expected 2015 U.S. wheat production would be 2,093 million bushels. When added to beginning stocks and expected imports, total

2015-16 supplies are expected to be 2.950 million bushels, up about 154 million bushels from 2014-15.

I expect domestic use to remain about the same in 2015-16 as feed use drops a bit more, given a decent corn crop, and food use may grow some with the population. I expect a normal world crop, and for world use to be up some as well. Therefore, I have raised my 2015-16 wheat exports marginally.

This scenario would leave us with total ending stocks of 786 million bushels. The projected stocks-to-use ratio would be 36.3%. But wheat will be priced a food versus feed crop, as corn is projected to drop to $3.65. I am projecting the average 2015-16 wheat price at $5.30, lower than last year, but significantly above the corn price. See Table 2.

At this point, the market is projecting a 53.3% chance that July 2015 Chicago SRW wheat futures will be below today's $5.05 per bushel, and a 60% chance that July 2015 SRW wheat futures will be between $4.30 and $5.60 per bushel at harvest. Or, to put another way, there is a 20% chance the July 2015 SRW wheat futures will be below $4.30 per bushel, and a 20% chance the July 2015 wheat futures could be above $5.60 per bushel come harvest time. One would then need to adjust for the basis. The all wheat price would be about 50 cents higher as HRW and HRS wheat varieties are more valuable.

TABLE 2													
SUPPLY/DEMAND BALANCE SHEET FOR WHEAT													
											Est.	Proj.	Hilker
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
(Million Acres)													
Acres Planted	62.1	59.7	57.2	57.3	60.5	63.2	59.2	53.6	54.4	55.3	56.2	56.8	56.8
Acres Harvested	53.1	50.0	50.1	46.8	51.0	55.7	49.9	47.6	45.7	48.8	45.3	46.4	46.4
Bu./Harvested Acre	44.2	43.2	42.0	38.6	40.2	44.9	44.5	46.3	43.7	46.2	47.1	43.7	45.1
(Million Bushels)													
Beginning Stocks	491	546	540	571	456	306	657	976	862	743	718	590	687
Production	2345	2158	2105	1808	2051	2499	2218	2207	1999	2252	2135	2026	2093
Imports	68	71	82	122	113	127	119	97	112	123	169	180	170
Total Supply	2904	2775	2727	2501	2620	2932	2993	3279	2974	3118	3021	2796	2950
Use:													
Food	907	910	915	938	948	927	919	926	941	945	952	960	970
Seed	80	78	78	82	88	78	69	71	76	73	77	74	74
Feed and Residual	212	182	160	117	16	255	150	132	162	370	226	150	145
Total Domestic	1194	1169	1152	1137	1051	1260	1138	1128	1180	1388	1255	1184	1189
Exports	1159	1066	1003	908	1263	1015	879	1289	1051	1012	1176	925	975
Total Use	2353	2235	2155	2045	2314	2275	2018	2417	2231	2400	2431	2109	2164
Ending Stocks	546	540	571	456	306	657	976	862	743	718	590	687	786
Ending Stocks, %of Use	23.2	24.2	26.5	22.3	13.2	28.9	48.3	35.7	33.3	29.9	24.3	32.6	36.3
U.S. Loan Rate	$2.80	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75
U.S. Season Ave													
U.S. $/Bu.	$3.40	$3.40	$3.42	$4.26	$6.48	$6.78	$4.87	$5.70	$7.24	$7.77	$6.87	$6.10	$5.30
Michigan $/Bu.	$3.35	$3.01	$3.13	$3.41	$5.01	$5.63	$4.25	$5.72	$6.70	$7.75	$6.70	$5.60	$4.90
Source: USDA/WASDE and Jim Hilker (2 - 1 - 2015)													

SOYBEANS

2014-15

Soybean producers planted 83.7 million acres for 2014, up a whopping 7 million acres from 2013, but still below what producers intended to plant as of June 2014 due to prevented plantings. Harvested acres were a pretty high percentage at 83.1 million acres. After the wet and late planting season, soybeans had quite a growing season over most of the U.S. The 2014 U.S. soybean yield came in at record 47.8 bushels per acre, about two bushels over trend. This put soybean production for 2014 at a record 3,969 million bushels. Total supply for 2014-15 is 4,076 million when beginning stocks and imports were added to production, a half a million bushels greater than the record 2013-14 total supply.

Michigan planted 2.15 million acres of soybeans in 2014, and harvested 2.14 million acres. Michigan's 2014 soybean yield was 43 bushels per acre, down 1.5 bushel per acre from last year and 3 bushels below the record as Michigan did not share in the record U.S. yield. This put 2014 Michigan soybean production at 92.0 million bushels, up six million bushels relative to 2013 due to more acres.

U.S. 2014-15 total use is expected to be 3,671 million bushels, up 200 million bushels from last year. Crush at 1,785 million bushels will be up for the third year in a row, with domestic use of soy oil and soymeal gaining a bit relative to exports. Exports are expected to be 1,770 million bushels, up 7.5% from 2013-14, the previous high. Most of the exports and pretty much all the export sales will take place before the massive and record South American soybean crop harvest is completed.

This will put projected 2014-15 soybean ending stocks at a more than adequate 405 million bushels, 11% of projected use. Large world supplies will keep a lid soybean prices for the remainder of the marketing year if we have a normal 2015 soybean growing season. The projected U.S. 2014-15 average price is expected to be $10.05 after all is said and done.

2015-16

I expected 84 million acres to be planted to soybeans, about the same as last year. While I expect some continuous corn acres to be shifted to soybeans, I also expect some marginal land will be taken out of soybeans due to the low price. I project 2015 harvested acres to be a normal percentage of planted acres which would be 83.1 million acres. Using a trend yield of 45.2 bushels per acre, 2015 U.S. soybean production would be 3,758 million bushels, which would be a second largest crop after 2014.

I expect crush to be up significantly as shown in Table 3. And I expect exports to be about the same. I expect exports will be held back despite expected good world demand, by another huge South American soybean crop this year and a normal South American soybean crop, still large, next year. Total U.S. disappearance is expected to be 3,711 million bushels, a record. However, despite the large disappearance, projected 2015-16 ending stocks are projected to be 467 million bushels, 12.6% of use. I project the average U.S. 2015-16 soybean price will be $9.00.

At this point, the futures markets are expecting a marginally higher price. The market is projecting a 53.1% chance that November 2015 soybean futures will be below today's $9.50 per bushel, and a 60% chance that November 2015 soybean futures will be between $8.15 and

$10.80 per bushel at harvest. Or, to put another way, there is a 20% chance the November 2015 soybean futures will be below $8.15 per bushel, and a 20% chance the November 2015 soybean futures could be above $10.80 per bushel come harvest time. Remember, you still need to subtract your basis from those numbers.

TABLE 3

SUPPLY/DEMAND BALANCE SHEET FOR SOYBEANS

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Est. 2013-2014	Hilker 2014-2015	Hilker 2015-2016
(Million Acres)														
Acres Planted	74	73.4	75.2	72	75.5	64.7	75.7	77.5	77.4	75.0	77.2	76.8	83.7	84.0
Acres Harvested	72.5	72.3	74.0	71.3	74.6	64.1	74.7	76.4	76.6	73.8	76.1	76.3	83.1	83.1
Yield/Bushels	38.0	33.9	42.2	43.0	42.9	41.7	39.7	44.0	43.5	41.9	40.0	44.0	47.8	45.2
(Million Bushels)														
Beginning Stocks	208	178	112	256	449	574	205	138	151	215	169	141	92	405
Production	2756	2454	3124	3063	3197	2677	2967	3359	3329	3094	3042	3358	3969	3758
Imports	5	6	6	3	9	10	13	15	14	16	41	72	15	15
Total Supply	2969	2638	3242	3322	3656	3261	3185	3512	3495	3325	3252	3570	4076	4178
Use:														
Crushings	1615	1530	1696	1739	1808	1803	1662	1752	1648	1703	1689	1734	1785	1835
Exports	1045	885	1097	940	1116	1159	1279	1499	1501	1365	1317	1647	1770	1760
Seed	89	92	88	93	80	93	90	90	87	90	89	97	92	92
Residual	41	19	105	101	77	0	16	20	43	-2	16	0	24	24
Total Use	2791	2526	2986	2873	3081	3056	3047	3361	3280	3155	3111	3478	3671	3711
Ending Stocks	178	112	256	449	574	205	138	151	215	169	141	92	405	467
Ending Stocks, %of Use	6.4	4.4	8.6	15.6	18.6	6.7	4.5	4.5	6.5	5.4	4.5	2.7	11.0	12.6
U.S. Loan Rate	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
U.S. Season Ave Farm Price, $/Bu.	$5.53	$7.34	$5.74	$5.66	$6.43	$10.10	$9.97	$9.59	$11.30	$12.50	$14.40	$13.00	$10.05	$9.00

Source: USDA/WASDE and Jim Hilker. (2 - 1 - 15)

2015 ANNUAL LIVESTOCK OUTLOOK
Jim Hilker

Cattle

The numbers show that traditional feedlots made economic profits the first 11 months of 2014, after only having one profitable month in the previous 32 months, but returned to hefty losses in December. The profits came with fed cattle prices at record levels, lower feed costs, and feeders bought at prices that did not anticipate the record cattle prices and low corn prices. But then feeder prices jumped even higher in response to the high fed prices and lower corn prices, and along with a fed cattle price drop, the profits ran out by December. While feeder prices have also stalled, it looks unlikely fed prices will average the needed $172-180 per cwt. breakeven prices needed to make economic profits over the first half of 2015.

Cow calf returns on average were positive for a fifth year in a row in 2014, after being negative in 2008 and 2009. The difference is profits were more widespread this past year due to less weather issues. In the first four years of average profits, many areas with drought had losses. Very good cow calf returns are expected in 2015, where grass and hay are available/normal; returns may be near the 2014 record levels, at least since my data begins in 1985.

After seven years of decline, the January 1, 2015 Cattle Inventory Report showed the U.S. had 89.8 million head of cattle and calves as of January 1, 1.4% above a year ago, but remember 2013 was the smallest since 1951. After eight years of decline, the USDA estimated the total U.S. cowherd, including dairy, at 39.0 million head, up 1.8% from a year ago. The beef cowherd liquidation is now officially over, as beef cows were reported at 29.693 million head, 2.1% larger than a year ago.

Beef cow replacements on January 1, 2015 were 5.78 million, up a 4.1% over last year. On top of that, the number of beef replacement heifers expected to calve in 2015 at 3.55 million head was up 7.3% from the 3.31 million 2014. As expected, the large beef cow states in the Southern Plains that were forced to liquidate beef herds due to several years of drought, expanded cow numbers with the improving pasture and range conditions in the last year or so. Texas, Oklahoma, Missouri, Kansas, and Colorado accounted for 534,000 of the total 607,700 head increase in U.S. beef cows.

USDA reported the 2014 calf crop at 33.9 million head, 1/2% larger than 2013, which was the smallest calf crop in my data, so pre-1950. This is the first time in 20 years that the calf crop has increased in numbers! A combination of 1.8% more beef and milk cows, and 4.3% more beef and dairy replacement heifers expected to calve should lead to a larger calf crop again in 2015.

As of January 1, the calculated available supply of feeder cattle outside feedlots was 25.31 million head, 1/2% more than 2014 year, but 1.0% smaller than 2013, 5.9% lower than 2011, and way lower than any prior year going back practically forever.

Cattle on Feed in all feedlots January 1 were 13.1 million head, up 6/10's of 1% relative to last January 1. The January 1 Cattle on Feed Report for feedlots over 1,000 head showed 10.7 million cattle on feed up almost 1% compared to last year.

All cattle and calves in Michigan on January 1, 2015, were at 1,140,000 head, up 10,000 head, less than 1%. All cows that had calved were at 515,000 head, up 3.0%. Beef cows were down 5.9%, at 112,000. Dairy cows numbers were put at 403,000, up 5.8%. Beef cow replacements were down 6,000 at 23,000, while dairy cow replacements were up 3,000 head at 167,000 head. Michigan's 2014 calf crop was 395,000, even with the previous year. The survey does not distinguish between beef and dairy calves. Michigan had 160,000 cattle on feed January 1, up 6.7% from last year.

The following estimates for cattle and hogs are made in conjunction with the Livestock Marketing Information Center, which I belong to. It is a group supported by Universities to provide efficiencies, ie, less duplication of work by folks such as myself. U.S. beef production is expected to be down 0.6% for 2015, as slaughter is expected to be down 2.1% with dressed weights being up 1.6%. Steer prices are expected to average in the $162-165 per cwt. Range for all of 2015, up 6%, after averaging $154.56 for 2014. The 7-800# feeder steers are expected to average $226-231 per cwt. in 2015, up from $207.67 for 2013, with 5-600# feeder calves averaging $274-281 per cwt., versus $246.44 in 2013.

In the first quarter of 2015, beef production is expected to be down 0.6%. Steer prices are expected to average $163-166 per cwt., with feeder steers averaging $226-230 per cwt., and feeder calves averaging $276-282 per cwt. In the second quarter, production is expected to be down 0.7%, with steer prices averaging $163-167 per cwt., feeder steers averaging $228-234 per cwt., and feeder calves averaging $280-287 per cwt.

In the third quarter, beef production is expected to be down 0.6%, with steer prices averaging $159-164, feeder steers averaging $226-233, and feeder calves averaging $273-282. In the fourth quarter, beef production is expected to be down 0.4%, with steer prices averaging $160-166, feeder prices averaging $222-230, and feeder calves averaging $266-275, all per cwt.

Hogs

Farrow-to-finish hog operations had a very profitable 2014 (if PEDv didn't hit an operation too badly), versus mixed returns in 2013, poor returns in 2012, mixed in 2011 and 2010, and taking a beating in 2009 and 2008. Returns may be mixed in 2014, okay at the beginning, and more vulnerable as we go through the year. The PED virus could be a wild card again.

All hogs and pigs on December 1, 2014 were up 2% from December 1. 2013. The breeding herd was up 3.7% from the same period a year earlier. Market hogs on hand December 1 was up 1.8% from last year. The Sept-Nov pig crop was up 4% from 2013. Fall farrowings were up 3%, and the pigs saved per litter were up 1%. PEDv really hit the winter quarter of last year and was also bad in the spring quarter; we saw relief, but not a full recovery in the summer quarter. And it appears we had it somewhat under control in the fourth quarter. What will the winter quarter bring?

The Michigan breeding herd stayed even at 110,000 head, the same as December 1, 2013, 2012, 2011, and 2010. We had 990,000 market hogs on hand, up 4% from last year. Sows farrowing in Michigan were up 4% this past fall, at 51,000. Pigs saved per litter were 10.20 versus 10.15 last fall. This put our total fall pig crop up 5% versus the previous year at 520,000 head.

Pork production is expected to be up 3.7% in 2015 versus 2014 as slaughter is expected to be up 3.7% with weights being the same. Carcass prices, National Weighted Average Base (multiply by .76 to have approximate live price projections) are expected to average in the $84-89 per cwt. range for all of 2015, down 14% relative to 2014.

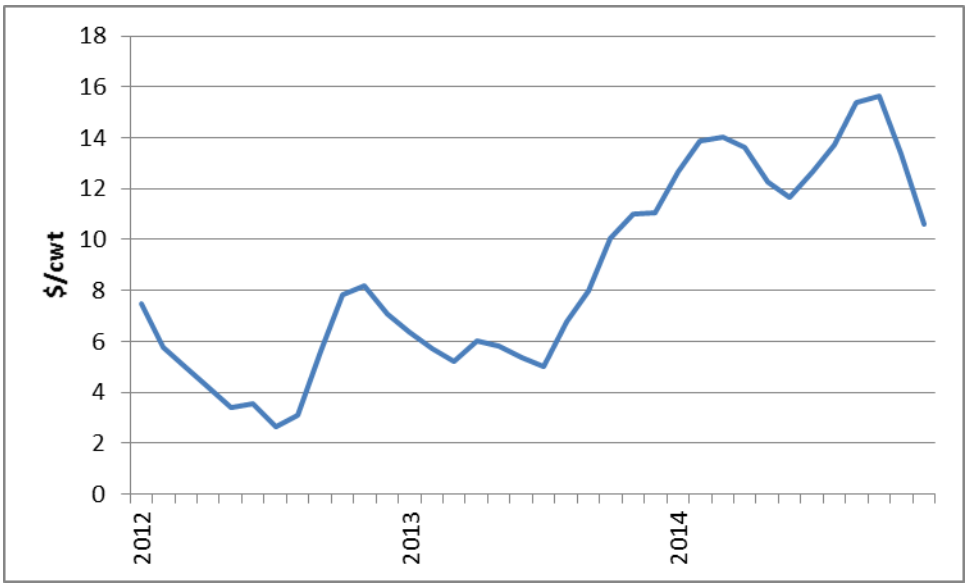
In the first quarter of 2015, pork production is expected to be up 1.9%, with carcass prices averaging $85-88 per cwt., down 5.4%. In the second quarter, production is expected to be up 2.9%, with carcass prices averaging $89-93 per cwt., down 18.6%. In the third quarter, production is expected to be up 4.2%, with carcass prices averaging $86-91 per cwt., down 19.6%. In the fourth quarter, production is expected to be up 5.6%, with carcass prices averaging $77-83 per cwt., down 11.2%.

2015 DAIRY SITUATION AND OUTLOOK
Christopher Wolf

In terms of milk price over feed cost margin, 2014 was a banner year for U.S. dairy farms. Figure 1 displays the milk price over feed cost margin that is used in the Margin Protection Program for Dairy Producers called the "Actual Dairy Production Margin." This margin uses U.S. all milk, corn, hay and soybean meal prices. While those national prices are not identical to any Michigan farm values, Michigan values tend to track them quite closely making the margin useful to indicate the general profitability of the dairy farm industry.

The long-run average—since 2000—of the U.S. Actual Dairy Production Margin is a little over $8.00 per cwt., but the margin has rarely been that value in recent years usually being in a boom or bust. Low milk prices and/or high feed prices conspired to lead to low margins in 2009, 2012, and 2013. In contrast, 2014 had both high milk price and moderate—by recent standards—feed prices. The margin nearly reached $16.00 in October 2014. For the year, the 2014 Actual Dairy Production Margin averaged $13.30 per cwt. The decline in margin at the end of 2014 reflected U.S. milk prices trending towards current world prices.

Figure 1. U.S. Dairy Production Margin



High dairy commodity prices—and the resulting high farm milk prices—in 2014 were driven by shortages in stocks domestically. For much of the year, butter stocks were more than 40% below historic levels. Cheese stocks were also tight—though not nearly as tight as butter. The result was that domestic butter and cheese prices diverged significantly from world prices.

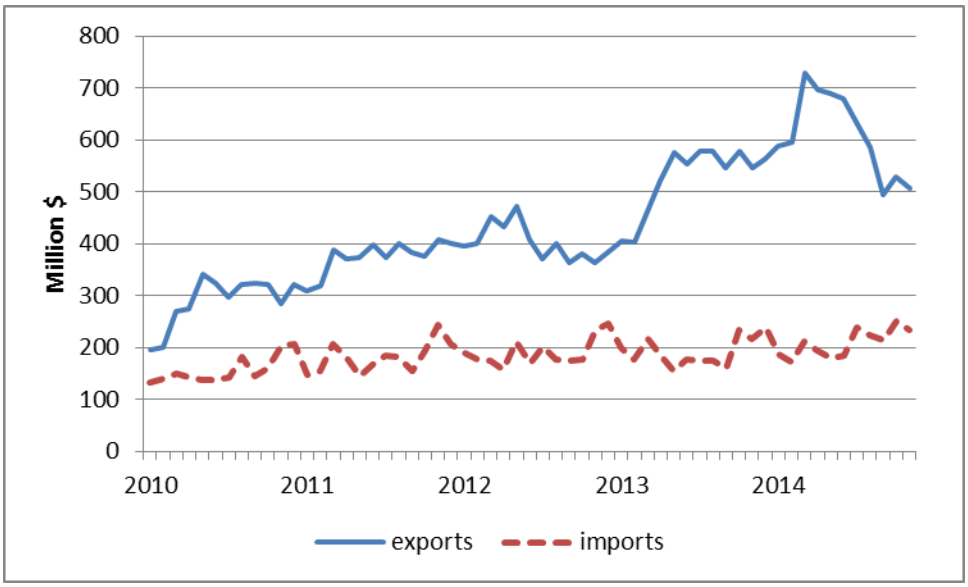
A high profit margin encouraged milk production expansion resulting in an increase of 92,000 milk cows nation-wide. The U.S. finished with 9.302 million milk cows marking the first time the country had more than 9.3 million milk cows in about six years. Michigan continued to grow milk production at a rapid pace in 2014 adding 21,000 milk cows to end the year with 402,000 milk cows. This marked the first time the state had 400,000 or more milk cows since

February 1984. Milk production increases put Michigan in seventh place in front of Minnesota, but behind Texas.

World Dairy Markets

The first half of 2014 witnessed continued growth in the value of U.S. dairy exports (Figure 2). For the first six months, U.S. dairy exports value on a monthly basis averaged $654 million which was 26% more than 2013. As the year progressed, curtailed Chinese dairy purchases and the Russian import embargo resulted in lower world dairy commodity prices. U.S. prices remained above world prices for several months as the domestic situation was tight for cheese and butter. However, when holiday orders were filled, U.S. commodity prices trended towards world levels seeking an equilibrium value. The influence of lower world prices resulted in the value falling to $500 million by the end of 2014.

Figure 2. Monthly Value of U.S. Dairy Exports and Imports, 2010-2014



Margin Protection Program for Dairy Producers

Lower dairy commodity prices and resulting lower projected dairy margins led to increased interest in risk management. A new farm bill program aimed to assist that need. The 2014 Agricultural Act was passed and signed into law in early February 2014 at Michigan State University's campus. After several years of debate in the dairy policy area, the results included eliminating the Milk Income Loss Contract (MILC) and Dairy Product Price Support Programs and the creation of the Margin Protection Program for Dairy Producers (MPP-Dairy). The general design of this new program is to give dairy farmers the opportunity to protect against low incomes from the sale of milk relative to the cost of feeds used for the dairy herd. The specific margin that actuates the program and determines benefit triggers is a national benchmark called the Actual Dairy Producer Margin. An individual farm's actual income over feed cost is irrelevant to the operation of MPP-Dairy but historically Michigan values have tracked the U.S. average quite closely.

Farmers must establish their eligibility and a historic level of milk sales that defines how much milk sales they can cover over the five-year life of the program. Each year, producers are able to decide how much margin coverage they want for the coming year in terms of the percentage of their historic milk sales and the magnitude of the margin, both within defined ranges. Catastrophic coverage at $4.00 per cwt. can be obtained without any premium above the $100 annual administrative fee paid by all participating operations. Farmers can buy higher levels of coverage in 50 cent increments up to $8.00 per cwt. At each incremental increase, farmers will have to pay a higher premium. There are two tiers of premiums, with a small increase in costs for milk enrolled in excess of 4 million pounds per operation per year. For 2015, premiums for enrollments up to 4 million pounds were further discounted 25%.

U.S. dairy farmers were allowed to establish their eligibility and select coverage levels for the 2015 program years during the period from September 2 to December 19, 2014. The Farm Service Agency of the U.S. Department of Agriculture recently released summary statistics describing the enrollment results by state. For the U.S. as a whole, enrollments represented 51% of the number of licensed herds in 2013, or 23,807 dairy farms. In Michigan an estimated 53% of the number of licensed herds enrolled for 2015 with 48% of those purchasing coverage above the $4.00 per cwt. base level margin.

2015 Outlook and Issues

U.S. butter stocks are still down (12% below levels from year earlier at the end of 2014), although they are not nearly as tight as six months earlier. Similarly, domestic cheese stocks are not oppressive. So why is the margin outlook down for 2015? Current product prices indicate that farm milk prices could decline a bit more from where 2014 ended. The market expects the farm milk prices to bottom out during the spring flush of 2015, but prolonged lower margins may occur. There are plenty of milk cows and another year of milk production growth is currently predicted by the USDA among others. However, cull prices are historically high reflecting the tightness of beef supplies will provide a large incentive to cull cows at lower margins. In particular, milk cows far out in lactation that were profitable at the high margins of 2014 will quickly become candidates for culling. Internationally, there is room for milk production growth from the European Union and the Russian import restrictions continue.

Further, the uncertainty in the EU contributes to a strong U.S. dollar which makes U.S. exports relatively less competitive. As of the end of January 2015, Class III milk futures average $15.75 per cwt. for the year. With typical basis, this would mean an average Michigan mailbox milk price of $16.75-$17.00 per cwt. The profitability of this price for a given producer then hinges on cost of production.

TAXES IN 2014 AND 2015
Larry Borton and John Jones

The Tax Extenders Bill was quietly signed just before Christmas. We had expected that it would get passed eventually, but the Administration would only agree to a one-year extension so its contents expired again at the end of 2014. Farm businesses were most concerned with the increase of the section 179 limit and extension of bonus depreciation. The direct expensing (section 179) increased to $500,000 for 2014, but is now back to $25,000 for 2015. The 50% bonus or special depreciation for original use of purchased farm property was extended through 2014, and has now expired for the 2015 tax year. Note that most fruit farms could not use bonus because they have made elections that require using the Alternate Depreciation System which disallows bonus depreciation. An additional benefit to the Tax Extenders Bill is to allow changing of the amount of section 179 or direct expensing on an amended return. This could be very useful if an IRS audit disagreed with the taxpayer and wanted to capitalize items that were called repairs. This still applies to returns for 2014, but not to returns for 2015.

The IRS attempted to reduce the misunderstandings and disagreements between what should be considered repairs and what should be capitalized by issuing new regulations. For most farmers who operate on a cash basis (instead of accrual which is not addressed here) we think changes are fairly minor, but should not be ignored. Since very few farms have an Applicable Financial Statement which has different rules, an election can be made when filing the tax return to expense (or treat like a repair) any item purchased for $500 or less. A business should have a written policy (although probably not required) for this amount, or an amount less than $500 may be chosen. In regards to materials and supplies mentioned in the new regulations, farmers can still prepay expenses for the purchase of inputs for the following year since they will be used within 12 months. Be careful to buy specific quantities of identifiable products. Just putting down a deposit could lead to disallowance of the prepaid expenses. This might result in higher taxes and probably significant penalties. For repairs over $500 (which is most repairs) it does not have to be capitalized if it just maintains the property and does not result in a betterment, restoration, or adaptation to a new purpose. These are the same rules which we have used for years in our farm businesses. Another rule allows expenses over $500 to be repairs if it just maintains the equipment and is a small amount compared to the total value of the item of property. There are some special rules for buildings for a farm with gross receipts of $10 million or less, and a building with an original basis of $1 million or less. An election can be made to take an annual deduction of the lesser of $10,000 or 2% of the building cost for repairs and improvements to each building. Also, many farm buildings are single purpose livestock structures or greenhouses and we can use direct expensing on these in the year purchased if it is available.

We are less confident that some tax items will be extended for 2015. Plan for taxes without much direct expensing. Even the $25,000 for 2015 begins phasing out at $200,000 of qualified property placed into service so that if more than $225,000 of qualified property is purchased, no direct expensing is available.

If an opportunity arises to trade-in machinery on a lease, the tax consequences may surprise you. Normally, a trade-in is a like-kind exchange and any undepreciated value on the old item is added to the new item and that amount is depreciated. A trade-in on a lease is not a like-kind exchange. It is really a sale of the old item, and if the allowance on the old item is used as a lease payment, the lease payment cannot be for more than 12 months in advance. So if trying to get more expenses by doing this, it may backfire and give you much more taxable income.

Taxes are calculated on income less expenses and so far this article has just addressed some expenses. Unfortunately, lower commodity prices may reduce the need and value of faster depreciation to lower income taxes, but we always hope for the best in yields and prices. We constantly hear about calls to people from the IRS with demands for immediate payment with a credit card or electronic transfer. These are scams! They are becoming more frequent and may seem to be credible because the callers may know a lot about the taxpayer and may even have fake IRS badge numbers. They may be quite aggressive and threaten that the local police may arrest you. Be comforted in knowing that if the IRS wanted you arrested, you would not likely get a call ahead of time.

The major change for many taxpayers compared to previous years is complying with the Affordable Care Act (Obamacare) provisions that went into effect for the 2014 year and filling out the tax forms with the correct information. If taxpayers bought coverage on the exchange, they should be getting a Form 1095-A which is used to calculate the health premium tax credit on Form 8962. If a taxpayer might qualify for a hardship exemption for not having health insurance, see Form 8965 and the instructions. The individual mandate penalty (or tax) for not having health insurance with minimum essential coverage requirements this year was $95 per adult, or 1% of modified household income, whichever is greater. This increases to $325 per adult, or 2% next year, and increases after that. For any businesses that help employees pay for health insurance, it must meet the market reform requirements. The penalty is $100 per employee per day which could be as much as $36,500 for each employee per year. Don't try to help with health insurance unless you consult an expert. This is not just for large employers, it applies to any employer with more than one worker.

You may hear that the IRS is having trouble keeping up with processing because of funding reductions. As the annual report by the Taxpayer Advocate to Congress enumerates, the IRS has many fairly significant problems stemming, in part, by their poor conduct with certain groups as pointed out by the Treasury Inspector General for Tax Affairs. This decrease in funding by Congress has resulted in the IRS greatly decreasing taxpayer service and will result in more people unable to find answers to their questions. The IRS expects less than half of phone calls to them will get answered, and the average wait time is expected to be at least 30 minutes. Also, Congress has not passed legislation for taxpayer rights. The House passed a bill in 2013 but the Senate failed to act. The IRS still published their list of taxpayer rights, but these don't carry the same force as legislation. However, the IRS has many capable revenue agents in the field and computers to match information. If you receive a letter from the IRS, immediately take it to your tax preparer and respond to it. Don't pay more tax than necessary, but remember, all income is taxable unless a rule exempts it. Be reasonable in your approach to deductions. Although the numbers are not high, we do get audits of farms every year in Michigan.

FARM INCOME
David B. Schweikhardt

During the past decade, variations in income across the farm sector have been especially pronounced, with the crop income outlook varying widely from the livestock income outlook. That trend will continue in 2015, but with sharply different outlooks for the two industries than in recent years. In particular, the outlook for continued lower crop prices is likely to be the dominant factor in determining the income outlook in both the crop and livestock sectors in 2015.

2014 Farm Income Summary

Net farm income in the United States is estimated to have been $97 billion in 2014, compared to $129 billion in 2013. This decrease resulted largely from a decrease in total farm revenue (-$13.2 billion) and an increase in expenses (+13.7 billion). The 2014 level of net farm income continued to be above the 10-year average of $85 billion. The value of crop production in 2014 ($201 billion) decreased from $233 billion in 2013 due to decreases in revenues for virtually every crop category – feed grains (-$33 billion), food grains (-$2 billion), oilseeds (-$9.5 billion), fruits and nuts (-$3.5 billion), and vegetables and melons (-$1.0 billion) all experienced decreases in revenue in 2014. At the same time, the value of livestock production increased from $182 billion in 2013 to $206 billion in 2014 on the basis of increases in dairy production (+$9.7 billion), meat animal production (+$15 billion), and poultry and eggs (+$1.8 billion).

This divergence in income outlook across agricultural sectors (crop versus livestock sectors) reversed the situation that existed during the past several years. In particular, the lower feed grain prices of the past year resulted in a decrease in purchased feed costs for livestock producers (from $62 billion in 2013 to $59 billion in 2014). At the same time, livestock and poultry purchases increased from $25 billion in 2013 to $33 billion in 2014. The decrease in revenue for crop production was exacerbated by continued increases in crop production costs – seed (+$500 million increase in 2014), electricity (+$500 million), fertilizer (+$1.0 billion), pesticides (+$300 million increase), fuels ($6.3 billion), labor (+2.1 billion), marketing, storage and transportation (+1.7 billion), interest (+$500 million), and rental payments (+$1.8 billion) all increased in 2014. Only repair and maintenance expenses (-$700 million) decreased in 2014.

2015 Farm Income Outlook

Looking toward 2015, the outlook for commodity prices is likely to continue dominating the farm income picture. If yields are normal in 2015 and carryover stocks increase, then lower commodity prices are likely to limit revenues from crop production (see the price outlook article in this issue for more detail). At the same time, a relatively stable outlook for some input costs could provide a small bit of optimism for the farm income outlook. First, energy costs could remain at or below existing levels. Producers purchased $18 billion in fuels during 2014, an increase of $700 million compared to 2013. The U.S. Department of Energy is projecting that crude oil prices will average $57 per barrel in 2015, compared to $108 in 2014.This oil price translated into an on-highway diesel fuel price of $2.86 per gallon for the week of January 26, 2015, or $1.04 less than one year ago. Retail diesel fuel prices are projected to average $2.85 for 2015, compared to $3.83 for 2014. This level of oil prices in 2015 is expected to result from continued high levels of world oil production and slow growth in the demand for oil due to slow worldwide economic growth that will continue through 2015. As usual, events in the Middle East and other oil producing regions could create periods of instability in oil prices.

Similarly, natural gas and electricity prices are expected to remain relatively stable in 2015. The DOE projected price for natural gas in 2015 is $10.63 per thousand cubic feet, compared to $11.00 in 2014. This price outlook is largely the result of continued high levels of shale gas production, which is unlikely to change in the near future. Thus, the natural gas cost component in fertilizer production is likely to remain steady in 2015, though other processing costs could increase (see the input cost outlook article in this issue for more detail). The DOE forecasts a price of electricity of 12.63 cents per KWH in 2015, compared to a price of 12.50 cents in 2014. This trend is closely related to the outlook for natural gas prices.

Second, land rental expenses continued their increase in 2014 and are likely to be a key factor in the 2015 farm income outlook. Farmers paid $19.5 billion in land rent to non-operator landlords in 2014, an increase of $1.8 billion over the 2013 level. As noted in last year's farm income outlook, though significantly lower returns on crop production would be expected to result in lower cash rents, landlord expectations (and tenants' cash rent bids) are often slow to adjust to economic reality. Given that land rental expenses increased again in 2014, this suggests that the difficult process of adjusting to lower rental rates has not yet begun and that a best case scenario is that rental expenses will remain unchanged in 2015, with lower rents b being one or two years away if returns on crop production continue at their current levels.

Third, the trend of increasing expenses for seed is likely to continue in 2015, though at a more moderate rate. Farmers spent $22.4 billion for seed in 2014, an increase of $500 million above 2013. This represented the smallest increase in seed expenses during the past five years. Because seed costs are determined, in part, by the prior year's production conditions, the favorable crop conditions in 2014 are likely to help keep a lid on seed price increases (see the input cost outlook article in this issue for more detail).

Finally, the outlook for interest rates on production and asset loans is likely to remain unchanged in 2015. In December 2012, the Federal Reserve issued its statement of "forward guidance" regarding its expected future policy direction. In that statement, the Fed indicated that its low interest rate policy could be expected to continue so long as: (1) the unemployment rate remains above 6.5%, (2) the short-term (one to two years) inflation rate is projected to be no more than 2.5%, and (3) the longer-term inflation rate is projected to remain stable. On the inflation front, existing conditions remain well within this range for the last two criteria. On the first criterion, the unemployment rate fell below 6.5% in April 2014, and stood at 5.6% in December 2014. Thus, a major question has arisen regarding whether the Federal Reserve will increase its discount rate (interest rate for bank borrowings) in 2014. Many observers expected the Federal Reserve to increase the discount rate in mid-2014. Recent economic events, however, have complicated the Fed's decision and perhaps delayed the decision to increase rates.

On January 28, 2015, the interest rate on three-month U.S. Treasury Bonds stood at 0.02% and the rate on 10-year Bonds stood at 1.72%. Continued low inflation, significant weakness in the economic growth in European and Asian countries, uncertainty about the fate of the Euro after the outcome of the Greek election, and the impact of a stronger dollar at decreasing U.S. exports all could pose threats to the U.S. economy. As a result, the Federal Reserve has shown more flexibility in its outlook during recent months and interest rate futures prices now suggest that a rate increase by the Fed could come well into the latter half of 2015. If any of these factors result in reduced job growth, the Federal Reserve's action is likely to be delayed even longer. Thus, significant increases in interest rates would be likely to occur, if at all, after most farm loans are secured for 2015. As noted in this article for the last few years,

however, lenders are likely to continue with increased scrutiny of borrowers' creditworthiness, with a particular emphasis on the farm's liquidity status.

Industry Variability in the Farm Income Outlook

In recent years, the total net farm income outlook has often obscured the highly variable situation across agricultural producers. Aggregate numbers such as "total net farm income" hide the differences in outlook across the crop and livestock industries. In particular, the difference in the income outlook for crop and livestock producers in recent years has underscored the reality that statements about "record net farm income" are relatively meaningless when applied to individual sectors or producers. Once again, the reality of wide variations in income outlook will occur if crop yields are normal and crop prices remain at lower levels than in recent years.