
A Robust Rural Economy in 2006?

By Jason Henderson

Rural America will remember 2005 as a year of drought, hurricanes, and surging gas prices. To be sure, some regions of the country faced devastating natural catastrophes. Yet, these catastrophes did not stop the farm sector from posting another banner income year—nor did they stop the nonfarm sectors from enjoying solid gains in employment and income. Overall, the rural economy was quite resilient in 2005.

Heading into 2006, the rural economy appears poised for another year of robust activity, especially if private sector forecasts hold true. Energy prices are the risk to the forecast. The higher oil and natural gas prices translate into higher production costs for factories, farms, and households. Yet, higher prices are also underpinning a new wave of investments and market opportunities in rural America's emerging bio-based energy sector.

This article reviews the rural economy in 2005 and discusses the prospects for the year ahead. The first section discusses the continued recovery in the nonfarm rural economy. The second section focuses on

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the continued prosperity in the farm economy in the past year. The third section examines the outlook for 2006, including the potential impacts of high energy prices on the rural economy.

I. THE RURAL RECOVERY CONTINUES IN 2005

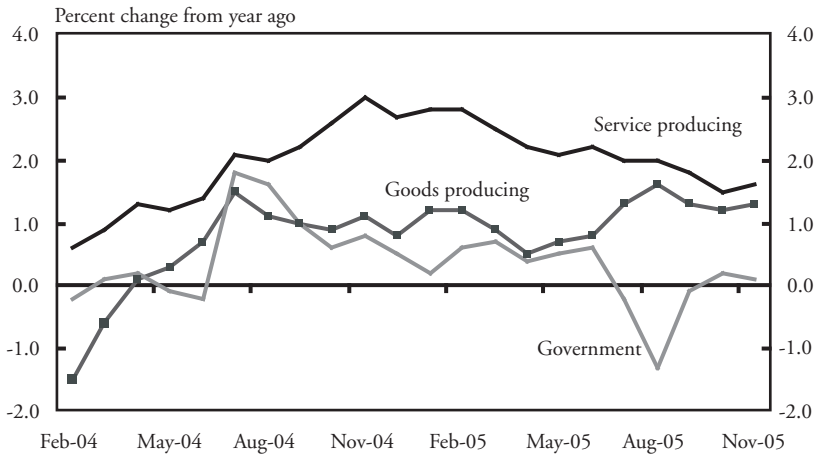
The economic recovery on rural Main Streets continued in 2005. Rural communities posted solid employment and income gains during the year. Strong growth in rural service, construction, and mining firms, along with stabilizing job rolls in rural factories, overcame weakness in the government sector. Rural firms continued to restructure their Main Street economies with high-skill business activity leading the way.

Main Street businesses continued to make solid job and income gains. Rural payrolls rose 1.2 percent during the first three quarters of the year, matching the growth posted in metro areas.¹ Rising employment rolls pushed the rural unemployment rate down from 6.0 percent to 5.7 percent.² While the rural unemployment rate remained higher than the metro rate, the rural unemployed tended to spend less time without a job than the metro unemployed.³

Sustained growth in 2005 translated into stronger income growth. In rural areas, weekly earnings growth averaged a solid 2.4 percent during the first ten months of the year, slightly below the 2.6 percent growth posted in metro areas.⁴ Rural growth strengthened in the summer and fall months, though, outpacing metro growth in the second half of the year.

The economic strength on Main Street emerged from private sector firms, with both services and goods-producing sectors posting stronger job growth (Chart 1). Rural service firms continued to lead rural job growth, posting 1.6 percent annual growth in November. Professional and business service firms continued to grow the strongest, adding jobs at a 3.7 percent clip. Professional and business service firms, which tend to employ people with higher skill levels, reflect the continuing transformation of the rural economy toward high-skill activity. Wholesale, transportation, and utility sectors grew solidly at above 2.5 percent.

Chart 1
RURAL JOB GROWTH BY SECTOR



Source: BLS, payroll survey

Recreation service growth remained strong, despite easing in the summer and fall due to higher gasoline prices. In fact, employment growth in recreation-destination counties grew 3.5 percent in 2005.⁵

The rural goods-producing sector strengthened in 2005, thanks to strong construction and mining activity and stable rural factories. The sector continued to add jobs as the year progressed. By the third quarter, annual job growth in these sectors crested at 1.5 percent. Strong housing markets underpinned robust activity and rising job rolls in construction. Residential construction continued to expand as housing permits rose 3.8 percent during the first 10 months. Surging oil prices underpinned strength in mining as oil companies expanded rig activity. Together, rural construction and mining job growth jumped 3.8 percent above 2004 levels. Rural factory closures and mass layoffs continued to abate after averaging almost 200 plant closures each quarter during the recession of 2001. In 2005, the average number of rural mass layoffs fell below 100 per quarter, stabilizing at year-ago levels.

The strong growth in rural services and goods-producing firms overcame weakness in rural government sector employment. Government employment expanded less than 1 percent during the year, with

weakness in payroll growth emerging as the year progressed. Limited job growth emerged despite improved fiscal conditions for state and local governments. State and local government payment revenues surged, but not enough to boost overall government payrolls.

II. ANOTHER BANNER YEAR FOR THE FARM SECTOR

Despite drought and hurricanes, the farm sector enjoyed its second-largest net farm income year on record, reaching \$71.5 billion. Farm incomes settled just below the 2004 record as rising production costs trimmed strong incomes in both the livestock and crop sectors. After multiple years of robust farm incomes, farm balance sheets and financial conditions remained strong.

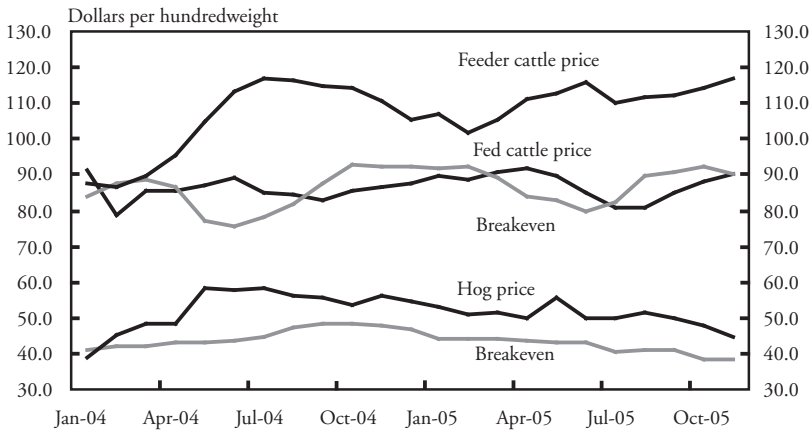
Strong demand and lean supplies boost livestock profits

Strong demand and lean supplies underpinned livestock prices and profits. Protein demand remained strong in both foreign and domestic markets. With producers limiting production gains, prices remained high and produced profit opportunities for many segments of the livestock industry. By year-end, gross cash livestock receipts reached \$123.7 billion, their highest level on record.

Strong demand for protein in domestic and foreign markets continued to bolster the livestock market in 2005. In domestic markets, U.S. per capita red meat and poultry consumption reached its second-highest level on record, trailing only last year's record level. Foreign consumption was also strong as U.S. red meat exports rose 30 percent.⁶ Pork exports remained robust, as exports to Japan and South Korea (countries that continued to ban the import of U.S. beef in 2005) set record highs. Beef exports to Canada and Mexico strengthened as these countries opened their borders to U.S. beef. In December, Japan finally announced it will allow the importation of U.S. beef from animals under the age of 20 months. While the prospect of renewed exports came as welcome news, some analysts suggested it will take several years to rebuild the Japanese market for U.S. beef.

Chart 2

U.S. LIVESTOCK PRICES AND BREAKEVENS



Source: USDA, *Livestock, Dairy, and Poultry Outlook*

Fed cattle are Great Plains Cattle feedlot. Hogs are N. Central Hog Farrow to Finish.

Feeder cattle are Oklahoma City steer prices 750-800 lbs.

Even in the face of high prices, livestock producers showed limited production gains. High prices typically lead to a chain of supply increases as producers start rebuilding breeding stocks. However, in the short term herd rebuilding often trims the flow of animals for slaughter. Over time, slaughter levels rise as the larger breeding stock produces more animals for slaughter. In 2005, cattle slaughter edged down as producers retained heifers and cows for breeding. Despite lower slaughter numbers, actual meat production rose as producers sent larger animals to slaughter. For the livestock segment as a whole, total red meat and poultry production rose a modest 1.7 percent in 2005.

Strong demand and lean supplies led to high prices and profit opportunities for most segments of the meat industry (Chart 2). Hog producers enjoyed the biggest profit opportunities as market prices stayed well above breakeven levels throughout the year. Cattle ranchers benefited from feeder cattle prices that approached record levels. However, strong feeder cattle prices limited profit opportunities for feedlot operators as fed cattle prices just covered breakevens throughout most of the year.

Lower crop revenues will be offset by government payments

In 2005, natural disasters were the lead stories for the crop sector. Despite drought and hurricanes, most segments of the crop sector harvested bumper crops. Big crops led to solid cash receipts despite lower prices, and gross cash crop receipts reached \$115 billion, their second-highest level on record. Bumper crops led to lower prices and a surge of government payments.

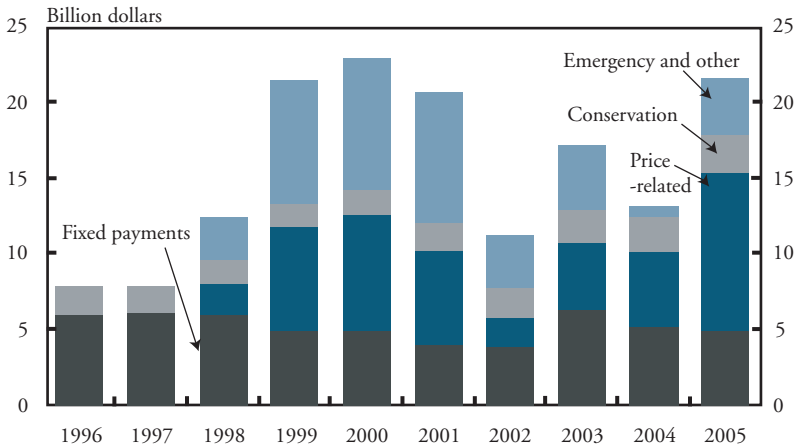
While the Midwestern drought and the record hurricane season devastated certain regions of the country, they influenced national crop production only modestly. Drought in the Midwest led to soybean and corn production losses of \$221 and \$486 million, respectively, in Arkansas, Illinois, Indiana, Missouri, Ohio, and Wisconsin.⁷ While large, this total accounted for only 1.2 and 2.4 percent of 2004 U.S. soybean and corn gross cash receipts. In fact, the 2005 U.S. soybean and corn crops were the second-largest on record and, coupled with a big 2004 crop, led to large amounts of the crops held in storage. Hurricanes Katrina and Rita led to \$882 and \$195 million in crop production losses, respectively, mainly in Southern states. While devastating to local agriculture, the losses to cotton, rice, sugarcane, and nursery crops, which totaled \$770 million, accounted for only a small proportion of U.S. gross crop receipts.

Big crops led to lower prices for producers. Despite drought, another bin-busting corn crop that topped 11 billion bushels pushed U.S. corn prices below \$2 per bushel.⁸ The U.S. soybean crop topped 3 billion bushels for the second straight year, and farm prices for the 2005 crop are expected to fall below the 2004 average. While wheat production was down 2.8 percent from a year ago, the average farm prices are expected to fall to, or sink below, 2004 levels. With the hurricane impacts, rice and cotton production are expected to be slightly below 2004 levels and lead to modest price gains for the harvested crop.

Lower prices are expected to lead to a surge in government subsidies. Government payments are expected to reach \$22.7 billion in 2005, up 70.7 percent from the 2004 level (Chart 3).⁹ The biggest gains, \$4.8 billion, emerged from the loan deficiency programs and countercyclical programs, which increase payments as prices fall. Ad hoc and emergency

Chart 3

U.S. GOVERNMENT FARM SUBSIDY PAYMENTS



Source: USDA

Fixed payments include production flexibility contract payments and direct payments, where payments are fixed by legislation. Price-related payments include countercyclical payments, loan deficiency payments, marketing loan gains, and net value certificates, where payment rates vary with market prices.

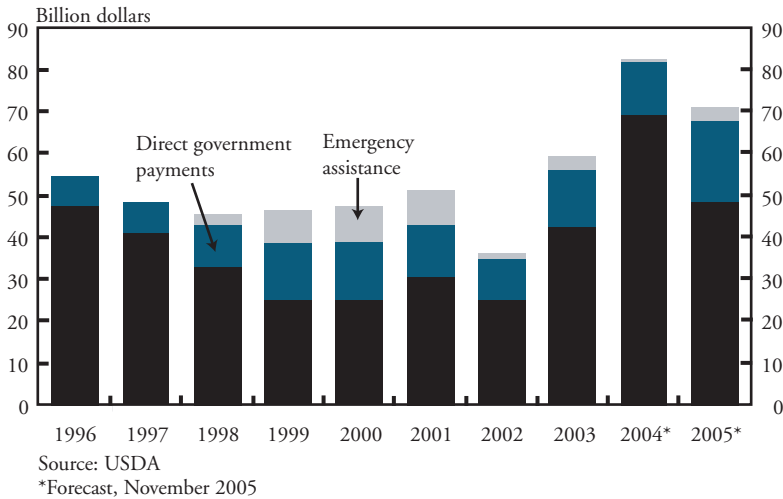
payments also rose \$3.1 billion, with a sharp increase in disaster assistance payments. At the time of this writing, additional federal disaster assistance packages were being discussed in Congress.¹⁰

Healthy farm finances despite rising costs

While the national production impacts of Katrina and Rita were small, the hurricanes intensified input price pressures on farmers. Rising production costs left only a minor dent in U.S. farm income, as net farm income reached its second-highest level on record. Robust farm incomes helped fuel surging land values and strong capital spending, especially in the first half of the year. And robust farm incomes supported healthy farm balance sheets.

Rising energy and interest costs fueled a rise in farm production expenses. Fuel and oil prices were already rising before Katrina and Rita. After the hurricanes, USDA estimated that a 10 percent increase in fuel and oil costs would lead to a \$85 million jump in monthly farm

Chart 4
U.S. NET FARM INCOME



production costs.¹¹ For 2005, fuel and oil costs were estimated to rise 40 percent. Crop producers, especially wheat and corn producers, which typically have a greater share of their costs derived from fuel and oil, are expected to bear the biggest brunt of rising fuel and energy prices. Higher nitrogen gas prices are expected to lead to additional gains in fertilizer prices in 2006. In the third quarter, bankers reported that many farmers requested additional operating loans to pay for higher fuel and oil costs during the fall harvest. In 2005, farm interest charges on both short- and long-term loans rose 15 percent.

Even with rising production costs, the farm income statement was strong, as robust livestock and crop sectors, coupled with large government payments, offset higher production costs. After an upward revision to previous forecasts, net farm income was expected to reach \$71.5 billion in 2005 (Chart 4). While 2005 income was 13 percent below 2004 levels, it was the second highest on record.

The strong income statement led to continued improvements in the farm balance sheet. Farm debt ratios fell in 2005 as farm equity gains outpaced rising farm debt.¹² Farm equity rose sharply with strong gains in farm land values. On the national level, farm real estate equity rose 7.3 percent, with some regions posting record farmland value

gains. For example, in the Tenth Federal Reserve District, ranchland values surged 13 percent above year-ago levels.¹³ Strong land value gains continued to be fueled by robust investment and demand for recreational and residential land.

Robust farm incomes also underpinned capital spending that remained strong throughout most of the year. With record income in 2004, capital spending surged in the fourth quarter of 2004, and the strong spending activity spilled over into 2005. Farm machinery companies posted strong sales, and motor vehicle assets rose 3.3 percent in 2005. However, higher energy prices following Katrina and Rita led to a slowdown in farm capital spending in the fourth quarter. Bankers in the Tenth Federal Reserve District reported weaker capital spending in the second half of 2005. The Association of Equipment Manufacturers also reported softer sales in the fourth quarter.

Heading into 2006, the rural economy appears positioned to reap another year of prosperity, especially if the national economy grows as private sector forecasters expect. Given supply and demand conditions, the farm sector could reap another bountiful year. Higher energy prices pose a risk to the rural outlook—but could also help spur a promising set of new investments in rural America.

Robust nonfarm growth

Activity on Main Street should remain robust in the year ahead. Rural income and job growth entered 2006 posting solid gains, and continued strength in the national economy should underpin future rural growth. High-skill jobs continue to expand in the rural economy. Improved fiscal conditions at state and local governments should help stabilize the government sector in rural communities, an area of rural weakness in recent years.

Various analysts and forecasters expect 2006 to be a strong year for the national economy. The Federal Open Market Committee indicated in July that real GDP growth should average 3.25 to 3.5 percent in 2006, with the unemployment rate holding near 5 percent (Federal Reserve Board). More recent private sector forecasts share similar views, with a general consensus that GDP growth should range from 3.5 percent in the first half to 3.1 percent in the second half of 2006 (Gerena-Morales and

Annett). Growth could be broad-based as both manufacturers and non-manufacturers are expected to produce solid growth. According to the ISM survey of purchasing managers, revenues in both manufacturing and nonmanufacturing are expected to rise and fuel additional job gains, with stronger growth in nonmanufacturing industries.¹⁴

Rural growth should continue to be fueled by national economic growth. Goods-producing job growth strengthened heading into 2006. Robust manufacturing activity should underpin continued resiliency in rural factories. Higher energy prices should continue to fuel solid growth at rural mining and mineral extraction firms. In service sectors, rural business job gains are expected to continue with strong gains in high-skill industries. Producer and business service firms, which employ a large share of skilled workers, continue to lead rural job growth heading into 2006. Many firms are engaging in “homeshoring,” outsourcing jobs to rural America instead of overseas. By offering lower costs than major metro markets, but closer proximity to firms, several businesses garnered media attention in 2005. For example, wages for software developers are \$35 to \$40 per hour in rural areas, compared to \$75 to \$100 per hour in major metro markets and \$20 per hour in India (Hall).

Another bountiful year for the farm sector

Despite lower projections for farm prices, farm incomes in 2006 are likely to remain healthy by historical standards. Farm incomes will stay strong but probably ease from the record level posted the past two years. Livestock revenues are expected to remain resilient, and government payments will rise to offset declining crop revenues resulting from lower prices.

Despite lower prices, livestock revenues will likely stay robust due to rising production. Total red meat and poultry production is expected to rise 3 percent in 2006. While meat exports are expected to match this 3 percent rise, domestic consumption is expected to rise a more modest 1.7 percent.¹⁵ With production outpacing consumption, prices are expected to ease slightly yet remain above historical highs. Cattle, hog, and poultry prices are expected to be roughly 10 to 15 percent above the 2001-03 average, despite falling below 2005 levels (Table 1).

Table 1
USDA ANNUAL PRICE PROJECTIONS, DECEMBER 2005

Livestock	2006	2005	Average 2001 to 2003
		Dollars per hundredweight	
Choice Steers	79 - 85	87.09	74.81
Feeder Steers	97 - 103	111.23	86.03
Hogs (barrows and gilts)	44 - 47	50.01	40.06
Broilers	68 - 73	71.00	58.90
Milk	13.35-14.15	15.10	13.20

Crop Prices	2005/06	2004/05	Average 1998 to 2001
		Dollar per bushel	
Corn	1.60-2.00	2.06	1.90
Wheat	3.25-3.50	3.40	2.63
Soybeans	5.00-5.70	5.74	4.46

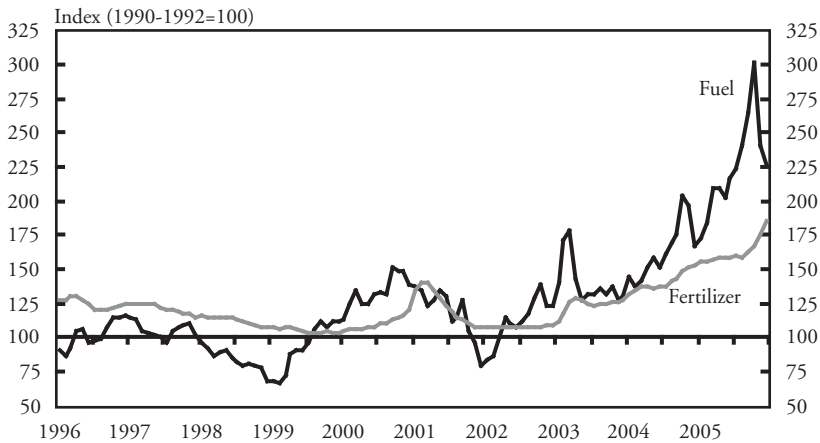
Source: *Livestock, Dairy, and Poultry Outlook* report and World Agricultural Supply and Demand Estimates, USDA December 2005

Crop revenues may not be quite so resilient. Two years of bumper crops in the U.S. market have depressed prices from the highs posted in 2004. Corn and soybean prices are expected to fall well below year-ago levels (Table 1). While soybean prices are expected to remain above their historical levels, corn prices are expected stay below their historical average. Wheat prices could remain near 2005 levels as drought and other production related issues have trimmed global grain inventories. World grain stocks-to-use ratios are at their second-lowest level on record and should support wheat prices. In the near term, lingering transportation bottlenecks on the Mississippi River from Hurricane Katrina may make it difficult to take advantage of emerging export opportunities.

Lower crop prices led to a surge in government payments in 2005. If prices remain low, government payments in 2006 will probably remain near record levels. Concerns about the federal budget deficit have raised the possibility of cuts in government support. But the proposal currently on the table would defer cuts until 2007. By that time, the debate for the next farm bill will be well under way.

Chart 5

FUEL AND FERTILIZER PRICES PAID BY FARMERS



Source: USDA

The energy impact

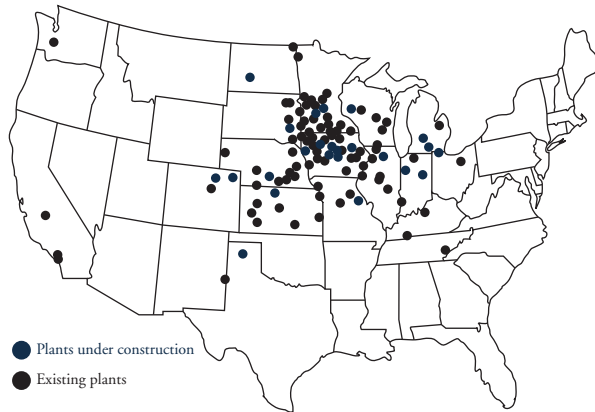
The biggest risk to a robust rural economy in 2006 will be high energy prices. Prices for most major energy products (gasoline, natural gas, diesel fuel, coal) soared in 2005, with some prices rising by half over the past year. Higher energy prices will boost production costs in both farm and nonfarm sectors of the rural economy. Yet, higher energy prices are also bringing new investments and new market opportunities to rural America.

Rural businesses are feeling the pinch of higher prices. In the farm sector, higher energy prices have led to substantially higher input prices. In 2005, farmers were paying 40 to 50 percent more for fuel than in 2004 (Chart 5). Fertilizer prices also rose in 2005, and substantially higher natural gas prices are expected to translate into even higher fertilizer prices in 2006. Crop producers, especially corn and wheat producers, use significant amounts of fuel and fertilizer and will face the biggest challenge in maintaining profits.

Rural nonfarm businesses also face rising input costs due to higher energy prices. In fact, energy prices could have a bigger impact on rural economies than metropolitan economies, given their industry mix.

Map 1

ETHANOL PRODUCTION PLANTS (AS OF NOVEMBER 15, 2005)



Source: American Ethanol Coalition

Rural manufacturers are more concentrated in energy-intensive industries. For example, in rural manufacturing more than a third of earnings come from industries with above average energy costs, compared to a quarter in metro manufacturing.¹⁶

Rural residents are also challenged with higher energy prices. The rural impact may be larger due to rural America's reliance on the automobile and longer commuting patterns.¹⁷ With surging gas prices, commuting costs have substantially increased. According to the Consumer Federation of America, rural households spent \$2,087 for gas in 2005, compared to \$1,705 for urban households (Cooper). Coupled with rural America's lower income levels, rural households spend a greater share of their income on gas than urban households.

While higher energy prices hurt the rural economy, they also fuel new investment opportunities in rural America through bio-fuels production. Bio-fuels production has surged recently with the rapid expansion of ethanol and bio-diesel, a fuel produced mainly from soybeans. In 2005, more than 4 billion gallons of ethanol were produced in the United States, up from 1.7 billion gallons in 2001.¹⁸ Bio-diesel production expanded from roughly 5 million gallons in 2001 to over 25 million in 2005.¹⁹ Higher oil prices are making bio-fuels production more profitable

and fueling new investments in bio-fuel plants, many in rural America. As of November 2005, 24 ethanol plants were under construction (Map 1) with another 56 proposed plants for bio-diesel production.²⁰

These investments not only boost nonfarm economic activities, they also provide new market opportunities for farm products. In the case of bio-fuels, both bio-diesel and ethanol are made primarily from farm products. Ethanol is a grain alcohol made from crops that is primarily used as an oxygenate for gasoline. Bio-diesel is a fuel for diesel engines that is derived from fat and natural oils, like soybean oil. As a result, the expansion of bio-fuel production capacity boosts the demand for farm crops. For example, according to the USDA, the annual amount of corn used to produce fuel has increased from less than 500 million bushels before 1995 to over 1.5 billion bushels in 2005.

IV. CONCLUSIONS

The rural economy was resilient in 2005, overcoming natural disasters and high energy prices to post another prosperous year. Strong job growth on Main Street and robust farm incomes underpinned a strengthening rural economy. The stage is set for another year of economic growth in 2006. Solid economic growth at the national level should underpin robust job and income growth on rural Main streets. Even with rising production, demand appears strong enough to keep farm prices at or above historical levels. Although crop prices are expected to remain weak, government payments should offset revenue losses.

High energy prices pose the biggest risk to the rural economy during the year ahead. Rural businesses and farmers will pay higher input costs and rural households will spend more for gasoline. Still, higher energy prices may fuel new investments and a new generation of market opportunity in rural America.

ENDNOTES

¹Calculations are based on Bureau of Labor Statistics state and metro payroll data.

²Rural unemployment rate is calculated as the seasonally adjusted rate of county level employment and payroll from the Bureau of Labor Statistics household data.

³Calculations are based on monthly Current Population Survey data. The average duration for rural unemployment was 17.1 weeks in 2005, down from 17.9 weeks in 2004 and below the 2005 metro rate of 18.8 weeks.

⁴Calculations are based on Current Population Survey data.

⁵Calculations are based on BLS employment data and USDA definitions of county typologies available at www.ers.usda.gov/briefing/rurality.

⁶Data were obtained from USDA's December issue of the *Livestock, Dairy, and Poultry Outlook*. Red meats include beef, pork, lamb, and mutton. Poultry includes broilers and turkeys.

⁷For more detailed information on drought and hurricane impacts, see *A Preliminary Assessment of the Effects of Hurricane Rita on U.S. Agriculture, An Update of the Preliminary Assessment of the Effects of Drought in the Midwest*, and *A Preliminary Assessment of the Effects of Katrina and Drought on U.S. Agriculture* published by the Office of the Chief Economist, USDA.

⁸Information was obtained from the December issue of the USDA's *World Agricultural Supply and Demand Estimate* report.

⁹The government payment level is from the USDA's November 2005 farm income forecast, available at www.ers.usda.gov/briefing/farmincome.

¹⁰Federal disaster assistance payments being discussed in Congress were related to the 2005 drought and hurricane impacts. If passed, these payments will probably be counted as government payments in 2006, when farmers actually receive disaster assistance checks.

¹¹See *A Preliminary Assessment of the Effects of Katrina and Drought on U.S. Agriculture* published by the Office of the Chief Economist, USDA for more detailed information.

¹²The farm debt-to-asset ratio fell from 13.8 percent to 13.4 percent. The farm debt-to-equity ratio fell from 16 percent to 15.4 percent.

¹³The Tenth Federal Reserve District covers the states of Colorado, Kansas, Nebraska, Oklahoma, and Wyoming, the northern portion of New Mexico, and the western portion of Missouri. See the Tenth District Agricultural Credit Survey for more detailed information.

¹⁴See the ISM Semi-Annual Report on Business publishing in December 2005 for more detailed information. The report is available at www.ism.us/ISM-Report/SemiannualROB122005.cfm.

¹⁵Production and consumption forecasts are available in USDA's *Livestock, Dairy, and Poultry Outlook* report.

¹⁶Calculations are based on REIS data from the Bureau of Economic Analysis and Census of Manufacturers data.

¹⁷According to calculations based on Department of Commerce data, commuting increases in more rural counties, that is those with lower population density.

¹⁸See American Ethanol Coalition www.ethanol.org for additional historical ethanol production statistics.

¹⁹See National Biodiesel Board www.biodiesel.org for additional information on bio-diesel production.

²⁰Proposed plants are in the permitting, equity drive, or construction phase of the project.

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