



2011 Indiana Agriculture Outlook

Indiana Farm Economy is Vigorous and Healthy

Indiana agriculture caught its stride once more in 2010 with lots of positive drivers. The U.S. economy is in recovery, and is expected to add slowly to that growth in the coming year. The world wants more agricultural products -ag exports sales are going to rise as incomes for the world's consumers are growing more rapidly than in the U.S. Drought in Russia has increased demand for U.S. wheat and corn and tightened supplies. Plus, the use of grains for biofuels continues to expand.



Producers of animal products turned the corner toward brighter financial days as well in 2010. Animal industries have suffered for several years with higher feed prices, a severe recession in 2009, and a miss-labeled disease more properly known as H1N1. Hog and beef cattle producers finally moved back to profitability this spring as the burdens of higher feed prices have been transferred to consumers. Poultry returned to positive margins in 2009 and has had a solid year in 2010. Milk producers are still in the shadowy area of breakeven prices, but at least have recovered from under the shroud of major losses.

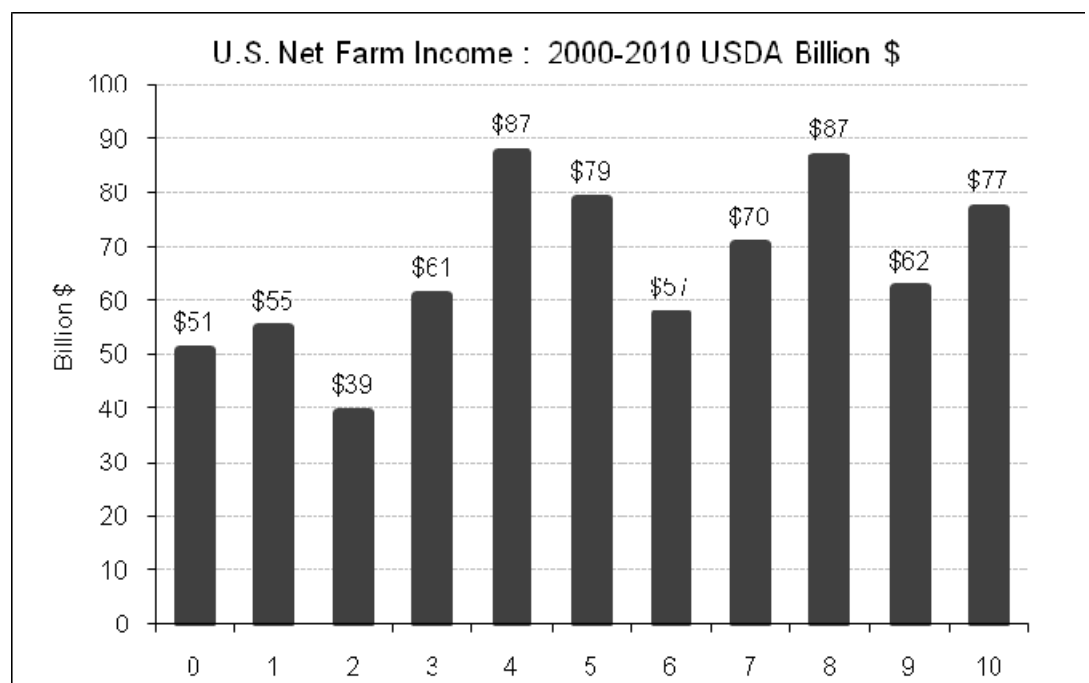
More good news for 2010! Land values were up, cash rents were up and the optimism among farm families is generally high.

What about 2011? Crop returns should be good, although input prices for seed, fertilizer, and fuel are headed back up. Higher feed prices, especially higher corn prices will cut into animal margins, but will also help those industries avoid excessive expansion. Land values and rents should continue their movement upward as well. These are expected to be the foundation for a vigorous and financial healthy Indiana agriculture in both 2010 and 2011.

Returns for Indiana crop producers will be strong as corn and soybean yields will be just under records. Corn prices will achieve a new record for this year's crop with soybean prices near the record. Revenue from corn will generate almost \$5 billion-a new state record, and soybeans at \$2.6 billion of revenue will also set a record, but just above last year's crop.

These are expected to be the foundation for a vigorous and financial healthy Indiana agriculture in both 2010 and 2011.

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Slow Economic Recovery Means High Unemployment

Larry DeBoer

The recovery from the worst recession in decades is now a year old. It's been slow to get off the ground. GDP grew 3% above inflation over the past year. That was not enough to make a substantial dent on the unemployment rate, which remains at 9.5%. Inflation and interest rates are near their lowest levels in decades. The Federal government is running an enormous deficit, and the national debt is growing.

Consumer spending is growing slowly. Sluggish income growth, high unemployment, shaky portfolios, and—perhaps—a new emphasis on saving kept consumption growth at 1.7% above inflation in 2009-10. Spending should increase a bit more next year. Home prices have stopped falling, consumer debt as a share of income has dropped, and interest rates are low. But spending will not grow as it has in the past, and this will be a drag on overall growth.

Housing remains in a slump. Home values have stopped falling, but home sales, construction and building permits remain near record low levels. Home building can't be counted on for substantial growth over the next year. Investment in business buildings has been declining, but may have bottomed out. Investment in equipment is rising rapidly. Low interest rates may continue to encourage this, but recently orders for equipment have declined. Businesses restocked inventories in a big way this past year, and this contributed a substantial amount to growth. However, this pace of inventory investment cannot continue.

Exports are growing rapidly, but imports are growing faster. Slower growth in the U.S. relative to the rest of the world—especially the developing world—and a declining value of the dollar should encourage exports and discourage imports over the next 12 months and add a bit to growth.

Federal spending is growing moderately. State and local spending is dropping, and is likely to drop more over the next year. Revenues have collapsed, and state and local budgets are in terrible shape nationwide.

The outlook is more uncertain than usual. Consumers seem unlikely to increase their spending substantially, but they could if the increase in savings is a temporary phenomenon. Business investment in equipment has been rising rapidly, which may continue, but some signs imply that it won't. And there's always the possibility of a new crisis in financial markets.



The most likely scenario is for slightly slower growth over the next year than this past year. Expect GDP to grow 2.8% above inflation between now and the second quarter of 2011.

Growth that slow is not enough to bring down the unemployment rate. Jobs will be created, but more people will be looking for work, too. The unemployment rate should still be 9.5% by July 2011. High unemployment tends to reduce the inflation rate. Firms cannot raise prices without more growth in demand. Expect prices to rise only 0.9% between now and July 2011.

The Federal Reserve will keep their main policy interest rate near zero for the next year, and has now pledged not to shrink the funds available for long-term lending. Interest rates will remain low. Expect the 3-month Treasury rate to be 0.3%, and the 10-year Treasury rate to be 2.7%, at this time next year.

The big federal deficit is a plus for an economy in recession. Added Federal spending and lower taxes increase the demand for goods and services, which gives businesses a reason to employ more people and produce more output. However, the deficit and rising debt will be a problem once the economy recovers. It could push interest rates and exchange rates higher, crowding out private investment and exports. The rising national debt would increase interest payments as a share of the budget, which is unsustainable if it continues. But for now, deficits will help the economy pick up steam.

Foreigners Anxious to Buy American Farm Products

Philip Abbott

U.S. agricultural exports are expected to rise to \$113 billion in 2011, nearing the record \$115.3 billion in 2008. This is a 5% increase over 2010. U.S. agricultural imports are expected to increase to \$81.5 billion next year. The agricultural trade balance is expected to improve to a favorable \$31.5 billion in 2011, as exports grow faster than imports.



Drought in Russia is one of the key factors contributing to higher

agricultural commodity prices, hence higher trade values. Russian wheat production for the 2010/11 crop year is expected to fall 32% or 19.7 million metric tons. Other FSU wheat exporters are also affected by drought. Their wheat production is expected to fall to nearly 18% or 9.6 million metric tons from the 2009/10 level. Coarse grain production (corn) is expected to fall by more than a third. Russia banned wheat exports on August 6 to protect its domestic market from more severe price run-ups.

The Russian drought has come at a time of abundant worldwide wheat stocks, with especially high stocks in the U.S. But the severity and extent of production shortfalls not only in Russia and the

FSU but also in Canada and the European Union will tighten grain supplies significantly. Expected world wheat carry-out stocks should fall 18.2 million metric tons to 27% of utilization as world exports fall 7.7 million metric tons. Given the high world wheat prices now seen, the U.S. may choose to export even more of its surplus stocks.

The events in Asia, especially China, are also influencing the agricultural trade outlook. Exports to Asia are \$7.1 billion higher in 2010, and are forecast to increase another \$2.3 billion in 2011. China has recently been a net coarse grains exporter, but last year a production shortfall led to net imports of 2.8 million tons. Imports are expected to continue at about the same level in spite of improved harvest, as the Chinese surprisingly purchased over one million metric tons of corn recently. While this is significant relative to world trade in corn, it is less than 1% of Chinese coarse grains production. This purchase reignited debate on the potential for future Chinese corn imports. But these purchases could simply be intended to rebuild stocks after last year's shortfall and to fight potentially rising inflation.

The Chinese announced that they would loosen control of their exchange rate, the Yuan, in June but their currency had only appreciated 0.4% between then and late August. USDA expects changes in the Chinese exchange rate to be too small to affect agricultural trade levels next year.

The dollar is expected to fall some in the coming year. It may be up against the Euro as a consequence of the debt problems in

Greece, Spain, and elsewhere. But it will likely be weaker relative to the Japanese yen and Brazilian real. Continued low interest rates maintained by the Fed to fight recession and recently observed increases in the U.S. trade deficit suggest weakness in the dollar for the future. Traditionally a weak dollar has meant higher agricultural prices and higher agricultural export value.



The USDA forecast is also based on somewhat optimistic expectations on world economic performance. Growth out of the worldwide recession is being led by emerging economies, especially those in Asia, helping to account for expected higher agricultural imports there. The USDA puts world economic growth at 2.7 to 3.3% in 2010 and 3.4 to 3.6% in 2011, while the IMF has world economic growth at 4.6% in 2010 and 4.3% in 2011. USDA expects Asia to grow 8% in 2010, led by 8 to 9% growth in China. The greatest uncertainty is for the European Union. The USDA expects European GDP growth of only 1.5% this year and 2.5% next year. They also acknowledged downside risks to worldwide economic performance that could be more limiting to agricultural exports.

Trade Agreements are Stalled

Philip Abbott

Trade negotiations under the World Trade Organization's Doha Round have stalled. The four regional trade agreements negotiated between the U.S. and Korea, Peru, Panama and Colombia just before trade promotion authority (fast track) expired in 2007 have also not moved towards ratification, in spite of interest in completing the Korean agreement expressed by the Obama administration. Disputes under the WTO are the vehicle through which that institution is now shaping trade policy reform.

One of the more important trade disputes, that will likely influence future farm bills, is the dispute between U.S. and Brazil on cotton. Brazil successfully argued to WTO panels that U.S. cotton marketing loans were not decoupled and that export credit programs were subsidized. Brazil won the right in this dispute to retaliate against intellectual property rights (pharmaceutical patents) in addition to imposing countervailing duties on imports from the U.S. Pressure from interests likely to be hurt by Brazilian countermeasures led to an agreement the day before those measures were to take effect -- on June 18.

Under that agreement, Brazil is to receive annually \$147.3 million, and the U.S. has agreed to limit trade distorting cotton subsidies, which will require modifications in the next farm bill. There is still pending another dispute between the U.S. and Brazil, which Canada joined, on a broad range of products that benefit from U.S. commodity programs, including wheat, corn, sorghum, cotton, rice and livestock. That dispute involves the same legal issues that the U.S. lost in the Brazil cotton dispute. It may therefore be the case the U.S. will not ignore its WTO commitments in the next farm bill as it largely did in the 2008 farm bill. If the U.S. fails to modify farm legislation in accordance with this agreement, Brazil retains the right to impose countermeasures.

High agricultural commodity prices now mean that spending under U.S. farm legislation is not currently in violation of our WTO commitments. The very positive outlook for U.S. agricultural exports means that farm income is likely to remain high for most commodities, and payments under government programs will continue to remain quite low.

Watch Three 'B's in Next Farm Bill

Roman Keeney and Amber Remble

Discussions in Washington D.C. on the 2012 farm bill are expected to focus around three 'B's: **B**razil, **B**udget, and **B**aseline.

Brazil: In April, House Agriculture Committee Chairman

Colin Peterson (D-MN) began publicly discussing prospects for the next omnibus farm legislation. The timing of Peterson's push to get the 2012 farm bill started coincided directly with the last minute deal struck between the United States and Brazil to send \$147.3 million dollars of annual support to Brazilian cotton production. This deal is a temporary resolution to the World Trade Organization (WTO) case that Brazil won against U.S. cotton subsidy programs. Another part of the deal was that the U.S. would bring their policy into compliance in the 2012 farm bill.

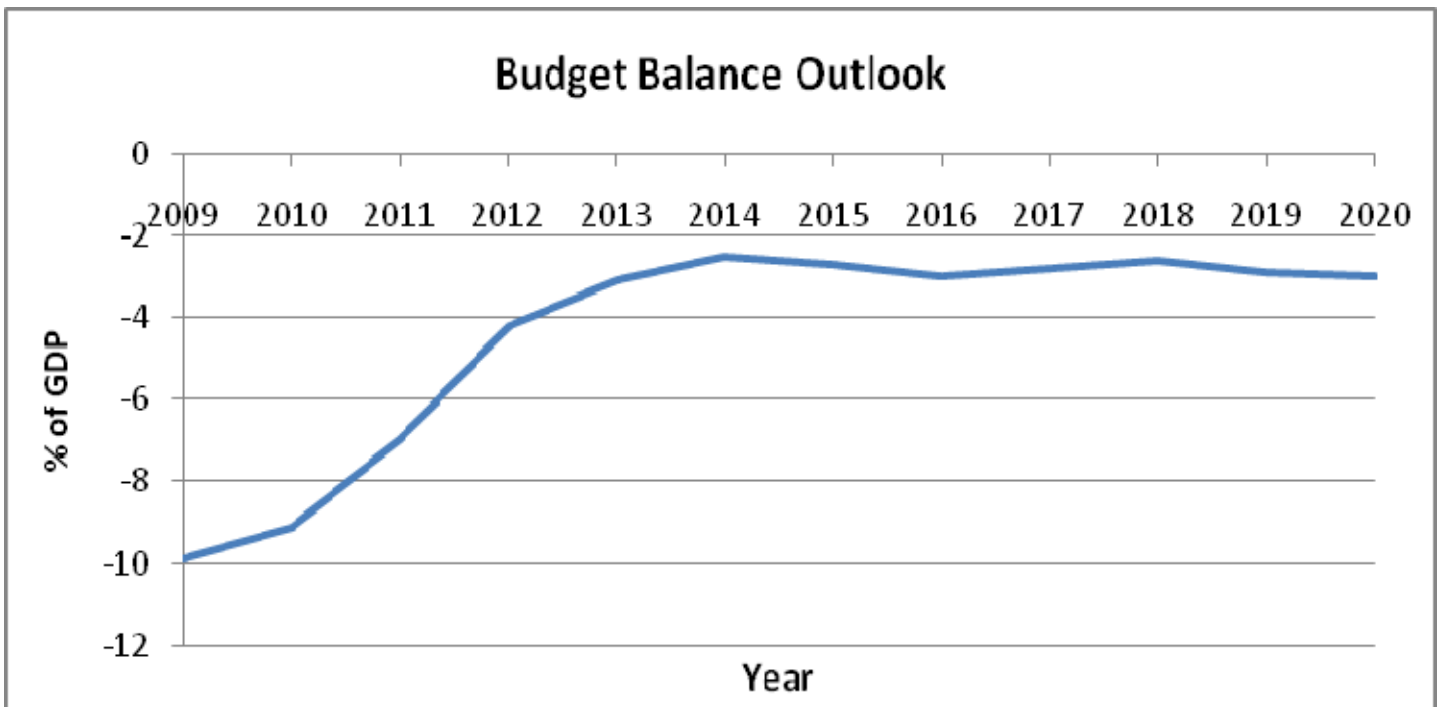
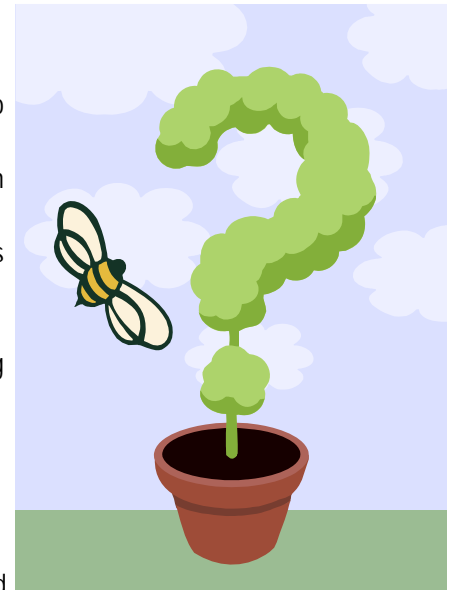
Budget: The U.S. federal budget deficit is emerging as a

significant economic and political concern. Slow economic recov-

ery and large deficits forecast for the next decade (see figure)

have been a prominent factor generating support for 2010 midterm election candidates who favor deficit reduction. The recession has been relatively mild in its impact on agriculture. This means that ag may be unable to justify maintaining current spending levels in a "belt tightening" environment. High commodity prices have left fixed direct pay-

ments as the only significant area for reduced commodity program spending. Plus, there is no political champion to maintain these payments in their current form. Thus, whatever emerges as new farm policy in 2012 will likely see total spending on agricultural income and price support reduced as farmers are asked to share the burden of federal budget reform.



Baseline: Even without a reduced budget, the agricultural

baseline for spending is near its minimal level with high prices generating low government expenditures on loan deficiency or counter-cyclical payments. So, some agricultural legislators want to move early on the 2012 bill in an attempt to lock in the current baseline and perhaps shield agriculture from even bigger spending cuts. Agriculture has successfully avoided budget cuts in the past and may do so this time by adopting the minimal baseline and moving quickly to get a 2012 act.

The three 'B's are closely related. The Brazil decision brings negative attention to U.S. farm programs as it is sending taxpayer

money to Brazilian farmers at a time of huge federal deficits. The biggest budget items for agricultural commodities are fixed direct payments and these are the least acceptable within the WTO system. Given the tight budget, we can expect strong support for shifting spending from direct payments to revenue protection (like the ACRE program). In addition, commodity groups and farm state legislators also want more risk management built into the farm support system.

Ironically, this type of redirection of farm support which keys payments to current revenue (i.e. current output and prices) has the potential to be much more costly if agricultural prices drop sharply while also exposing the U.S. to further complaints through the WTO system. If history is any guide, these unintended consequences will likely get minimal attention as the next year of policy debate remains focused on reacting to the three 'B's' buzzing at the moment.

Low Food Price Inflation

Corinne Alexander

After a year of food price deflation, shoppers are seeing moderate food price increases in 2010. The food price increases so far in 2010 are smaller than typical due in large part to the slow economic recovery. Looking forward, food price inflation will depend on the pace of economic recovery in the US and abroad as well as supply disruptions like the Russian drought's impact on world wheat supply. In addition, meat prices are expected to increase due to strong exports and smaller supplies.

Grocery store prices increased 0.7% from July 2009 to July 2010. However these price increases are well below the 1997-2006 average annual food and beverage retail price increase of 2.5%. Restaurant prices increased 1.1% from July 2009 to July 2010, well below the typical 3% increase which means restaurants are passing along lower food costs to consumers. Restaurants are also likely keeping a tight lid on wages because labor accounts for 40% of the cost of a restaurant meal.

Over the last 12 months, the product categories with the largest food price increases have been meat and dairy. The household staple with the largest price increase is bacon at 15.7%. Beef prices have

also been higher led by ground beef at 14.3%. For the dairy sector, whole milk prices are up 10.7% from the very low prices in 2009. In general the prices of wheat products have fallen over the last year with pasta down 7.9% and flour down 6.7%. However this trend will reverse soon due to the Russian drought moving grain prices higher and to higher meat prices.

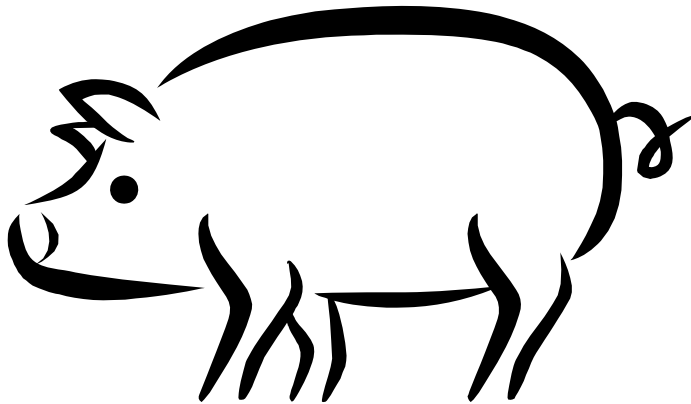
Over the next 12 months, food price inflation will depend on the direction of food ingredient costs and energy costs which in turn depend on the pace of recovery for the US and global economies. In addition, the droughts in Russia which have led to a wheat export ban and the structural change occurring in the US livestock industry will all put upward pressure on food prices. That said, the slowly recovering US economy will continue to limit the ability of retailers to pass on higher costs and thus continue low food price inflation. USDA expects food inflation to average near 1% in 2010 and then move upward to a range of 2% to 3% in 2011.



Pork Producers Bring Home Some Bacon

Chris Hurt

Large losses and a major erosion of equity were the hallmarks of the pork industry in 2008 and 2009. Losses averaged near \$20 per head each of those years. While live hog prices were about \$48 per live hundred-weight in 2008, they fell off a cliff in 2009 to only \$41. That fall was a result of the world recession and due to H1N1 being identified as "swine flu" in April of 2009.



As a result of these large losses, pork production dropped by 6% in 2010 and hog prices rose enough to move the industry back to profitability by last spring. While those profit levels have been very good this summer, it will require the positive returns in 2010 and 2011 just to recover the equity losses from 2008 and 2009.

Producers are expected to respond to the current favorable margins by beginning a modest herd expansion this fall and winter. Farrowings are expected to start increasing in the spring of 2011 resulting in higher pork production by the fall of 2011. Higher pigs

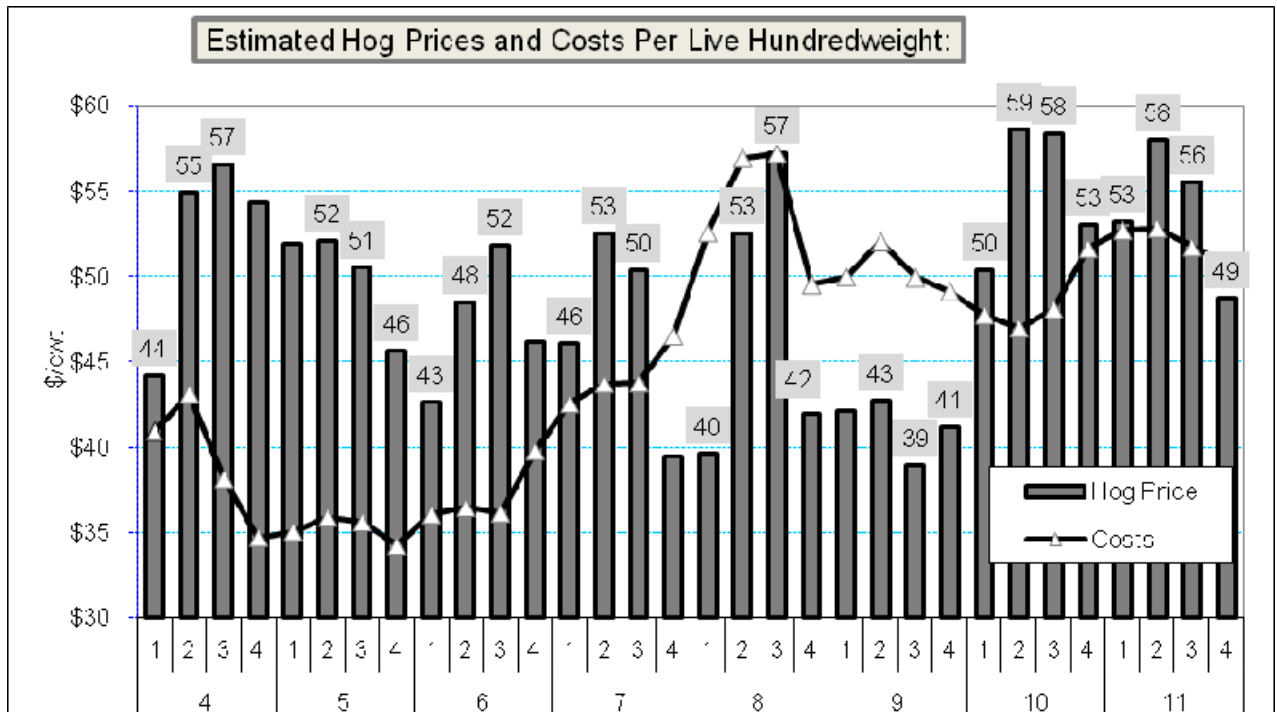
per litter will also contribute to an increase in 2011 production of 2%.

Pork exports remain a bright spot. This year the pork industry will export 19% of its production, and is expected to reach a record 20% of production in 2011. Just two decades ago, the industry only exported 2% of production. In contrast, corn producers in the U.S. exported 29% of their production 20 years ago and today that is down to only 15%. Both the U.S. chicken and pork industries export a higher percentage of production than do corn growers.

Hog prices this year will average around \$55 and near that level in 2011. Cost of production had been in the higher \$40 for much of this year, but currently have moved back above \$50. For next year, costs are expected to be in the very low \$50s.

Prices are expected to drop seasonally this fall and winter to \$53 and then average \$56-\$57 next spring and summer.

The end of this phase of profitability may come in the last quarter of 2011 if herd expansion begins this fall and winter as expected. Prices in the fall of 2011 and the winter of 2012 could be in the higher \$40s with costs above that level. Given the rise in corn prices late this summer, hog producers must be cautious about expanding until a more assured corn supply can be established. Unfortunately that may not be until the 2011 U.S. crop is produced.



Beef Industry In “Good Hands”

Chris Hurt

Returns for the beef industry should be on a longer term positive run. This is because the breeding herd continues to decrease, and currently there are no signs that brood cow producers have any interest in expansion. Beef cow numbers are now 12% below their most recent highs in 1996.

Like all of the animal industries, beef producers have been forced to adjust to much higher feed prices. This resulted in large feedlot losses dating back to 2007. A return to feedlot profits finally came in April of this year. Returns for cow-calf producers have not covered costs that may be about \$1.20 per pound for 500-600 pound calves.

In adjusting to the higher feed prices, beef production has kept falling and is now down more than 10% from when corn averaged closer to \$2.00 a bushel prior to 2007. While the small production will help strengthen beef prices, the beef industry will continue to lose consumer market share. As an example, in 1990 beef represented 34% of the total red meat and poultry consumed in the U.S. By 2000 that was down to 32%. As late as 2006 it was still 30%, but for 2011, beef's market share will drop below 28%. The reason for the recent numbers is because the chicken, turkey, and pork industries are already turning back to modest expansion while beef continues to reduce production.

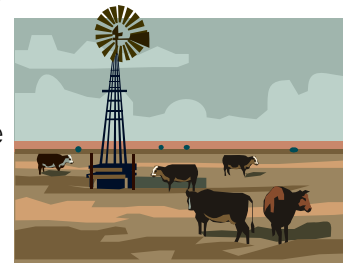
Finished cattle prices averaged about \$92 per hundredweight in both 2007 and 2008, but fell to only \$83 in 2009 as a result of the

recession. This year they will average about \$94 and \$98 for next year.

Calf and feeder cattle prices will be strong along with the higher finished cattle prices, but will be tempered by higher feed prices. In the fall of 2009, 500-600 pound steer calves averaged \$1.09 per pound at Oklahoma City. Those prices are expected to be in a range from \$1.20 to \$1.30 a pound this fall. Feeder steers weighing 750-800 pounds at Oklahoma City averaged \$.93 a pound in the fall of 2009 and may be in the \$1.05 to \$1.15 range this fall.

Prices for calves in the Eastern Corn Belt tend to be \$3 to \$5 lower. Ultimate feed prices will be important to the final determination of calf prices this fall.

The best news for cattle producers will be that the reduced production will keep cattle prices strong for years to come. If the industry does not start any heifer retention until 2011 or 2012, this means it will be 2013 or 2014 before beef production can increase, and thus an extend period of potentially favorable returns will exist, at least for cow-calf producers. Cattle feeders have the unfortunately uncertainty of volatile feed prices which can quickly impact margins and demands risk management strategies.

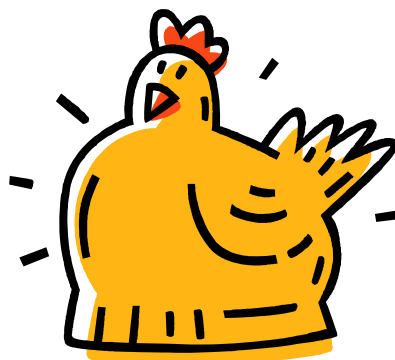


Poultry Sector Returns to Profits

Chris Hurt

Chicken producers returned to profitability in 2009 by quickly dropping production in both 2008 and 2009. This year, broiler prices will average about 83 cents per pound compared to only 77 cents last year. This price increase was achieved even with a 3% increase in production primarily due to the U.S. economy moving out of recession. Trade conflicts with Russia have helped keep chicken exports down this year about 6%.

For 2011, chicken production is expected to increase by 3% again. However, continued economic recovery and a 3% increase in exports should enable chicken prices to increase to average near 85 cents per pound. These chicken prices should be profitable if corn prices do not rise above \$4.50 per bushel.



Turkey producers followed a different path in 2008 when they expanded production by 2% even in the face of higher feed prices.

Financial losses from higher feed prices and the recession resulted in reductions of about 4% in 2009 production followed by another 4% in 2010. As a result of lower production and recovering consumer demand, turkey prices will average about 89 cents per pound this year compared to only 79 cents last year. For 2011, expect production to be up 2% with prices dropping to around 86 cents on average.

Price per dozen for New York eggs was \$1.28 in 2008. The recession in 2009 lowered them to \$1.03. Prices in 2010 will average about \$1.00 per dozen as production increase fractionally. For next year, USDA expects prices to average in a range from \$1.03 to \$1.12 per dozen.

Better Milk Prices Butter Up Farmers*Nicole Olynk and Mike Schutz*

Slowly, the industry is recovering from the dismal prices and record losses encountered throughout 2009 and into early 2010. Class III (milk for cheese) prices usually drive the overall milk price and have averaged \$13.60 per hundred weight for the first 7 months of 2010, which is \$3.45 ahead of the \$10.15 Class III price for the same time period in 2010. Current milk prices represent a return to levels that should cover costs of production for many dairy farms. However, it will take higher prices over an extended period of time for dairy producers to begin to replace lost equity. Typical dairy farms lost in the range of \$350 to \$1000 per cow in equity last year. That much loss forced several Indiana farms into bankruptcy or receivership. Dairy farms that were better able to control their own forage production and that had more equity, often through owned land, were best positioned to survive the economic catastrophe. Part of the losses were driven by high costs, especially feed and labor, but also from diminished value of cows and heifers. Milk cow prices were at \$1290 at the beginning of 2010, compared to \$1920 a year earlier, although prices are now moving higher along with increasing milk prices.

The depressed milk prices of 2009 followed a “perfect storm” of factors; and dairy producers were caught in the middle. Global economic conditions and improved production in New Zealand and Australia reduced the amount of dairy product exported while production continued to be strong. Domestic demand for dairy products was hampered by the US recession that dampened demand even at bargain prices. Production levels remained strong, even in the face of depressed milk prices and high feed prices. Monthly US milk production slowed in late 2009, but by March 2010, milk production was running ahead of levels for the previous year. Despite 3 rounds of herd buyouts in the Cooperatives Working Together Program during 2009 and historically strong cull cow prices, the US dairy herd was only slightly reduced from approximately 9.3 to 9.1 million head. Steady cow numbers may, in part, result from the record proportions of replacement heifers relative to cows in the US national herd. Increased total milk production from fewer cows has long been the trend in the dairy industry. Continuing growth in production per cow is the story in 2010. In Indiana, milk production per cow was up nearly 5% for June 2010 compared to June 2009, probably fueled by feed costs remaining largely unchanged, improving milk prices, and advantageous weather through late winter and early spring. For April, May, June, and July, on average, every cow in the US produced nearly 3 pounds (1.5 quarts) more milk than it did in 2009!

Nowhere are the effects of the prolonged heat and humidity more evident than in the butter markets! As cows encounter more heat and humidity, butterfat content typically falls; so reduced availabil-



ity of butterfat during the summer is not unusual. However, given that US butter inventories headed into summer were at a 5 year low, demand has driven butter prices higher—much higher. At the time of this writing, butter was at \$2.22 per pound, up \$0.98 since February 2010 and \$1.06 higher than a year ago! This is only about the fifth time since 2000 that Class I prices are being set by butter and not cheese values. It is unclear how long a rally in butter prices can sustain the all-milk price. Futures markets have only responded modestly to the leap in butter prices in nearby months, and little beyond November 2010.

Presently, the outlook for milk prices in the near term is better, but not spectacular. According to Chicago Mercantile Exchange futures, Class III prices are expected to average around \$15.25 for August to December. Unfortunately, prices are expected to weaken into early 2011, with January to March averaging \$14.05 and April to June averaging \$14.05. In Indiana, these Class III prices would translate to mailbox prices of \$17-17.50 for the remainder of 2010 and \$16-16.50 for the first half of 2011. With corn and soybean prices expected to strengthen, present forecasts call for triggering of Milk Income Loss Contract program payments beginning in April, 2011. Of course, anything that impacts milk production or product sales could dramatically affect a very fragile market. On the optimistic side, butter demand is incredibly strong with high demand for cream going to the churns, export markets are gaining steam, and butter inventories are low. On the other hand, cow numbers seem to be on the rise again despite another round of the CWT herd buyout, cheese stocks are at historic levels, and the summer heat will moderate. Fortunately, a return to 2009 prices seems unlikely, but the present modest rally in prices also is unlikely to last long enough to offset a meaningful portion of equity lost in 2009 and early 2010.

Every time milk prices are low, there has been discussion of supply control programs, either self-funded or government driven. This time is no exception; and several comprehensive proposals for dairy pricing reform have attracted their own supporters and detractors. Briefly, the plans put forth as the Federal Milk Marketing Improvement Act of 2009 (Specter-Casey Bill), the Dairy Price Stabilization Plan (Holstein USA Plan), and the Foundation for the Future Plan (National Milk Producers Federation) are garnering support. Chiefly, the plans differ in how milk prices are established in the federal orders, how futures prices are used to set prices, value of processor allowances for manufacture costs that are passed back to producers, government support programs, and inclusion of supply management or production quotas.

Dairy will be an important topic for the next farm bill or sooner, look for opportunities to learn more about how dairy pricing reforms may affect you.

Corn Demand Outpaces Supply

Chris Hurt

Corn growers can't keep up as demand is growing faster than they can provide bushels. The result is shrinking corn inventories which will be down to 8.3% of use by the end of the 2010/11 marketing year. That compares with about 12% stocks to use in 2006/07 and only 5% in 1995/96.

USDA revised yields lower in their September 2010 updates. The national average yield is estimated at 162.5 bushels per acre compared with the record 164.7 in 2009. Total production would still be a record at 13.16 billion bushels, slightly higher than last year. However, usage is estimated to be 13.44 billion bushels. Thus usage would exceed production by 280 million bushels.

Demand is robust. While the rate of additional annual ethanol usage is slowing, it is expected to grow to 4.7 billion bushels representing 35% of total corn usage. However that is just 165 million bushels more than was used for ethanol from the 2009 crop. This is in sharp contrast to the extraordinary average annual growth rate of 724 million bushels per year for the 2006, 2007, 2008, and 2009 crops. To meet the renewable fuels standard, the rate of growth will be about 215 million bushel per year through the 2014 crop.

The second leg of strong demand for the 2010 crop is exports. USDA expects them to increase to 2.1 billion bushels, a 6% increase over last year. Higher corn exports are related to reduced world wheat production and subsequent substitution of corn for wheat by some world buyers.

The ultimate loser in the race to secure corn may once again be the domestic animals industries as USDA expects feed usage to drop by 275 million bushels. Even when some added distillers grains are available due to higher ethanol production, corn feeding will drop about 4%.

The average corn price received by U.S. farmers is expected to average \$4.40 a bushel according to USDA. This means Indiana harvest cash prices could be in the \$4.25 to \$4.50 range at harvest

and move upward to \$4.75 to \$5.00 by next spring. Even higher prices could be possible if U.S. yields are reduced more in subsequent USDA updates, or export demand is even stronger.

The corn market faces an environment similar to 2008 when concerns over availability caused buyers to be more aggressive and increase their personal inventories. This is a situation where end users are willing to pay a premium to know they have supplies locked in. This causes the nearby prices to be bid higher relative to the more deferred positions. If this continues to occur, the "carry" (price premium for later shipment compared to current shipment) in the market will be lowered and increases the incentive to sell at harvest rather than store.

Market carry for corn has been eroding. A month ago, anticipated returns to on-farm storage above interest costs were about 35 cents per bushel. Now that is about 20 cents and will likely erode further. Twenty cents is still a positive return to on-farm storage and gives incentives to store and earn that carry. However, if buyers become anxious about ownership, that carry could become negative over the next several weeks. If that develops, then consider selling cash grain at harvest and buying deferred futures or call options as a way to replace ownership.

Commercial storage does not appear to be profitable this year and thus favors selling out of the field. For those who want to replace ownership, they can do that with futures or call options.

What about 2011? Corn will compete strongly for 2011 acres. However, wheat price are also going to encourage more acres. This means higher wheat and corn acres in 2011 will come at the expense of soybeans and other crops. That bidding war should extend until planters roll next spring.



Crop Production Costs UP for 2011

Bruce Erickson, Alan Miller and Craig Dobbins

Crop costs will be up in 2011. Production costs rose rapidly in 2007, 2008 and 2009, before dropping in 2010. Fertilizer prices have been a large part of recent input price swings and some products are now heading back up. Prices for seeds and fuels are predicted to be up a bit, and pesticide costs will be a mixed bag depending on product. Preliminary 2011 budgets show variable costs for soybeans increasing 2%, rotation corn up 5%, and wheat costs up by 8% compared to our January 2010 budgets.

Fertilizers: Fertilizer costs will increase. Since the fall of 2008, fertilizer prices have dramatically declined, but nitrogen and phosphorus fertilizers in general were quicker to come down than potassium. Just prior to the global financial crisis of 2008, retail price reports of potash of over \$900 per ton, anhydrous ammonia of over \$1000 per ton, and diammonium phosphate (DAP) of over \$1100 per ton were reported. September 2010 prices show anhydrous ammonia for fall application selling for \$535-\$675/ton, DAP at \$485-\$580, and potassium at \$420-\$550 (see http://www.ams.usda.gov/mnreports/gx_gr210.txt).



Our budget projections for 2011 put corn fertilizer costs per acre in the \$105-\$135 range depending on previous crop, soils, and other factors (includes N as well as P, K, and lime replacement).

Fertilizer prices don't always seem to follow U.S. supplies/demand or the agricultural economy. U.S. supply and demand is strongly tied to the worldwide production and utilization: more than 57 percent of nitrogen and 86 percent of potash used in the U.S. is imported (2008 data), and the U.S. is a major phosphorus exporter. The costs to produce and transport fertilizers are highly dependent on energy costs, so fertilizer costs are directly related to energy costs.

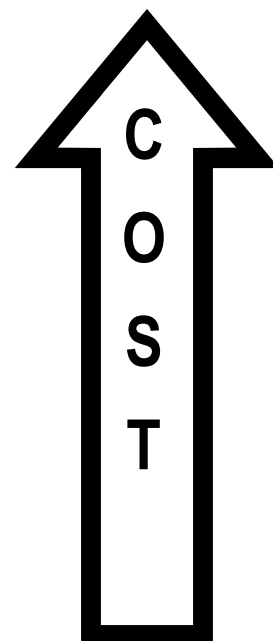
Also, many fertilizers are heavy, bulky materials and often require specialized equipment for transport, storage, and application, so there are often logistical constraints along the supply chain. In addition, some nutrients and products are produced, distributed, or sold by a limited number of companies, influencing supplies and costs in certain markets.

Seed/Genetics Technology fees charged to seed companies from bioscience providers account for a large share of seed prices. The percentage of genetically modified corn acres in Indiana is catching up to soybeans. According to USDA, 95 percent of 2010 Indiana soybean acres were herbicide tolerant. 76% of the corn in Indiana in 2010 was herbicide tolerant, compared to 15% in 2005. 63% of Indiana corn acres this year are insect resistant. Per-acre seed prices after quantity, early-pay, and other incentives are expected to be slightly higher for 2011.

Crop Protection Prices for herbicides, insecticides, and fungicide products have been relatively flat in recent years. Prices for glyphosate-based herbicides were up substantially overall in 2009, but then retreated back in 2010. It will be a mixed bag for other pesticides depending on each particular market, but the overall trend appears relatively flat.

Energy The Energy Information Administration predicts fuel prices will increase in coming months as demand gradually increases with worldwide economic recovery. Crude oil prices for 2011 are expected to rise by about 6% over 2010. In addition, they expect retail diesel to be up 6%, while retail gasoline may be up about 7%.

Machinery Farmer's expenses for machinery have been increasing in recent years. Sales numbers of smaller tractors across the industry have been down since 2004 due to housing and construction woes, but until recently larger horsepower tractor and combine sales had remained strong. 2009 and 2010 sales of the large tractors and combines have been lower than previous years.



Crop Economics Turn Positive

Alan Miller, Bruce Erickson and Craig Dobbins

Returns for crop production in 2011 should be strong due to high crop prices although costs of production will rise as well. Total costs for 2011 are expected to be near \$4.00 a bushel for corn; \$9.50 for soybeans; and \$6.00 for wheat. These estimated costs include all the variable costs to produce the crop as well as machinery depreciation, cash rent, and family living expenses. If prices are above these levels, producers may be earning an "economic profit" which means a return that is above a "normal return" to all the factors of production.



those farms that can effectively plant wheat and then double-crop to soybeans in 2011. Note that wheat and double-crop soybeans provides the highest expected returns. On low quality land that is \$70 an acre more than the next best alternative. For average and high quality land, that is \$101 per acre better than single-crop corn. These extraordinary returns mean producers in the southern-half of Indiana have strong incentives to consider wheat and double-crop beans. Some in the northern-half will also want to consider the wheat and bean combination.

A 2011 budget is shown below based on closing harvest futures prices for 2011 crops on September 9, 2010. Using a typical central Indiana basis, cash prices for corn, soybeans, and wheat were all above our Purdue total costs of production mentioned above. For example, with the 2011 December corn futures closing at \$4.57 and a 35 cent under harvest basis, the expected cash harvest price was \$4.22 per bushel.

Keep looking at seeding wheat this fall. Returns for single-crop wheat on low quality land may sharply exceed corn or soybeans in 2011. On average quality land, wheat may be competitive with soybeans. High quality land will generally stay in corn or soybeans, unless located where it can be effectively double-cropped, then wheat and double-crop beans dominate.

What crops should be planted for 2011? The lower portion of the table provides some clues. For average quality Indiana land rated at 161 bushels of yield, the returns per acre above variable costs are: \$319/acre for rotation corn; \$297/acre for rotation soybeans; and \$298 for single-crop wheat. This means that rotation corn provides the highest expected returns (with these costs and yields) and that single crop wheat or soybeans are roughly tied for second best.

These numbers indicate that the market is already "bidding for acres" for the 2011 crops. A year ago, the world did not need wheat acres, but this year it is begging producers to "look at wheat." The market is also asking for more corn acres. As a result of more wheat and corn acres in 2011, there will be less soybean acres, and therefore soybean prices are favorable as well.

Plant wheat and double-crop beans if your growing season is long-enough. The final column in the table shows expected returns for

You need to run your own budgets. Crop prices can vary sharply over time and each producer has their own costs structure and relative yield potential for corn, soybeans, and wheat varies by farm.

2011 Estimated Crop Budget:							
Indiana: September 9, 2010							
Prices	Corn		Soybeans	Wheat			
Harvest Futures	\$4.57		\$10.28	\$7.39			
Expected Basis	-0.35		-0.40	-0.80			
Expected Cash Price	\$4.22		\$9.88	\$6.59			
Estimated Yield/Acre and Returns/Acre Above Variable Costs							
Land Quality	Corn	\$4.22	Soybeans	\$9.88	Wheat	\$6.59	Wheat/DC Bns
	<i>bu./acre</i>	<i>\$/acre</i>	<i>bu./acre</i>	<i>\$/acre</i>	<i>bu./acre</i>	<i>\$/acre</i>	<i>\$/acre</i>
Low	129.0	\$219	39.0	\$209	62.0	\$257	\$327
Average	161.0	\$319	49.0	\$297	70.0	\$298	\$420
High	193.0	\$440	59.0	\$386	84.0	\$367	\$541

Budget: Purdue Id-166 (August 2010)

Soybean Prices to Moderate with Adequate Supplies***Chris Hurt***

In stark contrast to corn, soybean supplies will be acceptably high this year both in the U.S. and worldwide. USDA increased yields in their September report to a record 44.7 bushels per acre breaking last year's record of 44 bushels. Production will also be a record at 3.48 billion bushels, a 4% increase over last year's record.

U.S. ending stocks as a percent of use will be 11% which restores inventories compared to less than 5% for both the 2008 and 2009 crops. For the world inventories, stocks to use will be 25% compared with only 20% in 2008/09. In general, there will be no anticipated shortage of soybeans if South American crops achieve normal yields this winter. In fact, recent stronger bean prices have given some added incentives to increase acreage in South America.

USDA expects the average U.S. farmer to receive \$9.90 a bushel. That compares with \$9.60 a bushel from the 2009 crop. This would mean Indiana cash prices at harvest would be \$9.75 to \$10.00 a bushel and then move upward to \$10.50 to \$10.75 into the spring. Much will still depend on final U.S. yields, on the size of

the Southern hemisphere crops, and on the Chinese appetite for soybeans.

The carry in the bean market is not strong but may increase some in coming weeks (carry is the price premiums for later delivery compared to nearby delivery prices). But, the carry is strong enough to provide about a 20 cent per bushel return to on-farm storage above interest costs for storage into December. This means producers should look at short-term storage this year and consider getting beans priced by Thanksgiving or early December. Storage beyond that period runs the risk of a large South American bean crop. As always, if their crop should experience growing season weather difficulty, bean price can move upward into the winter and early spring.

Bean acreage will likely be down in the U.S. next spring and this will help support 2011 bean prices, but at somewhat lower levels than 2010 prices. The exception to declining bean acres will be double-crop beans for 2011 as a large increase in wheat seeding this fall and then double cropping to soybeans is expected next year.

Wheat Makes Big Comeback***Chris Hurt***

This year, wheat is back in the thoughts of Eastern Corn Belt farmers after the lowest acreage on record last fall. The abrupt turnaround in the wheat outlook has been driven by a 6% reduction in world wheat production this year. The highly reported drought in Russia, the Ukraine, and Kazakhstan resulted in a 26% drop of production in former Soviet Union countries. In addition, Canada's wheat crop dropped by 15% as well due to the inability to get spring wheat seeded due to excessive moisture.

The world's supply problems are confounded by the fact that the former Soviet Union and Canada are both major wheat exporters. World wheat ending stocks as a percent of use will be drawn down to 27%, the tightest since the 2007/08 marketing year when world ending stocks to use was only 20%. World stocks this year should not result in widespread shortages as was seen in 2008, unless weather in the Southern Hemisphere should also turn adverse and limit crops in countries like Argentina and Australia in coming months.

Most importantly, the U.S. has large inventories of wheat and is ready to supply the Russian and Canadian shortfalls, at higher prices. Fortunately, U.S. wheat production was up 2% this year as

a result of record yields of 46.9 bushels per acre, although planted acreage was down almost 5 million acres.

The U.S. is the largest wheat exporter in the world and has huge amounts of wheat in store. U.S. exports are expected to rise from 880 million bushels from the 2009 crop to 1.25 billion from the 2010 crop. Even with this large increase in world purchases, the U.S. ending stocks to use will be abundant at 37% compared with 13% in 2007/08 when our wheat cupboard was nearly depleted.

USDA estimates the average farm price for the 2010 crop will be \$5.30 a bushel. Recent new-crop wheat bids in Indiana have been much higher ranging from \$6.00 to \$7.00 a bushel. Higher wheat prices are expected to encourage farmers to quickly respond with many more acres around the world. In Indiana as an example, wheat acreage could be up 50% to 75% from the record low levels harvested in 2010. Across the U.S. wheat acreage could increase 3 to 5 million acres or around 7%. If yields are near normal, the world should have erased shortage concerns by late next spring as the 2011 crop ripens.

Wheat looks to be a very profitable crop for 2011. Please read the section on crop economics in this report that shows just how profitable wheat production can be in Indiana compared to corn and



soybeans. This is especially true for the land that is located where wheat can then be double cropped to soybeans. Our 2011 Purdue budgets show that wheat plus double-crop bean returns are \$70 to \$100 per acre higher than single crop corn or soybeans.

Wheat basis volatility has been an on-going issue for several years. Uncertainty about wheat basis has lead buyer s to widen

their basis bids. Those who are planting wheat may want to consider forward pricing in the cash market a portion of anticipated production. If priced in the cash market, basis is established and thus is no longer an issue on those bushels. In addition, if world acreage does rise as expected, wheat prices could be much lower by the 2011 harvest.

Land Values and Rents Continue Upward

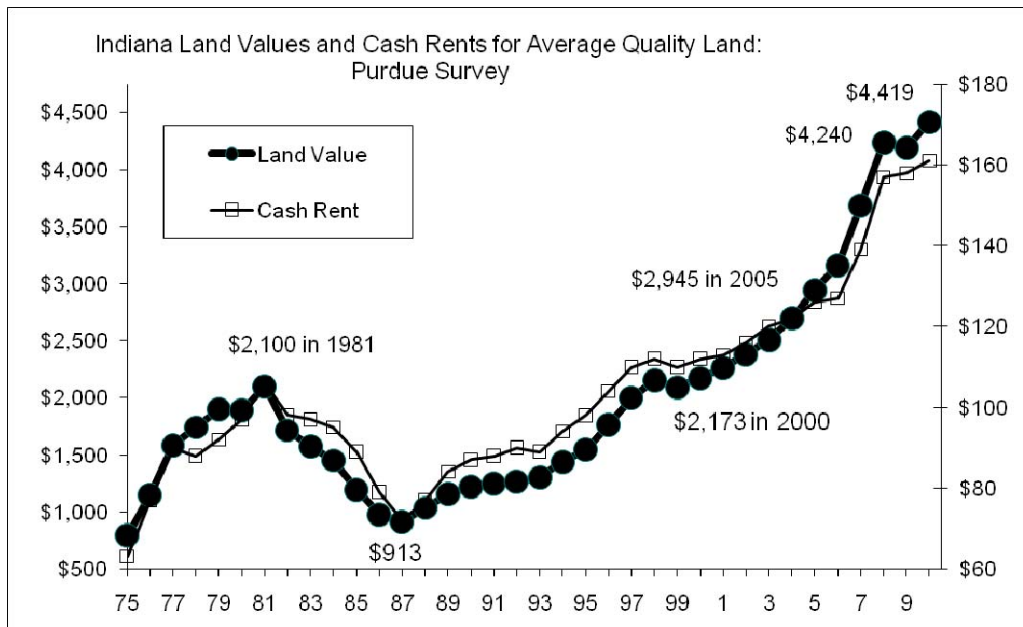
Craig Dobbins

After a slight downturn last year, Indiana land values quickly rebounded in 2010. Average quality land was up about 5.5% from June 2009 to June 2010. Top quality land rose slightly faster and lower quality slightly slower. Top quality land rose to an average of \$5,310 per acre, average to \$4,419 per acre, and lower quality land to \$3,501.

as cd's, stocks, and bonds. Commercial and residential real estate continues to also be viewed with suspicion as an investment alternative.

Expect land values to rise by 3% to 6% by mid-year 2011. Cash rents may move up nearly that much based on stronger crop prices and expected returns for 2011 crops.

Farm land values have been "on a roll" since the mid-1980's. The value of average quality land increased by 50% since 2005, and has doubled since 2000. The previous doubling of Indiana farm land values took 12 years from 1988 to 2000. The chart helps show some of these historic patterns.



What are the risk? Eventually, interest rates will rise and returns for alternative investment opportunities will become more positive. In 2010, the returns for ownership of farm land were down to about 3% per year compared to about 5% in 2000 and 6% in 1990. This means that farm land values have been bid higher relative to

Cash rents were up \$3 to \$4 an acre in 2010 or about 2%. For top, average, and low quality land they averaged \$202, \$161, and \$124 per acre. Often it is helpful to measure cash rent in \$ per acre of yield. For 2010 these relationships for top, average, and low quality land were \$1.08, \$1.04, and \$1.02 per bushel of yield potential.

the annual returns potential. Given the very limited returns in cd's and treasury bonds today, current average land values are not unrealistically high. Thus, farm land values do not seem to be exhibiting an early "bubble stage."

Land prices and rents continue to be supported by generally favorable farm income, by high crop prices, by low interest rates, by low returns for alternative investments and by a very limited supply of land being sold.

Longer term much will depend on the factors already mentioned and whether world demand for crops will continue to outpace supply. The primary drivers of that added demand are economic growth in developing countries and the rapid increase in the use of grains and oilseeds to produce biofuels. The latter, growth rates for biofuels is slowing sharply, but still positive. It is also important to keep in mind that one additional reason for the current higher crop prices is poor weather in some key world growing areas. Poor yields will not be in the mix every year.

The outlook is for land values to continue to rise into 2011. This is especially true since crop prices strengthened in the late summer. Interest rates are expected to remain low keeping land financing costs down. The slow recovering economy is also keeping a damper on the outlook for returns in alternative investments such



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