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. The use of grains for biofuels continues to expand, and lower corn yields have helped grain prices to increase.

Returns for Indiana crop producers will be strong. 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.

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 mislabeled 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 high, 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.


**Slow Economic Recovery Means High Unemployment**

Larry DeBoer

The recovery from the worst recession in decades is now more than 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 9.6%. 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 this 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. 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 around 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

In the most recent USDA trade report, U.S. agricultural exports were 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 were expected to increase to $81.5 billion next year. The agricultural trade balance was expected to improve to a favorable $31.5 billion in 2011, as exports grow faster than imports.

The most recent USDA World Agricultural Supply and Demand Estimates report projects higher farmgate and world prices, suggesting that exports and imports will be even higher than earlier expectations. It now appears likely that new export records will be established for 2011. A high level of exports generally is strongly related to high farm incomes.

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 27% or 16.7 million metric tons. Other Former Soviet Union (FSU) wheat exporters were also affected by drought. Their wheat production is expected to fall nearly 20% or 9.9 million metric tons from the 2009/10 level. Russian coarse grain production (corn) is expected to fall by more than a third, and exports by 2.6 million tons. 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 12.3 million metric tons to 26% of utilization as world exports fall 6.6 million metric tons. Given the high world wheat prices now seen, the U.S. may export even more of its surplus stocks.

With tighter supplies worldwide for coarse grains, and since low-quality Russian wheat is often used as feed rather than food, corn prices have also increased following this event, and now are well above $5.00 per bushel. U.S. corn exports are expected to increase at least $1.5 billion in 2011 in spite of tight domestic supplies and higher prices.

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 has appreciated a modest 2.3% to date. USDA expects further changes in the Chinese exchange rate to be too small to affect agricultural trade levels next year.

The dollar is expected to fall more in the coming year, and has already weakened relative to many currencies. In the spring it had been up against the Euro as a consequence of the debt problems in Greece, Spain, and elsewhere, but has depreciated strongly against the Euro recently. It also will likely remain weaker relative to the Japanese yen and Brazilian real, as well. 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 trade forecast is also based on somewhat optimistic expectations on world economic performance. That growth is being led by emerging economies, especially those in Asia, helping to account for 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.

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 recently 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. Thus, there is little budgetary pressure now to encourage more serious WTO negotiations.
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: Brazil, Budget, and Baseline.

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 recovery 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 payments 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.

**Food Price Inflation**

Shoppers have seen minor food price increases so far in 2010 but with larger increases coming later this year and into 2011. 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 move upward with the recovery in the world economy and with higher grain, oilseed, and meat prices due to reduced wheat production in Russian and Canada and to reduced corn yields in the U.S.

Grocery store prices increased 0.8% from August 2009 to August 2010, well below the 2.5% average annual increase from 1997 to 2006. Restaurant prices increased 1.2% over the past year, well below the typical 3% increase. High unemployment is also allowing restaurants to keep a lid on wages which account 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 and bakery products have fallen over the last year with pasta down 7.9% and flour down 6.7%. However, this trend will soon reverse due to the nearly 40% wheat price run up over the past few months.

Food price inflation which is currently near 1% will move higher into 2011, but should be much less than the 5.4% food inflation rate of 2008. Sharply higher corn, soybean, sorghum, and wheat prices will increase retail prices for cereals, sweeteners, and bakery products later this year and into 2011. Livestock and meat products will also be higher as a result of higher feed costs. However, unlike 2008, energy prices are not expected to move up as dramatically as that year which will help to keep retail food inflation well under the 2008 rate. Also, the slowly recovering US economy will continue to limit the ability of retailers to pass on wholesale costs to their customers. USDA expects about 1% food inflation in 2010 with a movement upward to 2% to 3% in 2011. The higher end of that range now appears likely given the recent sharp increases in grain and oilseed prices.
Large losses and 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 hundredweight in 2008, they fell off a cliff in 2009 to only $41. That collapse was a result of the worldwide recession and due to H1N1 being miss-identified as “swine flu” in April of 2009.

As a result of these large losses, pork production dropped by 4% in 2010 and hog prices rose enough to move the industry back to profitability by last spring. While those profit levels were very good last summer, much higher corn prices recently have cut profitability.

Producers had been expected to respond to the favorable spring and summer margins by beginning a modest herd expansion this fall and winter. However, high feed prices will likely keep that expansion from happening. The September inventory report from USDA indicated that producers were planning a slight expansion of farrowings this winter. That expansion probably will not occur given the sharp rise in corn prices. Pork production for 2011 is expected to be unchanged to up only 1%. Production in the first-half of 2011 will down somewhat with a slight increase in the last-half of the year.

Pork exports remain a bright spot. This year the pork industry will export 20% of its production, and is expected to reach a record 21% 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 should average around $56 and then $56 to $59 in 2011. Cost of production had been in the higher $40 for much of this year, but have currently moved back to near $55. For 2011, costs are expected to be in the mid-$50s. The focus is currently on corn costs. Given these anticipated 2011 hog prices, we estimate producers could pay up to an average of $5.50 a bushel for corn in 2011 and still cover all costs. This is much different than 2008 when their corn breakeven was only $3.50 a bushel.

Looking more closely at hog prices, they are expected to drop seasonally this fall to $54 and then be $57 in the winter. Prices should recover in the spring and average around $61 and $59 in the summer. By fall prices are expected to move lower again into the lower $50s.

This year will be a profitable one for producers with an estimated $16 per head profit. However, all the positive returns came in the second and third quarters as high corn prices have now largely eliminated potential profitability for this fall and winter. For next year there should be some profits in the second and third quarters but the first and fourth quarter will be near breakeven. Estimated profit for 2011 is a small $5 per head.

The potential for extreme corn prices have the industry on edge. The most important industry strategy now is to keep the industry the same size. If the breeding herd stays the same size, then producers should be able to make it through the next 12 months without major losses. Unfortunately, the tight corn supply situation cannot be substantially improved until the U.S. harvest next year. That means any expansion plans must stay on-hold for another year.
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 2009 recession resulted in reductions of about 9% in 2009 production followed by another 2% in 2010. As a result of lower production and recovering consumer demand, turkey prices will average about 90 cents per pound this year compared to only 77 cents last year. For 2011, expect production to be unchanged with prices around 92 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 $1.01 per dozen as production increases fractionally. For next year, USDA expects prices to average in a range from $.95 to $1.03 per dozen.

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 78 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 5%.

For 2011, chicken production is expected to increase by 1% to 2% again. However, continued economic recovery and a 3% increase in exports should enable chicken prices to increase to average near 89 cents per pound. High feed prices may ultimately cause 2011 production to be closer to unchanged with somewhat higher chicken prices.

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 $1.10 to $1.25 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 cents lower. Ultimate feed prices will be important to the final determination of calf prices this fall.

High corn prices will reduce the number of cattle placed in feedlots and cause calves to enter at higher weights. Unfortunately, it also means that cow-calf producers will not be rewarded with as high of calf prices as would normally be suggested by $1 a pound finished cattle.

The best news for cattle producers is that reduced beef production will keep cattle prices strong for years to come. Given uncertainty over feed prices for the next 10-12 months, heifer retention may not begin until 2012, this means it will be 2014 before beef production can start to increase, and thus an extend period of potentially favorable returns will exist, at least for cow-calf producers. Cattle feeders have the unfortunate uncertainty of volatile feed prices which can quickly impact margins and demands risk management strategies.

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 over the past three years. This resulted in large feedlot losses dating back to 2007. A return to feedlot profits finally came in April of this year. Last summer’s optimism for $3.50 corn resulted in heavy feedlot placements, but that hope has now faded with the latest escalation of feed prices. Returns for cow-calf producers have not yet covered total costs that may be about $1.20 per pound for 500-600 pound calves and thus cow slaughter remains high.

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 smaller 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%.

Finished cattle prices averaged about $94 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 $95 and could reach $100 or slightly higher next year.
Slowly, the dairy 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 $14.07 per hundred weight for the first 9 months of 2010. This summer’s milk prices represent a return to levels that should cover costs of production for most dairy farms. However, it will take higher prices over an extended period of time for dairy producers to begin to replace equity that was lost in 2009 and early 2010 and volatile feed prices continue to have dairies concerned about changing costs of production. Grain supplies and feed prices have become an added concern for dairy farmers looking toward 2011.

While there is tremendous variation in costs of production from farm to farm, and a very small percentage of dairy farms may have remained profitable throughout 2009; typical dairy farms lost in the range of $350 to $1000 per cow in equity. This 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, exceeding returns from milk sales, but also from diminished value of cows and heifers as dairy replacements. 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.

Butter has been a bright spot for milk prices. US butter inventories in early summer were at a 5 year low as demand drove butter prices higher—much higher. At the time of this writing, butter was at $2.19 per pound, up $0.87 since February 2010 and $0.95 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 on October 7th, 2010, Class III futures prices are expected to average $16.70, $16.23, and $15.27 for October, November, and December 2010, respectively. In Indiana, these Class III prices would translate to mailbox prices of $17-17.50 for the remainder of 2010. With corn and soybean prices expected to strengthen in early 2011, present forecasts call for triggering of Milk Income Loss Contract program payments beginning in February, 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 and humidity are giving way to more moderate temperatures that will encourage milk production. 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, especially as feed prices threaten to squeeze milk income over feed costs.

At each downturn in milk prices 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 manufacturing costs that are passed back to producers, government support programs, and inclusion of supply management or production quotas. Dairy will be important during the debate in the next farm bill. Look for opportunities to learn more on the proposals.
Corn Demand Outpaces Supply  

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 6.7% of use by the end of the 2010/11 marketing year. That compares with about 13% stocks-to-use in 2007/08, the record high price year, and only 5% in 1995/96.

USDA shocked markets by dropping national yields to only 155.8 bushels per acre in their October update, compared with the record 164.7 last year. This was nearly four bushel below trend yields. Total production was set at 446 million bushels below last year’s record. At this small production level, usage will have to be cut back by about 400 million bushels from their current estimate of 13.5 billion bushels.

Corn prices have to increase to levels that will convince some end users to make that 400 million bushel cutback. Right now, most end users can strongly compete for the limited bushels. The ethanol industry will need about 4.6 billion bushels of corn to meet the Renewable Fuels Standard (RFS) to produce 12.6 billion gallons of ethanol in 2011. In addition, our export customers are generally in a strong position to compete for corn as well. The most recent experience with short world supplies was in 2007/08 when fear of shortages and a weak U.S. dollar resulted in record corn exports of over 2.4 billion bushels. While USDA is budgeting only 2 billion bushels of exports, for this crop, that number could be much higher as the dollar is now approaching the low levels of 2008. China also began buying U.S. corn last spring and is expected to continue buying 2010 crop, and the ultimate level of their purchases could be higher than currently anticipated.

Thus, it will primarily be the animal sector which will be forced to cut back on feed use. The beef, hog, and poultry sectors are in much better position to pay high corn prices than they were in 2008. They can likely pay $5.00 to $5.50 per bushel and still break even. If these last comments are valid, then it will require cash prices moving above $5.50 a bushel for a period of time to force the usage cutbacks that are now perceived as needed.

It remains possible that the ethanol industry could be called upon to cut back as well. The 12.6 billion RFS for 2011 is established by Congress and is the law. However, the EPA as administrator of the law can use the “emergency clause” to reduce that requirement. It is likely the animals industries will request such a consideration. It is assumed that EPA would work with the USDA to determine if corn supplies are short enough to grant a reduction in the 2011 RFS level. Keeping the 2011 RFS at the 2010 level of 12.0 billion gallons, as an example, would reduce corn usage for ethanol by about 220 million bushels. Thus the ethanol industry would share with the animals industries in the reduction of corn usage. Any serious consideration of the RFS being lowered would cast a bearish shadow on corn prices until the EPA made the decision.

The average corn price received by U.S. farmers is expected to average in a range from $4.60 to $5.40 a bushel according to USDA, or $5.00 at the mid-point. These are sharply higher than the record average U.S. farm price received of $4.20 a bushel for the 2007 crop. With December corn futures at $5.70, the market is suggesting the U.S. price received will be closer to $5.35 a bushel. This is the high end of the USDA price range, and may merit some additional sales. Can prices move higher? The answer is clearly YES, especially if yields drop more in forthcoming USDA updates; if our export customers are nervous about supplies and buy more aggressively; or if China purchases more corn than anticipated.

It is also important to recognize that corn prices tend to make their highs in “rationing” years when there is the most concern about the cause for the shortage. When it is a short-yield year, prices tend to peak around the time the discoveries of those short-yields are being made. That would suggest pricing now, but some years have both reduced production and strong demand and that is a better description of this year which keeps open the possibility of $6 cash corn and small but measurable odds of $7 cash prices. The futures and options market in mid-October are suggesting there is about a 45% chance of seeing $6 cash corn by next summer, and about a 28% chance of seeing $7.00 cash corn.

What about 2011? Right now corn is the go to crop for 2011 acres. However, wheat and cotton prices are also demanding more acres. This means higher wheat, cotton, and corn acres in 2011 will come at the expense of soybeans and other oilseed crops. The acreage bidding war should extend through the winter and until planters roll next spring.
Crop Production Costs UP for 2011

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 5%, rotation corn up 10%, and wheat costs up by 12% compared to our January 2010 budgets.

Fertilizers: Fertilizer costs are increasing again after bottoming out last fall and winter as shown in the table below. But prices remain much lower than just prior to the global financial crisis of 2008 when 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. Potash prices have been more stable than ammonia and DAP—slower to come down in late 2008 and through 2009, but now not increasing like N and P. Mid-October 2010 retail prices show anhydrous ammonia for fall application selling for $625-750/ton, DAP at $560-689, and potassium at $470-560 (see http://www.ams.usda.gov/mnreports/gx_gr210.txt). Our budget projections for 2011 put corn fertilizer costs per acre in the $119-$149 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 while 76% of the corn was herbicide tolerant, compared to just 15% in 2005. A total of 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 both retail diesel and gasoline to be up about 6%.

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. Sales of the large tractors and combines were lower in 2009 and 2010.
Returns for crop production in 2011 should be very strong due to high crop prices although costs of production will rise as well. Total costs for 2011 are expected to be near $4.15 a bushel for corn; $9.90 for soybeans; and $6.15 for wheat. These estimated costs include all the variable costs to produce the crop as well as machinery depreciation, cash rents based on cash rental rates in 2010, 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.

A 2011 budget is shown below roughly based on closing harvest futures prices for 2011 crop harvest prices on October 21, 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 near $5.22 and a 35 cent under harvest basis, the expected cash harvest price was $4.87 per bushel.

What crops should be planted for 2011? The lower portion of the table provides some clues. These represent the estimated returns per acre above the variable costs of producing the crop. For average quality Indiana land rated at 161 bushels of yield, the returns per acre above variable costs were: $409/acre for rotation corn; $356/acre for rotation soybeans; and $291 for single-crop wheat. This means that with these prices, corn provides more than $50 per acre higher returns than soybeans and that soybeans are expected to return over $60 more than single-crop wheat.

If your growing season is long enough, consider planting wheat this fall and then double cropping to soybeans in 2011. The final column in the table shows expected returns for those farms that can effectively plant wheat and then double-crop to soybeans in 2011. Note that wheat and double-crop soybeans provide the highest expected returns above variable costs of any alternative (and this is before any added returns from straw). On low quality land that premium is $56 an acre more than the next best alternative. For average quality land, it is $38 per acre better than single-crop corn and $23 higher on high quality land. This extraordinary return potential means producers in the southern-half of Indiana have strong incentives to consider wheat and double-crop beans.

For those who cannot effectively double-crop, corn is king once again in 2011 where it has the highest expected return compared to soybeans or single-crop wheat on all three land qualities. Which crop comes in second—its wheat on low quality land and soybeans on average and high quality land?

These numbers indicate that the market is already “bidding for acres” for 2011 crops. A year ago, the world needed less wheat acres, but this year it is begging producers to “look at wheat.” The market is also asking for more corn acres.

Wheat seeding should rise perhaps by 2.6 million acres nationally and corn by 3 million. This means that soybean acres will drop by around 2.5 million acres. We expect to see the number of double-crop soybean acres increase by 4.5 million acres. This will be the primary way more acres are planted next year since a double-crop acre counts as both wheat and soybeans. In addition, there may be about 2 million acres of very marginal yield land that will be planted due to high prices in 2011 that was not planted in 2010. This means that total planted acres in 2011 could be up about 6.5 million acres across the country. You will need to run your own budgets. Crop prices are shifting sharply from day-to-day, producers have their own cost structure, and the relative yields for corn, soybeans, and wheat vary by farm.

The planting decision on wheat has been made, however some flexibility is suggested on the corn or soybean decision as final yields in the U.S. and South American yields this winter could alter which crop is most needed next spring.
Soybean Prices: Is the Top in Sight?  
Chris Hurt

Soybean supplies are expected to expand somewhat for this year’s crop, but aggressive purchases by China and uncertainty about final yields in the U.S., and still to be determined South America production have markets on edge. The edginess is creating unexpected pricing opportunities for soybeans not only for this fall’s crop, but for 2011 and 2012 as well.

The shift to a much more bullish soybean situation arrived with the October USDA updates. U.S. yields were reduced to 44.4 bushels per acre and production to 3.4 billion bushels, both still record highs. The reports reduced production by 75 million bushels. In addition, China continues to be a heavy buyer of soybeans in the early weeks of this marketing year, and the continued weakening of the U.S. dollar is encouraging more buyers of soybeans to be concerned with potential inflation generated by the U.S. Federal Reserve easing of monetary policy.

U.S. ending stocks as a percent of use are now projected to be 8% which is an increase from 5% over the past two years representing the 2008 and 2009 crops. For world inventories, stocks-to-use will be 24% compared with only 20% in 2008/09. These numbers would suggest that inventories will be adequate, but there is little room for any surprises that would result in smaller production or greater usage. The highest likelihood of a surprise would seem to be further reductions in U.S. yields this fall, greater Chinese purchases this fall, and then potential growing season weather problems in South America.

USDA expects the average U.S. farm price to be in a range from $10.00 to $11.50 a bushel with a mid-point at $10.75. That compares with $9.59 a bushel from the 2009 crop. In mid-October, futures markets are pricing beans near the top end of that USDA range. This clearly indicates that the markets are more bullish than USDA.

USDA expects exports will rise only 1% this year to 1.52 billion bushels. However in the first six weeks of the marketing year, export commitments are up 10%. While it is very early in the marketing year, if that 10% rate were to continue, exports for the year would be over 100 million bushels more than USDA’s number and reduce ending stocks to very tight levels. This coupled with anticipation of reduced U.S. acres in 2011 keeps a bullish tilt to prices.

China’s appetite for soybeans is the driving force for exports. USDA expects them to increase purchases by 9% compared to last year. So far this marketing year their purchases are running 9% more, exactly at the USDA’s projected level of increases.

The carry in the bean market is providing an incentive to store beans on-farm and price them for delivery in the December to February time period. This may return about 20 to 25 cents above interest costs. 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 will move upward into the winter and early spring.

How high will bean prices go? We can only give some possibilities, but futures prices at $13 now seem a reasonable possibility given current information. Futures and options markets, at this writing, with March 2011 futures at $12.12 a bushel have an odds of 36% that March 2011 futures will reach $13, and a 22% odds of reaching $14, by expiration of that options contract.

Clearly, returns from pricing beans now are enormous for most producers. While the price trend seems to be upward, market price direction can shift quickly. Having some portion of the soybeans priced now and taking these wonderful margins seems more than reasonable. With such large price volatility, a diversified strategy of multiple pricing points works best for many producers.

Total 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.

Right now, 2011 corn prices are leading the acreage parade. Purdue budgets for 2011 indicate that soybean prices would have to be at $12 a bushel at harvest to compete with corn. Much will influence that however, like the Chinese purchases, the size of the South American crop, the rate of world economic growth, and the value of the dollar. Hold on to your hats!

Wheat Makes Big Comeback
Chris Hurt

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% due to the inability to get spring wheat seeded due to excessive moisture.

Most importantly, the U.S. has large inventories of wheat and is ready and able 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 46.7 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 ample 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 35% compared with 13% in 2007/08.
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 about $40 to $70 per acre higher than single crop corn or soybeans.

**Land Values and Rents Continue Upward**

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.

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.

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.

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.

The outlook is for land values to continue to rise into 2011. This is especially true since crop prices strengthened in the late summer and fall. 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 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 5% to 10% by mid-year 2011. Cash rents may move up nearly that much based on stronger crop prices and expected returns for 2011 crops.
Use of This Information: This information is based upon current evaluations by USDA and Purdue analyst. While it utilizes the latest known information, future outcomes can be much different due to shortcomings in analytic methods, to inaccurate anticipation of future events, and to unforeseeable new events. Ultimate outcomes are often different than provided in the outlook. Thus, this information should be used in conjunction with other outlook sources and decision makers should always evaluate how a range of potential outcomes would impact their firm or organization.

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