Will Rural Prosperity Prevail in 2008?

By Jason Henderson and Maria Akers

The rural economy was strong in 2007. Record farm incomes were fueled by rising ethanol demand and by stronger export demand, which was driven in part by a weaker dollar. Farmers used the year's higher profits both to strengthen their financial conditions and to boost investment in land and equipment. Meanwhile, businesses on Main Streets reaped benefits from the higher farm spending, and the fortunes of energy-dependent regions brightened with higher energy prices.

As the year progressed, however, the outlook for the rural economy began to dim. Following national trends near the end of the year, Main Street activity waned. The higher costs for gas and heating fuel pinched rural household budgets. And despite robust outlooks for ethanol production and exports, rising energy costs began to trim profit margins for farm and nonfarm businesses alike.

This article reviews the state of the rural economy in 2007 and discusses its prospects for 2008. The first section examines the booming farm economy. The second section describes the modest, but steady, expansion on Main Street. The third section explores opportunities for

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the rural economy in the year ahead as well as the limits higher energy and production costs could place on this upside potential.

I. A FARM SECTOR BOOM

In 2007, farm incomes unexpectedly reached record highs. In February, the U.S. Department of Agriculture (USDA) predicted that 2007 net farm income would rise to $66.5 billion. After the August and November revisions, USDA forecast that net farm incomes would reach a nominal record of $87.5 billion, 47.6 percent above 2006 levels and 31 percent above the February forecast (Chart 1). Strong ethanol demand and rising exports fueled a sharp rise in crop revenues, and gross livestock receipts advanced solidly despite higher feed costs. Farmers used their profits to pay off debt, purchase equipment, and expand land holdings. As the year came to a close, farmers stood on solid financial ground.

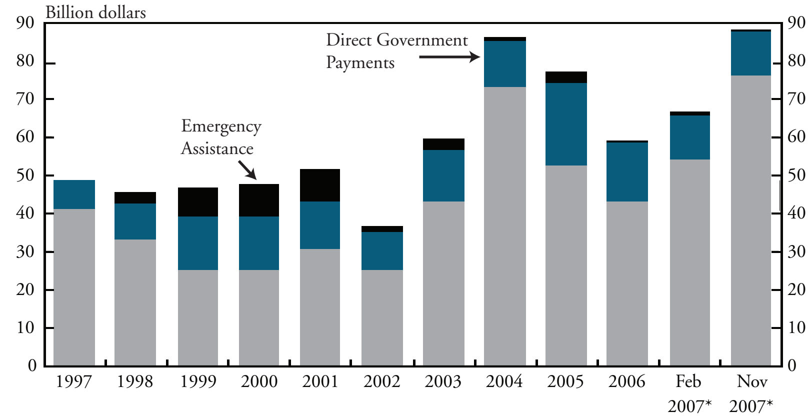
Rising demand boosts crop revenues

The surge in U.S. farm income emerged primarily from U.S. crop producers. Easing drought conditions led to rising production levels in 2007. Growing export and ethanol demand allowed crop producers to sell their bountiful harvest at strong price levels. Elevated crop prices, however, further curbed agricultural subsidies, and rising production costs limited the potential for even higher record incomes.

Drought conditions eased across most of the nation in 2007. Spring rains helped replenish topsoil moisture and led to favorable growing conditions during the summer. U.S. corn yields rose 2.6 percent in 2007 and contributed to a record corn crop as farmers increased corn plantings in light of higher corn prices at the beginning of the year.[1] Wheat yields also rose 5.2 percent despite heavy June rains that spoiled parts of the wheat crops in Kansas and Oklahoma. Coupled with a rise in harvested acres, U.S. wheat production rose 14 percent. However, a dry August in the Eastern Corn Belt and the Southeast dragged down U.S. soybean yields. The increase in planted acres of corn came at the expense of soybean production, which plunged 18.6 percent due to the lower yields and reduced plantings.

Changes in U.S. production patterns significantly influenced global supplies. World corn production surged with the bumper U.S. corn

Chart 1
U.S. NET FARM INCOME



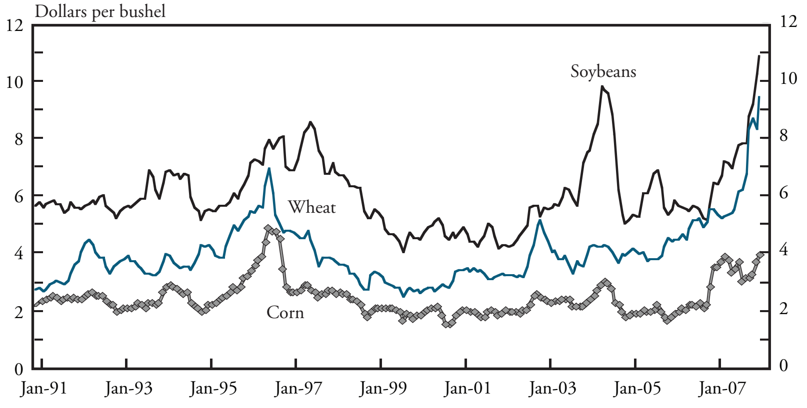
Source: USDA
* Forecast

crop. The rebound in U.S. wheat production helped offset drought-reduced harvests in Australia and some Eastern European countries, limiting gains in global wheat production to a meager 1.2 percent. The drop in U.S. soybean production led to a 5.9 percent decline in world soybean production.

In the face of lean supplies, robust demand further cut world crop inventories, fueling a surge in crop prices. Strong ethanol demand consumed 24 percent of the record U.S. corn crop, while growing global demand for farm products boosted U.S. corn exports 15.2 percent. Consequently, corn inventories stayed tight and corn prices exceeded the $3 mark throughout the year (Chart 2). Robust global demand also fueled a 29.3 percent surge in U.S. wheat exports and slashed wheat inventories to another record low. While U.S. soybean exports declined with U.S. production, total foreign trade projections for the 2007 soybean crop rose 6 percent, trimming soybean inventories.

By year-end, the momentum in crop markets had shifted from corn to the soybean and wheat markets. Early in the year, corn prices had jumped relative to soybeans and wheat, prompting farmers to plant more acres of corn. By fall, strong demand for wheat and soybeans was straining existing crop supplies, sending soybean and wheat prices

Chart 2
U.S. CROP PRICES



higher relative to corn as the market tries to entice farmers across the globe to plant more soybeans and wheat.

Higher crop prices held government support payments relatively low in 2007. Government farm payments fell to $12.1 billion, down from $15.7 billion in 2006 and the record $24.4 billion in 2005.[2] Payments under the countercyclical and loan deficiency programs vary with crop prices, rising when prices are low and falling when they are high. The sharp rise in crop prices following the fall harvest suggests that government payments could remain relatively low in 2008. At the time of writing, current discussions on a new farm bill suggest little change in farm programs.

Rising costs trim livestock profits

Stronger livestock demand helped offset rising production costs in 2007. Gross livestock revenues rose 17 percent due to modest supplies and rising export demand, fueled in part by a lower value of the dollar and solid economic gains in foreign countries. By the end of the year, however, livestock producers were struggling to post profits in the wake of soaring feed and other input costs.

The continually rising production costs led to increased slaughter and limited herd expansions. Competition with ethanol for corn and drought conditions in the Southeast translated into higher feed and forage costs. In response, livestock producers sent more livestock to slaughter, raising meat output in the short term, but reducing the breeding herds necessary to boost supplies in the future. For example, in the cattle industry, rising feed costs encouraged producers to keep cattle on pasture longer and to slaughter cattle at lighter weights to shorten the length of time cattle were on expensive feed. The result was stable beef supplies, as larger numbers of cattle were sent to slaughter but at lower weights compared to 2006.[3] Poultry production was flat as well, as increases in the number of birds slaughtered offset lower weights. In the pork industry, production rose 3.3 percent with lower mortality rates boosting hog slaughter numbers. The dairy herd held steady in 2007, while increased productivity lifted milk production 2 percent over 2006 levels.

Given the modest rise in livestock production, livestock revenue gains were driven by demand, especially export demand. The higher demand was supported by solid economic gains in foreign countries and the lower value of the dollar, which makes U.S. exports more affordable in foreign markets. The biggest gains emerged in the dairy sector, where strong export demand for dried milk products pushed milk prices above $20 per hundredweight by the second half of 2007 and boosted dairy revenues 50 percent above 2006 levels. After falling in 2006, gross revenues from cattle and hogs rebounded in 2007 with increased slaughter. Poultry revenues rose 25 percent during the year due to strong export demand.

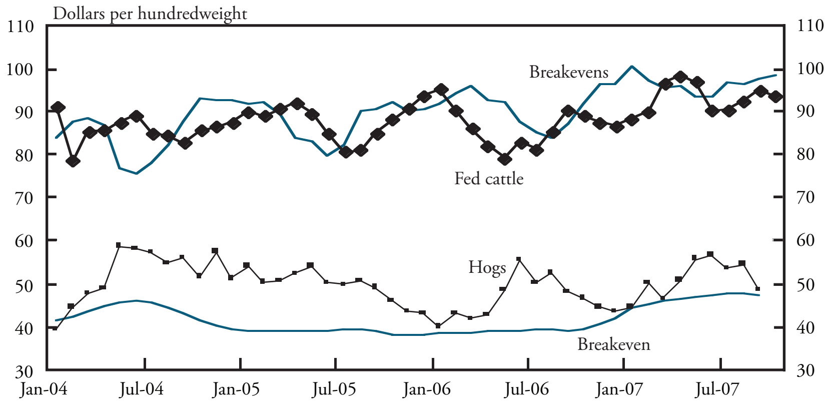
While gross revenues rose in 2007, higher feed costs kept net profits razor thin. According to USDA, feed costs rose 22.5 percent during the year, with the biggest gains coming in the fourth quarter. As a result, cattle feedlot operators operated in the red for most of the year, especially in the fourth quarter (Chart 3). Hog profits declined significantly, and losses are expected in the fourth quarter. The price-cost margins for poultry producers also fell sharply. Heading into 2008, the livestock sector is struggling in the face of higher feed costs.

Farmers increase spending amid solid financial conditions

Rising farm revenues, which strengthened the farm income statement, also solidified farm financial conditions. According to USDA, net farm incomes reached a record high of $87.5 billion in 2007. Farmers

Chart 3

U.S. LIVESTOCK PRICES AND BREAKEVENS



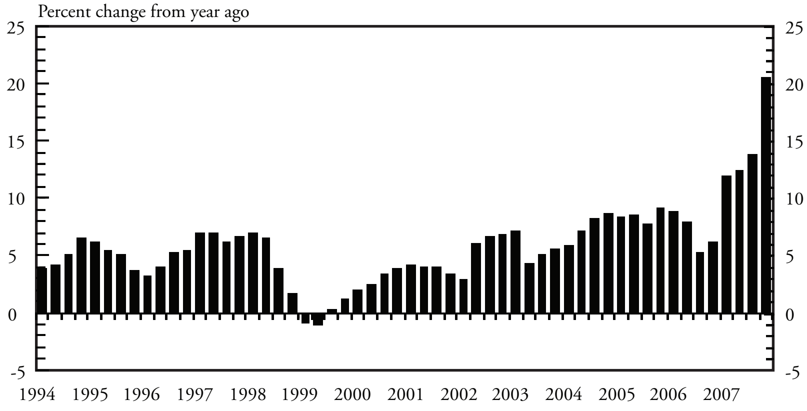
Source: USDA and Iowa State University

used increased incomes to pay off debts, upgrade equipment, and purchase land. Asset values climbed further, bolstering farm balance sheets.

Rising farm incomes were first employed to pay off existing operating loans. Across the nation, agricultural bankers responding to agricultural credit surveys at Federal Reserve Banks reported higher repayment rates and fewer loan renewals and extensions for non-real estate loans. In fact, the Federal Reserve Bank of Kansas City reported the highest level of loan repayment in a decade. Anecdotal comments indicated that farmers were using cash to pay down existing debt before engaging in investment activity.

Still, the strong balance sheets enabled farmers to finance purchases of both farm equipment and real estate. According to USDA and Federal Reserve surveys, demand for farm loans increased in 2007 along with capital spending. USDA forecast that non-real estate debt would rise 2.8 percent in 2007. At the same time, increased corn production and bumper crops led to substantial increases in farm equipment purchases and construction of grain storage facilities, primarily in the Corn Belt. The Association of Equipment Manufacturers indicated that during the first eleven months of 2007, combine and four-wheel drive tractor sales rose 15.6 and 21.6 percent on an annual basis, with the biggest sales emerging after the fall harvest.[4] Anecdotal reports from

Chart 4
NON-IRRIGATED FARMLAND VALUES
(FEDERAL RESERVE BANK OF KANSAS CITY)



Source: Federal Reserve Bank of Kansas City

agricultural bankers also indicated that, after a summer lull, farmland sale transactions picked up.

Rising farm incomes were quickly capitalized into farmland values. Farmland value gains intensified during the first quarter of 2007 after crop prices surged to close 2006. The price gains emerged first in the Corn Belt. The Federal Reserve banks in Chicago, Kansas City, and Minneapolis reported that nonirrigated farmland values in the first quarter of 2007 rose more than 10 percent above year-ago levels.

Price appreciation stabilized during the summer only to accelerate in the fall after a post-harvest surge in crop prices. For example, in the Kansas City District, nonirrigated cropland annual price appreciation held at 12 percent in the second quarter but accelerated to just over 20 percent in the fourth quarter (Chart 4). Irrigated cropland and ranchland values also experienced rapid price appreciation. Bankers in the district reported that higher land values were enticing farmland owners, especially investors, to put their land up for sale. Anecdotal evidence indicated that more land was being sold under auction than by private treaty.

Higher land values bolstered farm balance sheets as rising asset levels more than offset rising debt levels. According to USDA, total farm assets rose 12 percent in 2007, led by a robust 13.7 percent gain in total real estate assets, along with a rise of 7 percent in other farm financial assets. Farm debt levels rose a more moderate 3.8 percent, led by a 4.6 percent increase in real estate debt and a 2.8 percent increase in non-real estate debt. The rise in farm assets pushed farm debt ratios to historically low levels, with USDA's debt-to-asset ratio forecast falling to 9.7 percent for the year.

II. SLOW, STEADY GAINS ON MAIN STREET

The rural nonfarm economy made slow, steady gains in 2007. Main Street activity was buoyed by strong activity in energy and high-skilled services.[5] Much like the national economy, despite slower overall job growth, rural labor markets remained tight, and growth in rural incomes was solid. As in 2006, rural areas trailed metro areas in overall growth, and economic gains remained unevenly distributed across rural America.

Main Street businesses added jobs at a modest pace in 2007. Job growth in rural places slid throughout the year, slipping to an annual average growth rate of 0.4 percent through November. Job growth slowed dramatically in the third quarter, coinciding with weak job gains at the national level.[6]

Still, the modest growth was enough to keep rural labor markets in an extremely tight condition, spurring stronger gains in rural earnings. The rural unemployment rate, 4.6 percent in November 2007, remained low by historical standards and lower than metro unemployment rates, after edging up from 4.5 percent in 2006.[7] Anecdotal evidence suggests that rural businesses were still challenged to find and retain high-skilled workers (engineers, computer technicians, welders, etc). In some regions, businesses reported difficulty finding lower-skilled workers at existing wages. As a result, the tight labor markets supported further strength in rural wages. After rising 3.1 percent in 2006, average weekly earnings had risen 4.4 percent above year-ago levels in November 2007 and outpaced metro gains for the second consecutive year.

Natural resource industries, especially mining and energy, were the biggest engines of nonfarm growth for rural America in 2007. The rising price of oil prompted a rebound in the number of U.S. drilling rigs, and coal and natural gas production remained robust. Growth in the energy sector continued briskly, with exploration and mining firms boosting industry job rolls in rural areas. Though job growth waned when oil prices slid in the summer, surging oil prices fueled a rebound in energy employment to end the year. At the same time, average weekly earnings in the rural mining sector soared 35 percent. The expansion in renewable fuels production spread the energy impacts beyond the traditional mining and oil and gas regions. In the Midwest, many rural communities experienced a boom in local ethanol production. Moreover, the number of megawatts generated from wind power jumped 25 percent in 2007 after an equally large gain in 2006.[8]

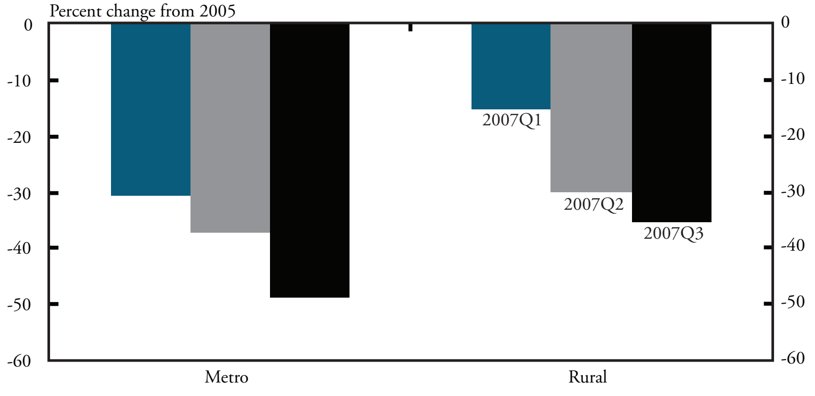
The expansion in service-related activity continued on Main Streets in 2007, with the biggest gains emerging in those sectors hiring high-skilled workers. Education and healthcare firms, which are the largest rural employers and hire many high-skilled workers, added the most jobs. Annual job growth reached 3.1 percent by November, although earnings were flat. The solid job expansion in professional and business services, which includes lawyers, accountants, architects and engineers, continued in 2007, posting 4.6 percent annual job growth, outpacing last year's gains. Employment in the financial activities and information sectors increased slightly, although financial industry difficulties in the second half of the year limited gains for the year. In contrast to metro areas, government employment in rural communities declined slowly throughout the year.

Despite overall declines in rural retail jobs, rural tourism continued to expand. Rural retail employment fell 5 percent in 2007. Even with rising gas prices, the tourism industry fared well, with modest employment gains in leisure and hospitality. Solid tourism growth supported strong job gains in rural America's high-amenity and recreation destination counties.

After fluctuating throughout the year, rural distribution, transportation, and utility companies posted solid gains. Employment in the transportation sector rose solidly, and wholesale trade jobs held steady. However, anecdotal reports indicate that the transportation sector struggled to post profits due to higher fuel costs. Still, hiring was up as the rural transportation industry strained to move the large 2007 crop. In addition, utilities were faced with extensive repairs in some rural areas after harsh winter weather.

Following national trends, weaker manufacturing activity precipitated some rural job losses. Mass manufacturing layoffs in both metro

Chart 5
RURAL AND METRO SINGLE-UNIT HOUSING PERMIT GROWTH



Source: U.S. Census Bureau

and rural areas spiked in the fourth quarter of 2006 and then tapered off in 2007. Rural manufacturing jobs declined around 2.5 percent, roughly double the losses seen in metro regions. Even with declining job rolls, average weekly earnings in the rural manufacturing sector remained stable.

The national housing market correction spread to many rural communities, but the impact was more modest than in urban neighborhoods. Through the first ten months of the year, rural building permits fell sharply, more than a third below peak levels for the nation in 2005. However, the steep declines in rural housing permits were substantially less than the nearly 50 percent declines posted in metro housing permits (Chart 5).

Despite a cool housing market that initially caused cutbacks in employment, the rural construction industry rebounded, adding jobs as the year progressed. Anecdotal reports indicate that many construction workers shifted from residential to commercial projects, where labor demand remained strong. Some of the bigger gains emerged in the Midwest, where agricultural construction projects ranged from building ethanol plants to erecting grain storage facilities. Moreover, some energy-producing regions were reporting stronger commercial construction activity.

While the nonfarm rural economy slowed along with the nation in 2007, rural areas still experienced steady economic growth, although the gains were not evenly distributed across geographic regions. Job growth remained strongest in and around the larger rural communities that serve as economic hubs outside of metro areas. Service-based and energy-related jobs continued to pace rural job gains, while slowdowns in manufacturing and housing activity dampened growth in some areas. Despite industry specific lulls in employment gains, rural incomes rose and economic prospects remained positive for Main Street businesses as 2007 came to a close.

III. WILL HIGHER COSTS TRIM RURAL PROSPERITY?

As 2008 approached, some questions emerged about the rural economic outlook. Economic forecasters expected slower activity in the first half of the year, followed by a rebound. If the Main Street economy continues to follow tradition and track national trends, rural nonfarm activity could experience a rebound after a sluggish start. Moreover, stronger export activity and rising ethanol mandates could add fuel to the rural economy. However, both farm and nonfarm businesses face higher input costs, which could dampen hopes for new opportunities in rural America.

Will housing dampen the rural economy?

Economic activity on rural Main Streets typically tracks national economic conditions. If this trend continues, the rural nonfarm economy could slow in 2008 with the national economy. Federal Reserve forecasts expect growth in the national economy to soften in 2008. In November 2007, the Federal Open Market Committee released estimates of national economic growth, indicating that U.S. gross domestic product was expected to rise 1.8 to 2.5 percent in 2008, following a 2.4 to 2.5 percent rise in 2007. The current outlook suggests GDP growth will remain sluggish in the first half of the year but then strengthen as the year progresses (Hoenig). Thus, Main Streets could experience a similar second-half rebound.

Several key sectors of the rural economy posted solid gains heading into 2008. Mining activity expanded during the fourth quarter of 2007 and could remain robust with elevated energy prices. Rural construction activity remained solid heading into the winter construction season. Heading into 2008, high-skilled service growth posted strong gains, and tourism activity associated with leisure and hospitality firms held steady despite higher gasoline prices. Even in manufacturing, where increased productivity was limiting job gains, anecdotal reports indicate that a weaker dollar could underpin some strength in export activity in 2008 as rural factories compete in global markets.

Of course, one of the biggest drags on the national outlook is housing. In rural places, however, last year's housing decline was less dramatic and foreclosure issues less prevalent than in metro places. According to Federal Reserve data, roughly 90 percent of all subprime loans and subprime loans in foreclosure in October 2007 were located in metropolitan communities. As a result, housing weakness could have a less severe impact on rural America's economy than on that of the nation.

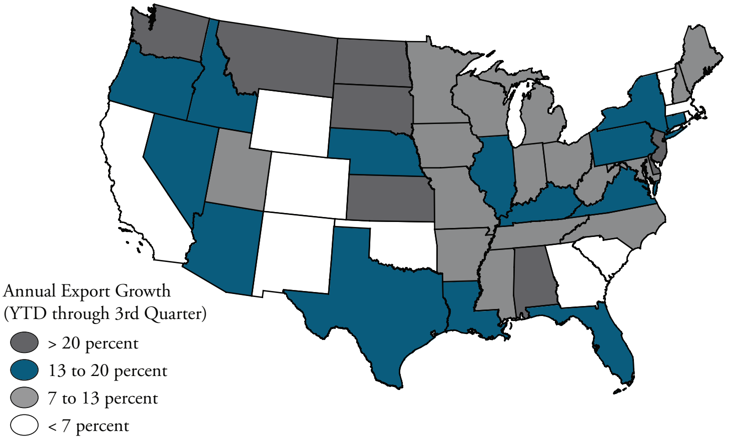
However, a 2007 study of rural home price appreciation found that rural home prices might be susceptible to a larger drop than metro prices (Dismal Scientist). From 2004 to 2006, metro areas and rural places, especially vacation destinations and rural places heavily influenced by urban sprawl, enjoyed similar home price appreciation, roughly 13 percent (Pozsar). The demand for affordable new home construction brought plenty of new homebuyers and developers to these rural communities. In a weaker housing market, the reverse could materialize. In the year ahead, disincentives like higher gasoline prices and longer commutes could limit housing demand, especially in rural communities that surround metro areas.

Can export activity drive rural output?

Increased export activity could provide a spark to rural America's agricultural and industrial base. Exports have always played an instrumental role in the rural economy, especially in agriculture. To be sure, a weak dollar can translate into higher import prices on goods purchased abroad, but can it support further export gains for rural America?

Expectations for U.S. exports are rising. At the start of 2008, the value of the dollar was down roughly 7 percent annually against most major currencies, with the biggest declines against the Canadian dollar

Map 1
MANUFACTURED EXPORT GROWTH (2005 TO 2007)



Source: WISERTrade

and the euro. Through the third quarter of 2007, the currency difference had contributed to a 13.5 percent annual gain in total exports, and some private forecasters expected further gains in 2008. The 2007 export gains were spread across the country, with rural states, especially in the Great Plains, enjoying strong growth in manufactured exports (Map 1).

Agricultural exports also strengthened. After a strong 12.3 percent annual gain in 2006, agricultural exports jumped 24 percent in 2007, with robust gains in both bulk commodities and processed goods. The surge was driven by increases in both the price of exported goods and the quantity of goods shipped. Agricultural export growth accelerated as 2008 neared, coinciding with the decline in the value of the dollar and increased production. Extremely tight global crop inventories should also boost exports in the coming year.

Future growth in agricultural exports will be driven not only by a weaker dollar that makes U.S. goods more affordable in foreign markets, but also by income gains in other countries that allow their consumers to buy U.S. products. Globally, more than 3 billion people live on less than $2 per day. After incomes reach $10 per day, people tend to consume more processed foods, a market in which U.S. agriculture is highly competitive (Thompson). The International Monetary Fund forecasts that world economic activity and incomes will rise markedly in 2008, especially in Asia. For example, in China and India, where 46.7 and 78.9 percent of their respective populations earn less than $2 per day, economic activity is expected to grow 8.4 and 10 percent. Such gains in global incomes could again support rural export growth, especially if Asian trade restrictions on U.S. beef are eased.

How much fuel is left in ethanol production?

Entering 2008, elevated corn prices continue to challenge the ethanol industry. Higher costs and a drop in ethanol prices trimmed profits and limited the ethanol expansion in 2007. Going forward, despite an expanded renewable fuels standard, the industry still faces challenges associated with building market-based demand, solving transportation issues, and responding to a potential restructuring of the ethanol industry.

Throughout 2007 and early 2008, the ethanol industry saw record profit opportunities disappear as input costs skyrocketed. After spiking in the fall of 2006, corn prices in 2007 remained persistently high, as demand for corn outstripped a bin-busting corn crop. Meanwhile, ethanol production surged, prices for ethanol dropped, and revenues for producers suffered, slashing profit margins.

Profit opportunities became more elusive in the second half of 2007 as the ethanol boom slowed. Entering 2007, ethanol production surged, jumping 32 percent above year-ago levels. But the pressure to expand ethanol production slowed when the industry reached 7.5 billion gallons of ethanol, the level mandated in 2005 by the Renewable Fuels Standard. As ethanol profits fell, several plants under construction were put on hold. Moreover, the industry continued to grapple with ways to transport large quantities of ethanol and the distilled grain by-products.

One lesson of 2007 was that ethanol is still a policy-driven industry. That is, government policy in the form of mandates and subsidies will drive profitability in the ethanol industry going forward. As a result, the new renewable fuels mandate established in December 2007, which requires 9 billion gallons of renewable fuels in 2008 and a progressive increase to 36 billion gallons by 2022, could reignite another cycle of expansion in ethanol production capacity that might taper off as mandates are reached.

As the industry gears up in 2008 to fulfill the new mandates, the primary question will be: Who will build the new ethanol capacity? In other words, which ethanol plants are in the best position to compete in a market with tighter profit margins? For example, will firms with lower fixed costs—that is, older firms that have already paid for facilities and larger firms with better economies of scale—be in a better position to weather tighter profit margins?

Record profits in 2006 brought new players to the ethanol industry. In addition to farmer-owned processors and large processors such as ADM and Cargill, a new type of venture-capital-backed ethanol producer emerged. As a result, in 2006 and 2007, only 11 percent of new ethanol plants were farmer-owned, down from roughly 70 percent in prior years. While increased ethanol mandates may support additional growth in the ethanol industry, the economic structure of the ethanol industry in the future may become less concentrated in farmer-owned facilities.

Will rising production costs trim rural profits?

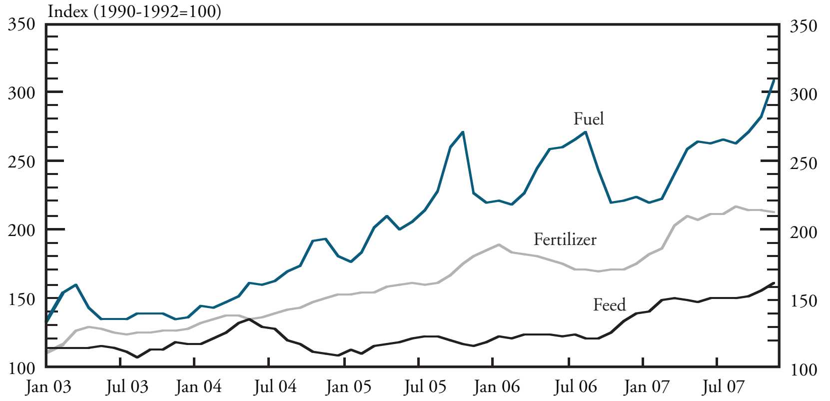
Expectations of a stronger national economy, growing global demand, and robust ethanol demand could underpin another year of economic growth in rural communities. However, rising production costs could trim some of this upside potential.

Heading into 2008, higher energy costs fueled higher input prices for many rural businesses and transportation costs for rural workers. Anecdotal reports indicate that manufacturers face fuel surcharges for transporting raw materials and finished goods. Rural transportation firms also report serious challenges in making ends meet as fuel costs rise.

Research also indicates that higher energy costs, especially gasoline prices, have a disproportionately greater impact on rural than urban households. Rural households in 2006 spent roughly 22 percent more on gasoline expenses than their urban counterparts (Shoemaker, McGranahan, and McBride). In addition, rural workers tend to travel longer distances to work than their urban counterparts, and they are more dependent on truck and automobile transportation.

In the farm sector, production expenses surged in 2007, and these pressures intensified heading into 2008. Farm production expenses rose 9.3 percent in 2007, the biggest annual increase since 1979. Energy-related costs experienced large gains, with energy and fertilizer expenses

Chart 6
FARM PRODUCTION COSTS



Source: NASS, USDA

jumping 8.8 and 19.1 percent, respectively. Bin-busting fall harvests strained storage capacity and transportation systems, which, coupled with higher fuel costs, sparked an 11.1 percent rise in transportation and storage expenses. Higher crop prices led to 22.5 and 13.1 percent increases in feed and seed costs, respectively.

As 2008 approached, cost pressures in agriculture intensified. Feed, fertilizer, chemical, and fuel prices rose sharply (Chart 6). The costs for farm machinery edged up. Early in the year, both cattle and hog feeders were operating in the red as prices dipped below break-even levels. Profit margins for crops planted in 2008 may also fall victim to rising prices. Rising costs could diminish profit opportunities for both farm and nonfarm businesses alike.

In sum, the rural economy in 2008 is poised for another year of economic gains. As with the national economy, the stage is still being set. Main Street activity has slowed, but could rebound in the second half of the year. Ethanol demand and export activity may support another year of robust farm incomes. A stronger national economy in the second half of the year, vibrant demand from ethanol, and increased export activity are factors that could help Main Streets and farm gates enjoy another profitable year in 2008. However, the long-term sustainability of profits is a concern in a period of high and volatile commodity prices. With economic opportunities like these possible, rising production costs will determine how prosperous rural America will be in the year ahead.

ENDNOTES

[1]Crop production and yield information was obtained from the World Agricultural Supply and Demand Estimates.

[2]Farm income, government payments, and farm production costs are from the Economic Research Service, USDA.

[3]Livestock production numbers are from the Livestock, Dairy, and Poultry Outlook published by USDA.

[4]Combine and tractor sales information is from the U.S. Ag Flash Report, *www.aem.org*.

[5]In this article, rural areas are equivalent to nonmetropolitan areas.

[6]Calculations are based on Bureau of Labor Statistics state and metro payroll data. Job growth at rural businesses is based on the Current Employment Statistics (CES) survey conducted by Bureau of Labor Statistics. Employment growth at rural households is based on the Local Area Unemployment Statistics (LAUS) survey conducted by the Bureau of Labor Statistics.

[7]The rural unemployment rate and weekly earnings data are obtained from the Current Population Survey.

[8]Data on U.S. wind energy projects are available from the American Wind Energy Association, *www.awea.org*.

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