

Agricultural Outlook

Purdue Cooperative Extension Service

September 2004

2005 and Beyond!

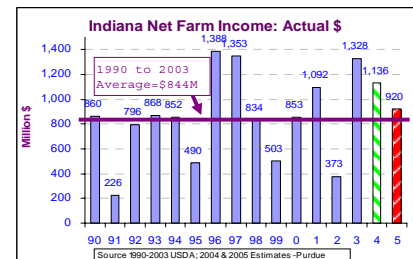
The Year Ahead

Indiana's farm economy has experienced two excellent years in 2003 and 2004. Farm income in 2003 reached \$1.3 billion, near the record years of 1995 and 1996 according to USDA. Purdue estimates for 2004 are positive as well with estimated income near \$1.1 billion. The surge was particularly welcomed after a mere \$373 million of state farm income in 2002, as low corn and soybean yields and depressed animal product prices provided the lowest annual income in more than a decade. For perspective, Indiana net farm income has averaged about \$850 million per year since 1990, but is highly variable.

For 2004, income will be supported by record corn yields, above average bean yields, and by favorable animal product prices for hogs, beef cattle, milk, broilers, and eggs. Net returns per acre are expected to be down about \$15 per acre for 2004 crops compared to the very good returns from 2003 crops. The primary reason is related to higher costs of production due to higher input costs and to higher land rents.

For 2005, net income is expected to decline once more to the range of \$900 million to \$1.0 billion. The declines are anticipated as a result of a return to normal yields for 2005 crops, and even higher costs for inputs. Animal industries are expected to see

increasing incomes in 2005 as a result of continued strong beef, pork, broiler, and egg prices and lower feed costs. Milk returns however, will be narrowed in the coming year and turkey production may be near breakeven. Even with these decreases, 2005 farm income is still expected to be above the longer-run average.



Can Economic Growth Be Sustained?

Dr. Larry DeBoer

In a word, yes. Gross Domestic Product grew 4.8% above inflation over the past year, the best performance since the 1990's. But concerns were raised when growth dropped to 2.8% in the second quarter 2004.

The drop in growth in the second quarter was due entirely to slower consumer spending growth. Spending on durable and non-durable goods actually declined, after adjustment for inflation. The other components of GDP continued to grow as in the past year. Investment boomed, especially in housing and business equipment. Exports increased rapidly. Imports increased as well, while government purchases rose slowly.

Rising oil prices may be the reason for the slowdown in consumer spending. High gasoline prices drain spending from other goods and services. Oil prices are likely to remain high. Producers are pumping flat out, and demand in the U.S. and China continues to grow. Whether they rise more depends on political factors in Russia, Venezuela, Nigeria, and Iraq. We can only guess how

politics will play out, but the guess here is that oil prices will not rise much more than they have already.

So there is reason to think that consumer spending will emerge from this lull. Consumer expectations are relatively optimistic. Orders for consumer goods are at a high level. If energy prices stop rising, consumers should start spending again. Coupled with continued growth in investment and exports, GDP should rise 3.7% to 4.0% above inflation over the next year.

Inflation was up in 2003-04, at somewhat over 3.0%, again mostly because of rising energy prices. If energy prices stop rising, inflation should return to the 2.0% to 2.25% rate in 2004-05. The unemployment rate was 5.5% in July. Real GDP growth over 3.5% tends to bring down the unemployment rate. Expect the unemployment rate to be around 5.2% to 5.3% in July 2005. Growth in employment is less certain, since added productivity will allow firms to meet growing consumer demand without hiring many new workers.

The Fed virtually has committed to raising interest rates during the next year.

Two quarter point rate hikes so far in 2004 have put the federal funds rate at 1.5%. A series of quarter point hikes will likely bring it to near 3.0% by July 2005. In August, the 3-month Treasury interest rate was 1.5% and may rise to about 3% over the next year. The 10-year Treasury rate was 4.3% in August and is expected to rise to 5.3%, by this time next year.



Forecast for 2005

	Last 12 Months	Next 12 Months
GDP (Real)	+4.7%	+3.7% to 4.0%
CPI	+3.0% (July 03-July 04)	2.0% to 2.25%
Unemployment	5.4% (August 04)	5.2%-5.3% (July 05)
3 Month Treasury	1.5% (August 04)	2.0% Dec 04 3.0% July 05
10 Year Treasury	4.3% (August 04)	4.8% Dec 04 5.3% July 05

Government Programs Have Some Change

Dr. Allan Gray

The corn target price for the 2004 to 2007 crops increased 3 cents per bushel to \$2.63, and the county loan rates dropped 3 cents per bushel as well. This increases the minimum price guarantee by perhaps \$3 to \$4 per acre of corn base on average. It also slightly increases the odds of getting Counter Cyclical Payments and slightly reduces the odds of getting Loan Deficiency Payments. Wheat target prices increase by 6 cents per bushel to \$3.92 and the loan drops by 5 cents per bushel. This increases the minimum price guarantee by about \$3.00 per acre on average. There are no changes on soybeans for the 2004 to 2007 crops.

The 2002 Farm Bill created three possible support payments for corn, soybeans, wheat and a host of other crops. The first are direct payment which all producers in the program receive. These payments continue for the 2004 through the 2007 crops at the same levels as last year: 28 cents per bushel for corn, 44 cents for soybeans, and 52 cents for wheat. The second potential payments are Loan Deficiency Payments (LDP's). LDP's have been around since the 1996 Farm Bill and qualifying grain becomes eligible to receive them if Posted County Prices (PCP's) fall below the county loan level. LDP's for corn are possible this fall, but are not likely for soybeans.

Producers should review provisions for receiving LDP's, or they should contact their County FSA office for details and forms. Two provisions of LDP use are helpful to keep in mind. First, today's LDP is based on yesterday's PCP. This means on a day when LDP's are working and market prices move sharply upward, you get the higher LDP from yesterday's PCP and can sell the grain at today's higher market price. The second provision is known as the 60-day LDP lock for grain. This allows producers to lock in the LDP on the day they select, and then have that LDP level set for the next 60 days. This provides the opportunity to set the LDP when one feels it is high, and then speculate that market prices will rise over the next 60 days. Even if cash prices do rise, the LDP will remain at the locked-in rate until the 60-day expiration is reached. If prices should

fall further after the 60 day lock period, that grain becomes eligible for whatever the daily LDP rate is. When LDP's are working, this provides nearly free speculation with little downside risk. Check with FSA prior to harvest for exact details as the grain must be placed under loan to utilize the 60-day LDP lock-in.

The third type of payments are Counter Cyclical Payments (CCP's). The outlook for 2004 crop prices, particularly corn, suggests that producers may be receiving counter-cyclical payments. Counter-cyclical payments are made if the U.S. average price received by farmers falls below the CCP Pivot as shown in the table below. The CCP Pivot is the target price minus the direct payment. For corn this is $\$2.63 - \$0.28 = \$2.35$ per bushel.

If the average price received by U.S. farmers is below the CCP Pivot, then Counter Cyclical Payments will be

Government Provisions:			
2004 to 2007 Crops (\$/bu.)			
	Corn	Soybeans	Wheat
Target	\$2.63	\$5.80	\$3.92
Direct Payment	\$0.28	\$0.44	\$0.52
CCP Pivot	\$2.35	\$5.36	\$3.40
Maximum CCP	\$0.40	\$0.36	\$0.65
National Loan	\$1.95	\$5.00	\$2.75

made. USDA's September forecast for the 04/05 marketing-year average price of corn is \$2.20. If this average price holds true, producers could expect a \$0.10 per bushel counter-cyclical payment spread over this next year.

The first advance payment would come in October for 35% of the expected amount of the counter-cyclical payment. Another 35% advance would be made in February of 2005 and the remainder (final) would be paid in October of 2005. Of course, USDA's price forecasts could change either up or down which would decrease or increase the amount of the expected CCP. The maximum CCP is the difference between the CCP Pivot and the loan. For corn this is $\$2.35 - \$1.95 = \$0.40$ per bushel.

For soybeans, current price projections show no anticipated counter-cyclical payments while current wheat price projections result in \$.15 per bushel of anticipated counter-

cyclical payment.

An important point to keep in mind is that if corn prices should continue to fall, the CCP's and loan deficiency payments act as a price floor which protects producers from further losses if used properly.

Finally, what about policy changes in Washington this year? With the presidential election looming, there is little expectation that any legislation of significance will be passed this fall. However, once the election is over there may well be changes. The current federal budget projections are for deficits of about 4% of GDP over the next several years. Regardless of which party is in control after the election, some budget cutting measures will likely have to take place. Agriculture will not be immune from these cuts. What will be cut and how much is not clear yet, but it is conceivable that even payments, as those discussed above, could be affected in future years. For example, direct payments and CCP's already are multiplied by a factor of .85. It would be convenient for Congress to simply reduce this payment factor in the formula, and thereby cut each of these payments proportionally.

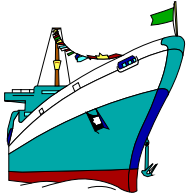
If you combine this budget pressure with World Trade Organization issues surrounding cotton programs and negotiations for a new agreement (a discussion for another article), the outlook for federal spending on agriculture is for a decline not an increase.



Ag. Imports Continue to Surge

Dr. Philip Paarlberg

U.S. agricultural exports for fiscal year 2005 are forecast to drop \$4.5 billion to \$57.5 billion dollars from the record \$62.0 billion in fiscal 2004. However, imports of agricultural goods are forecast to rise another \$2.5 billion to \$55 billion. Thus, the agricultural balance of trade is expected to continue to shrink from \$9.5 billion in fiscal 2004 to only \$2.5 billion in fiscal 2005.



The decline in export sales will be led by lower export volumes of cotton and wheat, and by lower prices for cotton, soybeans, and soybean meal. Current assumptions are that much of our beef exports will be shut off as well.

Imports continue to surge-up \$14 billion in the last three years while exports were up only \$4.2 billion. Thus, the U.S. moves closer to an agricultural trade deficit. What is the source of this import surge? Three general categories are food products that we do not produce at all in the U.S.; food products

which we cannot produce in some seasons; and food products that provide variety for U.S. consumers. Some of the key products that compose the \$14 billion import increase are: fruits (+\$.7B); vegetables (+\$.2.1B); fruit juices (+\$.6B); wine (+\$.1.1B); malt beverages (+\$.5B); coffee (+\$.7B); cocoa (+\$.1.5B); and tea-spices-natural drugs (+\$.5B).

USDA estimates that Americans are consuming an increasing share of foods from foreign sources. In the early 1980's about 9% of food volume came from foreign sources, by 2002 this was up to 13%. The percent of foreign consumed food in 2002 by category was: red meats (10%); dairy products (4%); fruits, juices, nuts (31%); vegetables (10%); grains (5%); and sweeteners (28%).

Several issues will affect global agricultural trade over the next year. It is likely that the United States and Japan will come to an agreement that will allow the United States to again export beef to Japan.

A framework for World Trade

Organization (WTO) negotiations has been determined and talks will proceed. The recent WTO ruling against U.S. cotton programs and the appeal process could affect other U.S. farm programs for soybeans, corn, and wheat at a later time. The United States has signed regional trade agreements with several countries and this effort will move on a parallel track to multilateral trade negotiations.

China has been reducing ending stocks for major commodities in recent years. This means that production shortfalls will be offset by changes in imports and exports. Forecasts for fiscal year 2005 incorporate increased Chinese imports or reduced Chinese exports.

A major food crisis is brewing in the Sudan as well as in some other eastern African nations. The effects of these food crises depends on the ability of international food relief agencies to deliver supplies.

Food Prices Will Rise Faster than General Inflation

Drs. Corinne Alexander and Joe Uhl

Food shoppers are paying much higher prices than they were last year, even though food prices have declined between June and July. These price increases are due in large part to reduced meat and milk supplies, higher costs for imported foods as a result of a weaker dollar, rising energy costs which increase the costs of food processing and transportation, and in smaller part to the economic recovery which is increasing consumer demand for food.

Grocery store prices rose 4.6% from July 2003 to July 2004, compared to the previous year's rise of 2.2%. USDA estimates that grocery store price increases will be in the 3.5-4.5% range for the rest of 2004 and in the 3-4% range for 2005, which is twice the rate of core inflation. Restaurant prices are expected to increase more

slowly, in the 2.5-3.5% range for the rest of 2004 and 2005. While many factors determine retail food prices, the two dominant factors in the coming year will be farm commodity prices and energy costs. The current trend of moderating farm prices will be more than offset by rising food marketing costs due to higher energy prices.

Rising food prices over the last 12 months have been led by dairy and meat. The most dramatic retail price increases have been in the dairy sector with a 39% increase in the price of butter and a 28% increase in the price of milk. Retail beef prices will be at record levels in 2004 and retail pork prices may be close to a record as well.

Only a few items have fallen in price over the last 12 months, notably tomatoes, lettuce, grapes, coffee, pasta,

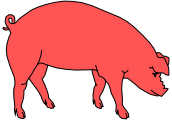
sugar and turkey. For 2004, the USDA forecast is for retail price increases of 8-9% for beef and veal, dairy products, and fats and oils. Egg prices are forecast to increase at 7-8%. Pork prices are forecast to increase more slowly at 4-5%. One explanation for these expected price increases is the continued popularity of "low carb" diets. While there is some evidence that the "low carb" diet trend is moderating, the popularity of these diets has increased consumer awareness of the carbohydrate content of foods and generated the perception that carbohydrates should be avoided.



Pork Industry Looks Positive

Dr. Chris Hurt

Producers operated at a loss for most of 2002 and 2003, this discouragement led to a reduction of the breeding herd and smaller farrowings beginning in the spring of 2004. Farrowings should remain below year-previous levels, at least through this winter and result in nearly unchanged pork production for 2005.



Pork demand has led hog prices upward since the spring. Pork exports for 2004, so far, have been up 26% with the largest increases to Mexico, Canada, and Japan. Strength in exports has been fueled by trade restrictions on beef and poultry. Exports of beef from both the U.S. and Canada have been severely restricted due to BSE, and poultry exports due to Asian influenza. Pork, with no trade restrictions, has been a substitute for both beef and poultry in world markets.

Domestic demand has been strong as well due to growth of personal incomes, and the popularity of high-protein diets (or low-carb diets). It appears that retail pork prices have not increased as much as wholesale prices. This has stimulated more pork consumption at moderate prices compared to beef. As a result, pork producers are receiving 32% of the retail dollars spent on pork this year compared to 26 % for 2003.

Hog prices (live price per hundredweight) are expected to average in the mid-\$40s this fall. Winter prices should improve to an average in the higher \$40s with spring prices moving to near \$50s. Summer prices are expected to stay strong as well in the higher \$40 to low \$50s. Some expansion should be expected which could begin price declines in the fall of 2005. For 2004, hog prices are expected to average about \$49.50 with 2005 prices

about \$2.00 lower.

Costs of production will be sharply lower with the advent of the 2004 corn and soybean harvests. Costs over the next year are expected to be about \$4 lower, near \$40 per live hundredweight. This means that producers could have positive returns that may average \$6 to \$8 per hundredweight for the next 12 months.

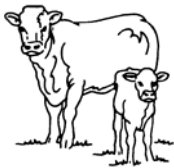
Some modest expansion in production can be anticipated for late 2005 and 2006. In addition, resolution of beef and poultry trade restrictions would likely be bearish to hog prices. Lower prices, and perhaps a return to losses, would be anticipated into 2006 and early 2007.

Cattle Prices Keep Profits Rolling

Dr. Chris Hurt

Cattle prices should establish new records in 2004. Prices at Great Plains markets for finished steers are expected to average about \$86/cwt.; 750-800 pound feeder steers about \$103/cwt.; and 500-550 pound steer calves around \$125/cwt. All would be new records.

Beef production is expected to be down 6% in 2004, and drop an additional 2% in 2005. At this point, opening the Canadian border to live animal imports does not appear to be on the immediate horizon, but an agreement with Japan over BSE testing does not appear immediate either. Without the ability to import more Canadian live cattle, U.S. supplies are limited to domestic production which is at 15 year lows on the current cattle cycle, and to the limited number of feeder cattle that can be imported from Mexico. In addition, producers have started to retain heifers for replace-



ment in domestic beef herds (up 4% in July). This means that the pool of females for slaughter will be reduced in the coming year as well.

The start of the expansion phase of the cattle cycle has been slow in coming. This is likely due to several factors including improvement in the prolonged drought that has plagued portions of the Great Plains and Rocky Mountain States for years. Also, beef demand had been dropping for years, but seems to have turned strongly positive since 1998, and is now spurred upward by high-protein diets. Finally, costs of production are high, and producers were not willing to expand with calf prices under \$100/cwt. Needless to say, producers have also been well aware of financial risks associated with potential BSE announcements as well.

Finished steer prices are expected to move into the higher \$80s this fall. Daily highs in the late winter could reach back towards the \$90s, but the first quarter average price is expected to

be in the mid-\$80s, with mid-to-higher \$80s in the second quarter. For 2005, finished steer prices are expected to average near this year's level of \$86.

Moderate feed prices and strong finished cattle price prospects will provide the setting for calf prices to be at record levels. Indiana steer calves weighing 500 to 550 pounds are expected to trade in the \$115 to \$130 range this fall.

Uncertainty remains high for cattle producers. BSE testing has been stepped-up, and trade agreements with Japan (exports) or Canada (live cattle imports) could change prices quickly. As an example, with current U.S. prices on finished cattle in the low-\$80s similar cattle in Canada are only \$52/cwt. in U.S. dollars. An unrestricted opening of the Canadian border would result in U.S. prices dropping about \$4/cwt., with Canadian prices rising about \$25/cwt.

Poultry Outlook Looks Generally Good Also

USDA expects broiler production to rise this year by nearly 4% with another increase of 3% in 2005. Strong prices have stimulated production with the 12 city prices averaging about 77 cents per pound this year compared to only 62 cents last year. For 2005, prices are expected to be lower around 71 to 77 cents per pound. Avian influence outbreaks in a number of states restricted some broiler exports this year which are down about 13%. Most of those restric-

tions are expected to be lifted by 2005 with a restoration of export trade.

Wholesale turkey prices in Eastern U.S. markets will average about 68 cents per pound this year compared to 62 cents for 2003. This much improved price is a result of a 5% drop in production after producers lost money with high feed costs in 2003/04. For 2005, USDA expects producers to cautiously expand production by about 1% with prices averaging in an estimated

range of 64 to 69 cents per pound.

Egg prices will average about 90 cents per dozen at Eastern markets this year, slightly higher than last year. For 2005, the USDA forecast is for egg prices to drop to a range from 80 to 87 cents with production up about 1%.

Somewhat lower prices for poultry products in 2005 will be partially offset by lower feed costs as well.

Dairies Let a Good Thing Slip

Dr. Mike Schutz, Animal Sciences Department

Dairy producers have seen a period of relatively higher milk prices in the past ten months, but those prices will slip this fall and winter. Particularly beneficial to dairy farmers was the record setting prices for milk produced in May and June. Numerous factors were contributing. Closure of the Canadian border to cattle imports in May 2003 resulted in fewer replacement heifers from Canada and the loss of slaughter cows kept cull cow prices high. An additional 33,000 cows were removed in the fall of 2003 by the Cooperatives Working Together (CWT) Program. Fewer cows, combined with variable feed quality and further reductions in milk produced per cow because of a shortage of Monsanto's POSILAC caused US monthly milk production to lag behind year-ago levels in 2004.

While Class III prices reached \$19.66 and \$20.58 for April and May, respectively; many producers were shocked at the size of the negative Producer Price Differential (PPD) deducted from their checks. Under Federal Milk Market Order pricing, dairy producers in the Mideast Order are paid for milk in two parts. They are paid for the Class III (component) value of the milk and a PPD for the value of the remaining milk in the pool. When milk prices are rising, the PPD can be negative. Since the milk price increases this spring were largely driven by cheese prices, which are established after the month of production, the Class I prices were considerably lower, since they are established two

weeks before the month of production. It turned out that in May there was a whopping \$6.02 difference between the Class III and Class I price. Furthermore, with prices headed up, some plants slowed cheese production and some cooperatives de-pooled milk, leading to a much higher percentage of milk being used for fluid consumption. The PPD for April in the Mideast Order was -\$3.78. It is little consolation that the PPD is only negative when prices are moving upward.

A negative consequence of the very high milk prices has been an increase in retail milk prices at the store and an accompanying decrease in consumption. A 14.1% increase in retail price over all milk beverages has resulted in a 1.4% decline in consumption (Ken Bailey, Pennsylvania State University). It appears that milk consumption may be more elastic than once thought, particularly when retail milk prices exceed \$3.00 per gallon. Remarkably, consumption of cheese and butter has increased markedly, despite dramatic increases in retail prices.

In response to increased milk prices, cow numbers in the 20 leading dairy producing states began to increase in June and July. Indiana cow numbers have been steadily increasing over the past 10 months. Indiana now ranks 13th in milk cows and 14th in total milk production. Nationally, the number of cows going to slaughter has been low this summer. Typically, the dairy industry responds quite quickly to higher milk

prices by expanding herd sizes. This may have been delayed this year by elevated feed costs. Even with record milk prices, the milk to feed price ratio has only slightly exceeded 3.0, the value that usually signifies an expansion of cow numbers.

In the first week of September, Class III milk futures were trading at \$14.50 and \$13.40 for September and October on the Chicago Mercantile Exchange, but decline to \$12.15 by December. The futures prices range from \$11.85 to \$12.25 for the first half of 2005. The forecast from USDA's Economic Research Service calls for Class III prices to be around \$13.20 this fall and about \$11.50 for the first half of 2004.

Several factors may affect prices going into this fall. Feed quality and supplies may be an issue because of the unusually cool summer in the Midwest. Supplies of butterfat are tight right now; though cow numbers are beginning to increase. Any factors reducing the number of cows in the national herd are likely to push prices higher in the short term. It was recently announced that the CWT program will again accept bids for herd retirements, probably beginning in October 2004. Other factors such as the re-opening of the Canadian border to cattle imports or restoration of full supplies of POSILAC may increase yield and erode prices. Dairy producers are still encouraged to consider opportunities for milk price risk management.

Forages Are Abundant

Dr. David Petritz

The national all hay crop is forecast to be 3% larger than a year ago while alfalfa is 1% larger. Production of all other hay is up nearly 5% due to abundant rainfall and moderate summer temperatures. Yields throughout the Great Plains and Corn Belt generally increased from last year.

In Indiana, hay production and supplies are much larger than in the past two years primarily due to large inventories at the start of the season. All hay production is slightly larger than last year, and alfalfa hay production is about the same. However, May 1 carryover of hay was 164% larger than the drought reduced carry-over a year earlier. Available supplies of high quality dairy and horse hay are probably about the same as a year ago due to

"In Indiana, hay production and supplies are much larger than in the past two years."

frequent spring and early summer moisture that reduced the quality of the first and second cuttings.

Prices for hay in the Midwest generally declined during the late winter and early spring. The early spring this year encouraged pasture growth and increased inventories of hay provided a clear signal that forage supplies were much larger. This fall, the potential for frost damaged corn to be chopped for silage in the northern Corn Belt region may also reduce the demand for hay. Thus, unless winter weather is severe, prices are not expected to reach levels achieved during the past winter with smaller than normal seasonal increases during the storage season. The magnitude of any increase will be dependent on fall and winter

weather patterns as well as on the price trends for feed grains and protein feeds.

Livestock producers who need to buy hay during the winter months should find large supplies. In all cases, buyers should price hay based on nutritional value and alternative ration formulations. Hay producers will face a more competitive market place than in past years, especially for average quality hay. Producers who have high quality hay may enjoy premium prices this winter if they can identify livestock owners who are seeking quality.

Longer term, producers should carefully assess the potential market for increased quantities of hay before expanding production. They should be prudent when considering expansion unless they have established, consistent, and dependable market outlets that will return a profitable price.

Input Prices to be Up AGAIN!

Alan Miller, CPA

Total agricultural production expenses in the U.S. increased at an annual average rate of 2.1% from 1995 through 2004. The upward trend in production expenses is expected to continue in 2005. Only feed and livestock input prices are likely to be lower among the major input categories.

Input costs for corn, soybeans, and wheat are expected to be more expensive for the 2005 Indiana crops. Per acre costs increases are expected to be from 3 to 11%, with soybeans increasing most in percentage terms followed by corn then wheat. The per acre cost of growing crops on average quality land is expected to increase approximately \$16 for continuous corn, \$11 for rotation corn and soybeans, \$11 for second year soybeans, \$11 for double crop wheat and soybeans, and \$5 for wheat. These are very preliminary estimates and will likely change between now and next spring.

Energy prices continue to be a prominent factor contributing to the higher input costs. Crude oil prices have

been very volatile. Limited production capacity worldwide, coupled with ever increasing consumption makes oil prices hyper-sensitive to any potential for supply disruption. Diesel prices have increased more than 30 cents per gallon during the past year. Gas and diesel prices are expected to be higher in 2005 although the increase is expected to be more moderate, like 5% to 10%.

Propane inventory in the U.S. in early August was down about 8% from a year earlier. The price of propane is about 20 cents per gallon higher than a year ago. An early maturing crop this fall is expected to help hold down drying costs in Indiana, which may partially offset the higher propane prices for some Hoosier corn growers. Nationwide, large areas of the northwestern Corn Belt are expected to have late maturity with above average costs for drying.

Unlike crude oil, natural gas prices have been less volatile this summer. One reason is that most of the gas consumed in the U.S. comes primarily

from North America and the Gulf of Mexico. So far that has been viewed as a stabilizing factor relative to crude oil where the majority of our supplies are imported. Supplies of gas in storage have improved this summer due in part to a cool summer.

However, prices are still too high to encourage domestic conversion of gas to anhydrous ammonia.

Natural gas prices are expected to increase seasonally with the start of the winter heating season. Imports of Anhydrous ammonia are up 83% since 2000. Higher natural gas prices and the continuing dependence on imported ammonia mean no relief is in sight from high nitrogen fertilizer prices. Expect nitrogen fertilizer prices next spring to be at, or above, those in the spring of 2004. Take advantage of early order/prepayment discounts this fall, because January 2005 futures for natural gas are currently at nearly \$2.00 premiums to October 2004.



The fertilizer industry appears to be expecting a big fall application season for P and K, which may contribute to slightly higher prices. In Indiana, an earlier harvest will provide greater opportunity for fall application as well. Net removal of phosphate fertility has been increasing, and that may stimulate fertilizer sales given improved cropping incomes in 2003 and 2004. The perception is that corn growers' gross incomes have been up, and the income will help stimulate increased fertilizer sales.

Seed companies are expected to have adequate supplies. Seed prices however, are expected to be 5 to 10% higher for the technology seeds. Prices of non-GM varieties will increase, but not as much. Some of the GM varieties, particularly for soybeans, may have increases well in excess of 10%. More seed varieties will carry seed treatments as a matter of course, and as an element of price, rather than as an optional extra cost treatment. Stacking of traits in the technology carrying varieties will give

growers more options, but at higher prices.

Both farm wage rates and farm machinery prices have trended steadily upward in recent years. The annual average rate of increase has been a little under 3% for machinery prices, and about 4% for farm wage rates, since 1995.

Farm Land Prices: Higher and Higher

Dr. Craig Dobbins

Indiana farmland values continue to move higher. Compared to year earlier values, the June 2004 Purdue Land Value Survey indicated an increase of 7.3% to 8.4%.

There are a number of factors supporting continued increases in farmland values. These include:

1. Continued demand for rural residences.
2. Continued development demand and the use of tax-free exchanges to reinvest money from these sales back into farmland.
3. Low long-term interest rates.
4. Competitive farmland investments

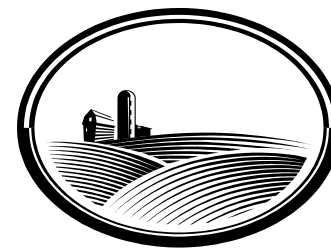
returns compared to investments in stocks, bonds, and other nonagricultural investments.

5. More optimistic expectations about agricultural prices and farm income.
6. A renewed interest by farmers in making farmland purchases, and
7. The limited supply of farmland on the market.

Looking to next year, it is likely that the rapid decline in corn and soybean prices has dampened price and farm income expectations. Also interest rates have begun to rise and more increases are expected as the economy continues to expand. While increasing

interest rates have a negative influence on farmland values, the rate increases are starting from a very low historical level. The supply of land available for sale is expected to remain small and the demand from farmers and non-farm investors is expected to remain strong.

For the year ahead, farmland values are expected to increase 3% to 5%.



Cash Rents to Make Modest Increases

Dr. Craig Dobbins

For the past several years, cash rents have also been moving higher but at a slower rate than farmland values. The June 2004 Purdue Land Value Survey indicated that cash rents increased by 1.7% to 3.2% when compared to values in 2003. As with farmland for sale, the supply of land to rent is limited and the demand strong as farmers seek to increase their farm's size. This puts land owners in a strong bargaining position.

While crop budgets from the last several years indicate a continued squeeze on crop production margins, rents have continued to increase. Higher corn and soybean prices in the spring of

2004 were leading to speculation that cash rents for next year might make a sizable upward jump. However, since that time, corn and soybeans prices have declined sharply. In addition to the decline in prices, it appears that 2005 will be another year of increased production costs for corn and soybeans. Fuel costs, fertilizer costs, seed costs, and chemical costs are all expected to be above last year.

This means there is continued pressure on margins. In an effort to lower per unit costs, many farm operators are striving to increase the number of acres being farmed. This will keep

the demand strong. Even in the face of continued pressure on margins, cash rents are expected to increase 1.0% to 1.5% for 2005 crops.

Huge Corn Crop & Lower Prices Until Next Year

Dr. Chris Hurt

The 2004 crop will blow the top off previous yield and production records. The 149.4 bushel yield estimate is 5% above last year's record, and the 11.0 billion bushel crop is 850 million bushels higher. Corn yields are expected to be better than average in all of the major production states with Indiana's 157 bushel yield beating the 2001 previous record yield of 156 bushels per acre.

Corn in the Northwest portion of the Corn Belt is late maturing due to the cool wet summer. Frost threats may keep some "price risks premium" in the market through the end of September. Even normal frost dates will trim yields in some corn fields and reduce quality.

USDA continues to expect record usage for the 2004 crop of 10.7 billion bushels. This means that ending stocks in August 2005 would rise to 1.2 billion bushels from about 950 million this August, and the U.S. average farm price would drop to \$2.20 per bushel compared to \$2.40 for the 2003 crop.

What does this mean for marketing strategies? Large crops generally make lows at harvest and have reasonable price recovery into the spring and early summer. The big corn and bean crop will put considerable pressure on storage. With much of the corn and bean crop ready to be harvested at the same time, the harvest window will be

narrowed which tends to create added handling problems. More corn will go to outside piles this year and elevators will have a tendency to increase storage charges. This means that storage is going to be very valuable. Gross storage returns for corn are expected to be 25 cents from harvest to January; an additional 10 cents to spring and another 5 cents until June. This is a total gross return of 40 cents for corn storage.

There are reasonably high odds that LDP's will be working on corn at times this fall. The best guess of when LDP's will be the largest is mid-to-late October, near the peak of harvest activity.

There is reason to believe that the post-harvest price rally will be strong as well. World stocks are expected to be very tight, the exchange rate of the dollar makes our corn relatively cheap for foreign buyers, and the 2005 crop is not likely to be as large as this year. This also makes storage look attractive as a potential strategy. Also consider the 60-day LDP lock-in which allows the LDP to be "locked-in" on the day of choice, and then stays at that level for the next 60 days.

Also, keep in mind that prices are now low enough to expect some Counter Cyclical Payment (CCP's) for the 2004 crop. If the U.S. average farm

price is below \$2.35 for the 2004 crop, then CCP's will be made. With the current estimate at \$2.20 per bushel, USDA is suggesting that CCP's would be 15 cents per bushel. The first advance on 2004 CCP's would be made in October 2004 and would be 35% of the expected total amount.

One additional point to remember is that even if prices should continue downward from here, they are now at levels where CCP's and LDP's help to compensate. This is to say producers have considerable price protection in the government program should prices continue to decline.

This price pattern suggest that cash corn prices of around \$1.90 to \$2.10 in central and northern Indiana at harvest could return to \$2.30 to \$2.40 by next spring/early summer. With some positive news on exports, or weather concerns in the Southern Hemisphere this could push pricing opportunities into the \$2.50 to \$2.60 level at some point. If one could add 5 to 15 cents per bushel from LDP's to these market prices, the gross price would be \$2.60 to \$2.70 per bushel. These levels would sound very favorable for producers with lots of bushels to sell. (Ohio River prices would be 10 cents or so higher).

Soybean Prices Won't Repeat

Dr. Chris Hurt

Soybean markets in the past year were dominated by extreme stocks shortness due to poor yields in the U.S. and South America. The opposite may be true this year as the world supplies are expected to increase by a huge 18%.

U.S. soybean yield estimates of 38.5 bushels per acre are about one bushel below trend, but a major improvement compared to last year's disappointing 33.4 bushel mark. Harvested acreage is up 2%. As a result, the nation's crop will be 2.8 billion bushels, a

17% increase over last year. Indiana yields are expected to be somewhat above average at 45 bushels, but well off the 49 bushel record of 2001.

USDA believes China will return as an even larger buyer this year and that U.S. exports will expand with more abundant supplies and lower prices. If so, utilization would expand to 2.76 billion bushels and carry out stocks would expand to 190 million bushels which is about double the very tight carryover from August of 2004. This

means farm prices would drop from an average of \$7.35 for the 2003 crop to \$5.80 for the 2004 crop.

Harvest time prices are expected to be in the \$5.25 to \$5.75 range. A post harvest increase could move them to the \$5.75 to \$6.25 level by Thanksgiving. Beyond that there is more uncertainty. Flat-to-lower prices in the winter remain possible if the South American crop is large. However, there is also potential for further spring price strength if U.S. weather problems

develop.

Storage may only provide positive returns for those who have existing on-farm storage, as commercial storage charges may increase this year. Current gross storage returns are estimated at about 25 cents per bushel to November/December and a total of 40 cents into the early summer.

The anticipated size of the South American crop may have large impacts on price direction into the winter. Brazilian acreage is expected to expand by 10% with production up an amazing 26%, while Argentina's acreage may rise 2% with production up 15%. (These South American crops would be harvested next spring). Crops of this magnitude would have potential bearish impacts on U.S. prices in the

winter, as world ending stocks as a percent of use could reach near record highs. This means it is possible to see the lowest prices of the season in the winter. Because of this concern, some may want to consider storing beans, but with them priced for later delivery. This can be done with forward cash contracts, with futures hedges, or with hedge-to-arrive contracts at the elevator.

LDP's for soybeans at harvest are not likely, but may be more possible if the huge South American crop develops, and thus LDP's might be working again

in the winter. One way to take advantage of potential winter LDP's is to store soybeans priced for delivery into the late-winter or early spring.

Counter cyclical payments (CCP's) for soybeans are not expected at this point either. The U.S. average farm price received would need to drop below \$5.36 per bushel for CCP's to be made.



Huge global crops will reduce grain prices.

World Wheat Production Rebounds

Dr. Chris Hurt

Wheat production in the U.S. dropped 9% while world production is up 11%. The U.S. continues to move toward fewer acres of wheat as feed grains and



soybeans have been favored. U.S. planted acreage at 60 million was down 3% in 2004, and down 20% from the 1996 recent peak. National yields are estimated at 42.0 bushels per acre, a decrease of 5%. The large world crop will mean

U.S. exports will shrink, even in the face of lower U.S. prices. Exports are expected to drop to only 950 million bushels from 1.155 billion a year ago. In addition to weak exports, domestic use has been flat as population growth has been offset by modest declines in per capita consumption due to low-carb diets.

Both U.S. and world ending stocks are expected to grow with U.S.

ending stocks in May 2005 reaching 578 million bushels. USDA's estimate of average U.S. farm price is expected to be in the range of \$3.00 to \$3.50 (mean of \$3.25). This is a 15 cent decline from the 2003 crop. Soft red winter wheat will be at the tightest ending stocks levels since the 1996 crop and keep Indiana average price received for the 2004 crop at about \$3.10 per bushel compared to \$3.21 for the 2003 crop.

As of this writing, Indiana wheat prices were 50 cents higher than county loan levels, thus, there is little chance that LDP's will be working in the coming months. However, producers will likely be eligible for counter cyclical payments (CCP's). The wheat target is \$3.92 with direct payments of \$.52 per bushel. Thus, the CCP Pivot is \$3.40. Currently the USDA's August estimate is \$3.25 for the U.S. average price received. This implies a CCP of 15 cents per bushel.

Wheat prices are likely to follow corn lower into the fall harvest. Recovery in prices can then be expected into December and January. Cash wheat prices in Indiana may recover after fall harvest by about 30 to 40 cents per bushel.

What about seeding 2005 crop wheat? Expected wheat returns for 2005 are generally lower than those for corn and soybean alternatives. The three exceptions to this are: (1.) wheat/double crop beans in the southern 1/3 of the state; (2.) where there is a good market for straw; and (3.) some lower quality soils that have strong wheat yields compared to corn and soybeans.

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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