

# Recession Catches Rural America

*By Jason Henderson and Maria Akers*

**A**s the recession intensified in 2008, rural economies held firm. Through the first half of the year, strong commodity prices supported robust farm incomes and contributed to relatively stronger gains on Main Street. Moreover, the housing correction was less intense than in urban areas, and the financial crisis was less severe than on Wall Street.

While these factors shielded the rural economy from the worst of the recession, rural America was not immune. The foundations of rural economic strength in 2008—high commodity prices, robust export activity, and rising ethanol demand—were crumbling. Consequently, the booming farm economy began to slow, and, following national trends, the nonfarm economy continued to falter.

This article reviews the state of the rural economy and discusses prospects for the year ahead. The first section examines the robust farm economy in 2008. The second section describes the weaker, but relatively stronger performance on rural Main Streets compared to their metro peers in the face of weak housing markets and a financial crisis. The

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third section explores how the recession could affect the rural economy in 2009. A rural rebound will rest on whether the fiscal and monetary stimulus packages spark demand for rural goods and services.

## I. ROBUST FARM INCOMES IN 2008

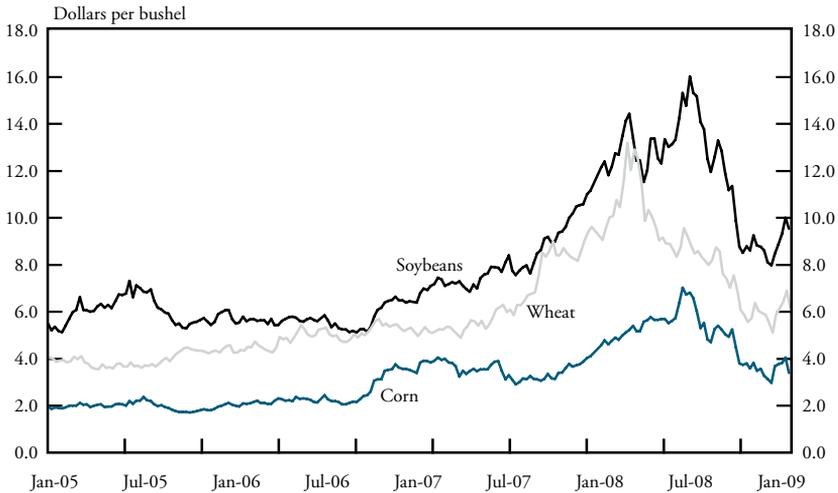
The U.S. farm sector enjoyed an unusually prosperous year in 2008. A summer surge in commodity prices boosted gross revenues for crop producers, although the high prices limited government payments and cut profit opportunities in the livestock sector. A sharp rise in production expenses for both the crop and livestock sectors kept net farm income at \$87 billion. Robust farm incomes supported record farmland value gains and further solidified farm balance sheets. The fourth-quarter collapse in commodity prices, however, led to dramatic declines in farm income expectations and credit conditions.

### *Robust profits despite volatile crop markets*

Crop producers enjoyed a profitable year in 2008 despite the extreme volatility in crop and input markets. During the spring planting season, crop prices surged amid strong global demand and low inventories. As summer approached, input prices spiked with rising energy prices. During the fall harvest, though, the global recession trimmed demand, placing downward pressure on crop prices. Despite the turbulent market conditions, crop producers enjoyed historically high profit levels in 2008.

The volatility in crop prices was extreme in 2008. Heading into the year, crop prices were surging as both global and ethanol demand, coupled with lean supplies, intensified competition for planted acres (Chart 1). In February, winter wheat prices peaked at \$14 per bushel, more than double 2007 prices. Price gains for spring wheat were even larger. Higher prices in the wheat market contributed to a steady rise in corn and soybean prices that intensified as cold, wet weather delayed spring planting. Prices for corn and soybeans ultimately peaked at record highs in early July, averaging \$5.00 and \$12.00 per bushel, respectively, for the year—over 40 percent above the 2007 average. Agricultural commodity prices fell sharply at the end of the year, threatening 2009 farm incomes and trimming income forecasts for 2008.

Chart 1  
U.S. CROP PRICES



Source: Commodity Research Bureau

Farmers responded to the elevated crop prices by reallocating crop acreage and increasing production. In 2007, strong ethanol demand had sparked record-high corn plantings at the expense of soybean production.<sup>1</sup> In 2008, the stronger jump in soybean prices and delayed spring plantings enticed farmers to plant more soybean acres and trim corn acres. Meanwhile, record wheat prices led to a rise in U.S. wheat acres at the expense of cotton production.

The combination of increased planted acres and above-average yields led to a rise in U.S. food crops. Following two years of drought and disease-reduced harvests, wheat producers harvested their largest crop in 20 years, due to increased planting and above-average yields. Soybean production rose 9 percent, with increased planted acres offsetting a slight yield decline. American farmers also harvested the largest corn crop on record, due to large planted acres and a near-record corn yield. In addition to the bountiful U.S. harvest, global food production also rebounded in 2008.

Despite increased production, strong global demand and continued expansion in the U.S. ethanol industry kept grain inventories near record lows. Through the first half of the year, the low global supplies,

strong economic gains, and a weaker dollar underpinned robust export activity. U.S. agricultural exports rose to a record \$115 billion for the 2008 fiscal year, 40 percent above 2007 levels.<sup>2</sup> In addition, another sharp gain in U.S. ethanol production, which used a third of the U.S. corn crop, also trimmed corn inventories. Robust demand kept food crop inventories near historical lows and underpinned higher crop prices in 2008, despite sharp price declines at the end of the year.<sup>3</sup>

While higher crop prices and increased production helped boost crop incomes in 2008, low government support payments tempered crop revenues. After dropping substantially in 2007, government payments to the farm sector remained low in 2008, as payments tied to crop prices (such as the counter-cyclical and loan deficiency programs) declined due to strong crop prices. A surge in ad hoc and emergency payments for disaster assistance, however, offset the declines to keep direct government payments steady at \$12.5 billion.<sup>4</sup>

Crop profits were also limited by sharp gains in production costs. Rising energy prices quickly translated into higher crop production costs, especially for fertilizer and fuel. By June, fertilizer and fuel prices had jumped 65 and 26 percent, respectively, above year-ago levels. Land rents and seed prices also continued to climb with overall crop prices and profit expectations. Some input prices dropped with energy prices near the end of the year, but the decline came too late to trim costs for the 2008 crop.

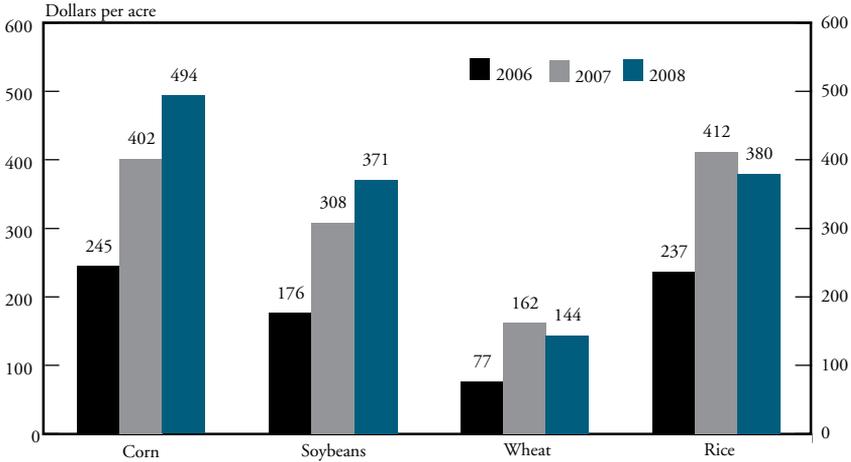
Still, rising crop prices more than offset input price gains in 2008. The Food and Agricultural Policy Research Institute (FAPRI) projected that 2008 gains in variable production costs would exceed 35 percent for corn, rice, soybeans, and wheat. Yet, the surge in crop prices boosted forecasts for net market returns (Chart 2). Net market returns to corn and soybean production were forecast to rise 20 percent, with more modest gains in rice profits and slight declines in wheat profits.

### *Livestock profits fall as feed costs soar*

Unlike crop producers, livestock producers struggled to post profits in 2008 as input cost increases outpaced price gains. The summer commodity boom supported gains in livestock prices and gross revenues. Feed costs rose more sharply than livestock prices, however, causing

Chart 2

## NET MARKET RETURNS TO CROP PRODUCTION (Gross Market Returns Minus Variable Costs)



Source: Food and Agricultural Policy Research Institute, August 2008

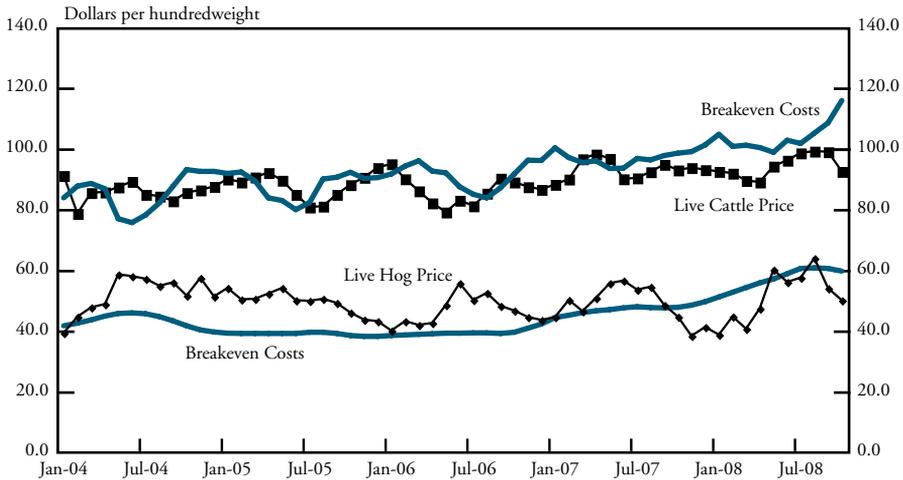
Note: Market returns only include revenues from the sale of crops and exclude government subsidy payments. Variable costs exclude fixed costs such as land, labor, depreciation, insurance and taxes.

most livestock enterprises to operate at, or below, breakeven levels for most of the year.

Strong export activity, especially early in the year, underpinned historically high livestock prices. As the year began, strong world economic growth and the relatively low value of the dollar made U.S. agricultural products attractive in global markets. The highly anticipated reopening of the Korean market for U.S. beef boosted beef exports 35 percent, and a pre-Olympic surge of pork exports to China helped boost pork exports 60 percent, both increases achieving record highs.<sup>5</sup> Gains in poultry exports exceeded 20 percent for the same period, mainly due to larger shipments to Russia, the combined China/Hong Kong market, and Mexico. Dairy exports also strengthened due to drought-reduced supplies in Australia and New Zealand and high relative milk prices in Europe. By July, live cattle and feeder calf prices rose to \$101 and \$111 per hundredweight, respectively, up from \$85 and \$99 per hundredweight in April (Chart 3). Hog prices also experienced a summer rebound, reaching \$65 per hundredweight in August, up from \$30 per hundredweight in January.

Chart 3

## U.S. LIVESTOCK PRICES AND BREAKEVEN COSTS



Source: USDA and Iowa State University

Coupled with higher prices, increased livestock production helped boost gross livestock revenues. Livestock producers typically respond to higher feed costs by liquidating herds, which expands short-term livestock production. In 2008, high crop prices boosted feed costs, and livestock producers responded by culling breeding stocks and boosting heifer and sow slaughter.<sup>6</sup> As a result, meat and poultry production rose 2.9 percent, and higher prices boosted farm-level meat and poultry receipts 5.9 percent. Dairy receipts remained historically high as cheese and butter price increases partly offset milk price declines.

Despite higher gross revenues, high feed costs limited profit opportunities for livestock producers. Nationally, feed costs jumped 23 percent in 2008. As a result, cattle and hog feeders operated at, or below, breakeven levels for most of the year (Chart 3). Dairy producers also experienced thin profit opportunities with slightly weaker milk prices and high feed costs. Poultry producers faced the biggest increases in feed costs, with the bankruptcy of Pilgrim's Pride highlighting the struggles facing the livestock industry (Schmit 2008).

### *Healthy farm balance sheets*

Despite rising input costs, the farm sector enjoyed another profitable year in 2008. Net farm incomes held at historically high levels and

contributed to healthy farm balance sheets. According to the U.S. Department of Agriculture (USDA), real net farm income for 2008 was \$86.9 billion, slightly below the \$89.0 billion posted in 2007 (Chart 4). Farmers used profits to increase farmland holdings, purchase equipment, and pay off loans.

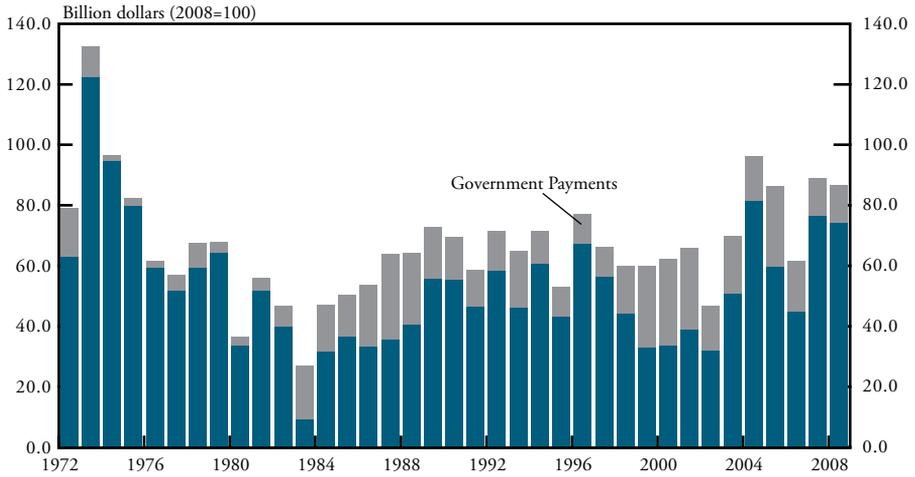
Demand for farmland remained strong as surging commodity prices increased the value of crop production. Following strong appreciation in 2007, farmland values continued to climb in 2008, according to Federal Reserve agricultural credit surveys, posting another round of robust year-over-year gains. This was especially evident across the Corn Belt, where third-quarter annual farmland value gains were 15 percent in Illinois, 17 percent in Iowa, and a record 28 percent in Nebraska. The Kansas City District posted the strongest annual farmland gains in survey history in 2008, rising more than 20 percent above 2007 levels (Chart 5).<sup>7</sup> Irrigated land and ranchland also commanded higher prices in 2008. A substantial rise in cash rental rates of over 20 percent in the Chicago and Minneapolis districts reflected more intense competition for farm acreage, further supporting land value gains due to increased income streams (Madden 2008, Oppendahl 2008).

While farmers expanded their land holdings, nonfarm demand remained solid, at least through the first part of the year. Bankers in the Kansas City District noted that the booming energy industry was contributing to rising farmland values in natural gas and oil producing states (Henderson and Akers 2008). Farmland with amenities suited for recreational use remained attractive to nonfarmers, though sales of farmland for nonagricultural use eased with the slowing economy.<sup>8</sup>

Strong farm incomes prompted an increase in capital spending through the third quarter. Bankers responding to Federal Reserve agricultural credit surveys indicated some farmers were investing profits in upgraded equipment and construction of onsite grain storage. In November, the Association of Equipment Manufacturers reported that 2008 sales of combine and four-wheel-drive tractors rose 22 percent annually.

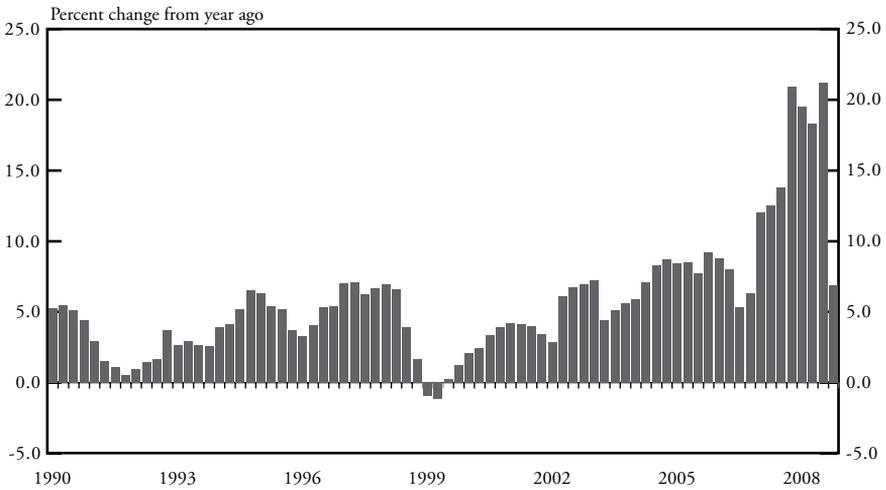
The value of farm assets rose more than farm debt levels, strengthening already healthy farm balance sheets. Real estate asset values, which account for roughly 85 percent of farm assets, rose 6.8 percent in 2008. Non-real estate assets rose 3.3 percent. Farmers used elevated incomes to keep debt levels in check. Loan repayments peaked in early 2008 when farmers marketed the remainder of the 2007 crop, and

*Chart 4*  
**U.S. REAL NET FARM INCOME**



Source: USDA

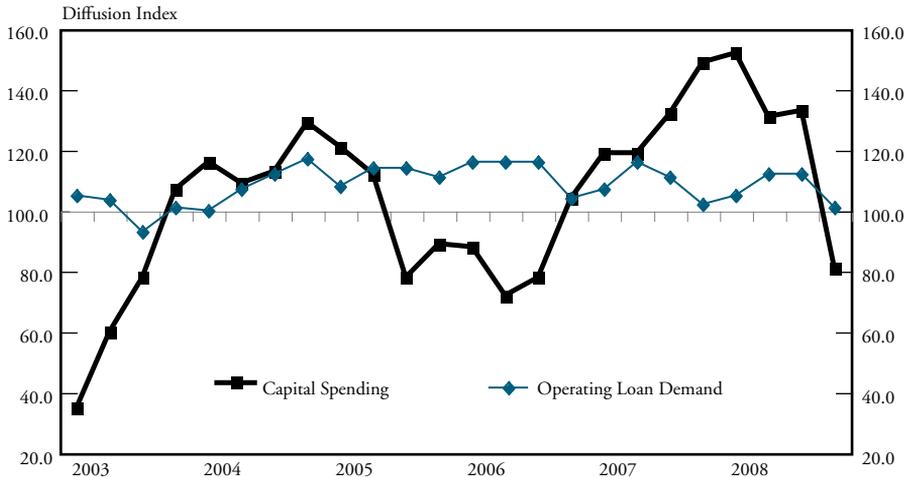
*Chart 5*  
**NONIRRIGATED CROPLAND VALUE GAINS**  
 (Tenth Federal Reserve District)



Source: Federal Reserve Bank of Kansas City

Chart 6

### FARM CAPITAL SPENDING AND OPERATING LOAN DEMAND (Tenth Federal Reserve District)



Source: Federal Reserve Bank of Kansas City

repayment rates remained high for the year. Loan renewals and extensions held at low levels throughout most of the year. Real estate and non-real estate borrowings increased a more modest 3.1 and 0.3 percent, respectively. As a result, the farm debt-to-asset ratio fell to a record low 9.2 percent in 2008.

Agricultural loan demand weakened as the year closed. Agricultural bankers reported that operating loan demand eased during the fourth quarter of 2008, partly due to lower input prices (Chart 6). In addition, bankers also reported weaker capital spending, which also slowed loan demand. The sharp decline in capital spending paralleled the fall in commodity prices and the deterioration in farm income expectations. Weaker farm incomes also translated into softer farmland values in the fourth quarter.

At the same time, the financial market crisis led to tighter credit standards at the end of the year. According to Federal Reserve agricultural credit surveys, commercial banks reported raising collateral requirements and increasing the use of guaranteed loan programs. Industry contacts reported that lenders were reducing the term on loans. It appears that rising credit standards were due to market uncertainty,

as bankers reported having funds available for agricultural loans. Increased risk likely contributed to wider spreads between farm interest rates and other rates. Rates on Farm Credit System bonds also rose toward the end of the year. While lenders had funds available, the cost of funds increased and, coupled with increased risk, led to tighter credit standards for agricultural loans as the year closed.

## II. SLOWER BUT SOLID MAIN STREET ACTIVITY

The booming farm economy helped shield Main Streets from steep economic contractions. Profits from the summer commodity boom flowed to many rural communities. And the recession, which started in the housing market and spread to financial markets, hit rural communities with less force.<sup>9</sup> Still, as the year progressed, rural economic growth slowed and the recession deepened.

As recession gripped the U.S. economy, rural communities continued to post modest economic gains throughout most of the year. Heading into 2008, rural employment gains remained approximately 0.5 percent above year-ago levels.<sup>10</sup> However, as the recession deepened, both households and businesses reported employment levels were below a year ago in November, the most recent data available at the time of writing (Chart 7).<sup>11</sup>

Still, rural economies outperformed their metro peers throughout 2008. And the gap between rural and urban growth widened as the year progressed. At the start of the year, rural and metro employment growth rates were roughly similar. By November, metro job losses approached 1 percent, while rural losses were only 0.4 percent.

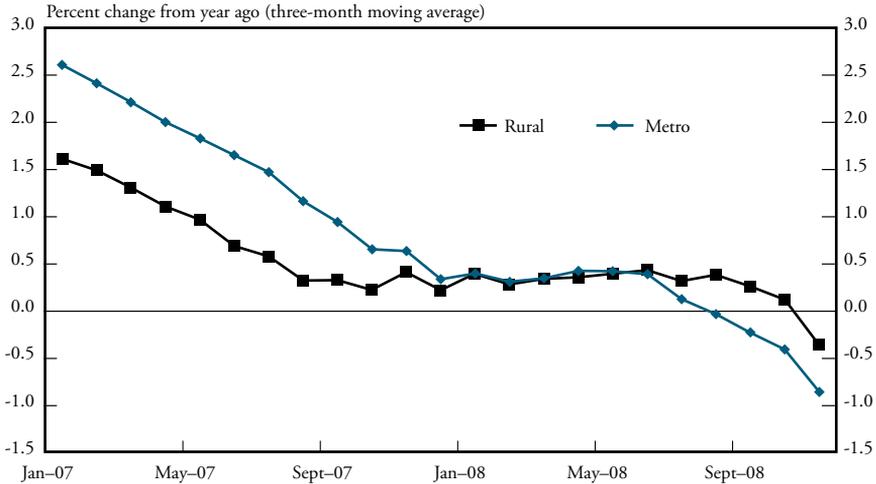
Employment losses were lowest in the most rural counties. Town counties (nonmetro counties without towns of more than 10,000 residents) experienced annual job losses of 0.2 percent in November. In contrast, micropolitan counties (nonmetro counties with at least one city of more than 10,000 residents) experienced annual job losses of 0.5 percent by November. During the same time frame, metro counties experienced annual jobs losses of 0.9 percent.

### *Commodity markets*

The relative strength of the rural economy was fueled in part by its large concentration of commodity-based industries. The spike in com-

Chart 7

## RURAL AND METRO EMPLOYMENT GROWTH



Source: Bureau of Labor Statistics

Note: Rural is defined as total employment in all nonmetropolitan counties.

modity prices during the first half of 2008 set the stage for strong economic growth in many rural areas. Rising agricultural commodity prices boosted economic gains in farm-dependent regions, as farmers increased their purchases of goods and services. Energy and mining-dependent regions also enjoyed stronger economic gains, as energy companies increased production, boosting the demand for energy-related goods and services. By November, rural employment growth was stronger in counties dependent on farm and mining activity, rising above year-ago levels by 1.0 and 1.1 percent, respectively. Moreover, natural resource and mining firms reported stronger job gains than other rural firms. Wage gains were also strong in the farm-related and energy firms.

### *Housing markets*

Rural economies also experienced a less-severe housing correction. Following national trends, rural construction activity has declined since peaking in 2006.<sup>12</sup> After declining 20 percent in 2007, rural single-family housing permits have fallen 38 percent below year-ago levels through the first 11 months of the year, compared to a 43 percent plunge in metro areas.

Similarly, declines in home prices have been less dramatic in rural than metro areas (Chart 8). In fact, rural home prices continued to rise through the first quarter of 2008, before declining over the summer (Wilkerson 2008). Yet, by the third quarter, rural home values remained 0.7 percent above year-ago levels, according to the Federal Housing Finance Agency (FHFA). In contrast, metro home values fell 6.6 percent annually, with 18 percent declines reported by the Case-Shiller index, which measures home values in larger metro areas.<sup>13</sup>

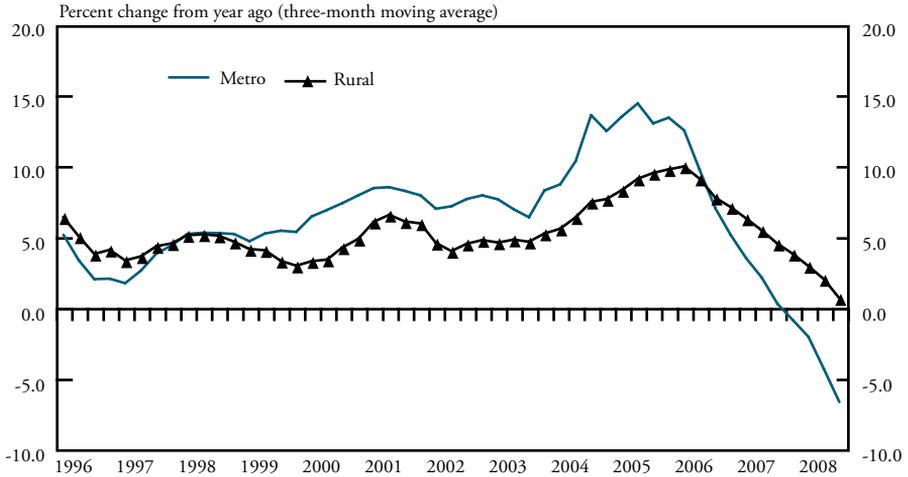
Several factors supported relatively stronger housing markets in rural areas. One, despite a sharp increase in home construction from 2004 to 2006, rural areas were not as over-built as metro areas. For example, from 2000 to 2005, in contrast to gains in metro areas, the number of single-family housing permits per capita in rural places declined. Two, rural home prices did not rise as sharply as metro home prices (Wilkerson 2008). Between 2004 and 2006, rural home prices rose more than 8 percent annually, up from the 5 percent annual gains since 1995. Despite this surge, home price gains in rural areas paled in comparison to gains in metro areas.

The weaker rise in rural home prices meant that rural prices were more closely tied to long-term fundamentals. Over time, home prices should rise in concert with personal incomes, as mortgage payments and loan values are typically based on household income levels.<sup>14</sup> According to the Bureau of Economic Analysis, from 2000 to 2006, rural per capita incomes rose 3.7 percent annually, well below the 6.6 percent annual gains in rural home prices. In metro areas, however, the gap between per capita incomes and home prices was wider, with incomes rising 3.4 percent annually compared to 9.4 percent gains in home values. While metro home prices have fallen dramatically to rebalance with long-term income gains, rural home prices have had to fall less.

Rural areas also appeared to have less exposure to subprime loans and foreclosures. From 2004 to 2006, the prevalence of subprime loans rose sharply, accounting for roughly a third of all loan originations in 2006 (Edmiston and Zalneraitis 2008). However, many of these loans were originated in locations with sharply rising home prices—that is, in metro places. In addition to less exposure to subprime loans, rural places also appear to have fewer subprime loan foreclosures. For example, national loan performance data and metro area data suggest that

Chart 8

## RURAL AND METRO HOME PRICE APPRECIATION



Source: Federal Housing Finance Authority

subprime loan foreclosure rates outside of metro areas were smaller than metro foreclosure rates.

### *Financial markets*

In addition to the less-serious blow from the housing correction, rural economies appear less shaken by the financial market turmoil. To be sure, rural businesses and stockholders were not immune to the collapse in the financial markets and stock market values that reduced overall wealth. However, rural areas lost fewer jobs due to the financial crisis.

Employment in rural financial service firms declined throughout most of 2008. In the first half of the year, rural financial service firms reported flat annual employment levels, compared to losses of over 1 percent by metro firms. This contrast was fueled by differences in the structure of the financial service industry across metro and rural areas. The financial market crisis hit Wall Street institutions particularly hard, as evidenced by the disappearance of investment banks through bankruptcies or conversions to bank holding companies. Rural areas had less exposure to investment bank activities and jobs. Investment banks and other financial institutions involved in securities, commodity contracts,

and investments accounted for a third of the earnings at metro financial institutions but less than 10 percent at rural financial institutions.<sup>15</sup> However, as financial market weaknesses spread beyond Wall Street, rural financial service firms suffered mounting job losses, with November employment down 1.3 percent from a year earlier, on par with metro losses.

### *Nonfarm activity ends the year on a weak note*

While rural places performed better than many metro places, they were not immune to the recession of 2008. Economic activity across a variety of sectors slowed in the second half of the year, leading to annual job losses by November. Beyond financial services, the trade, manufacturing, and distribution industries are the clearest examples of souring economic activity on rural Main Streets.

As the recession deepened, consumer demand fell sharply. Nationally, retail spending dropped below 2007 levels. Some rural regions, especially those dependent on agriculture and energy, continued to report stronger retail sales through the first half of the year. However, national contractions in retail demand spread to many rural places, leading to a 1.1 percent annual contraction in retail jobs by November. Moreover, jobs in the rural leisure and hospitality industries fell 0.4 percent annually, as recreational spending and business travel diminished.

Weaker economic growth prompted further job cuts in rural manufacturing. Over the 12 months ending in November, jobs in rural factories fell 3.2 percent, compared to a 2.9 percent decline in metro jobs. Still, factory closures and mass layoffs rose less in rural areas than metro areas, especially in the first three quarters of 2008. As a result, rural factories accounted for only a quarter of all mass layoffs and worksite closures in 2008, compared to a third of such closures in 2006. One area of strength in rural manufacturing can be attributed in part to its large concentration in the food and agricultural equipment industries.<sup>16</sup> Nationally, food and agricultural equipment manufacturing were among the few manufacturing sectors that *added* jobs in 2008. Food manufacturing employment rose 3.5 percent in 2008, and agricultural equipment manufacturing employment rose roughly 5.0 percent. However, with a weaker farm economy, the sustainability of these gains is in question.

The deepening recession and weaker manufacturing activity also hampered distribution industries. At the beginning of the year, strong export activity spurred a surge in activity on rail lines and at shipping ports. Some manufacturers reported challenges acquiring shipping containers to package shipments for foreign destinations. Other transportation modes were equally strained to move increased shipments and reported thin profits due to higher fuel costs. Later in the year, softer domestic demand and weaker export activity, due to slower global economic growth and a stronger dollar, resulted in less distribution activity and more job cuts. By November, after rising most of the year, rural transportation and wholesale jobs had fallen roughly 0.6 percent below year-ago levels.

### III. ECONOMIC PROSPECTS IN 2009

According to the December minutes of the Federal Open Market Committee of the Federal Reserve, the U.S. economy continues to face a weak housing sector, a financial market crisis, tighter lending standards, broad job losses, falling consumer and business confidence, and reduced spending by both consumers and businesses. Reductions in wealth from falling home values and stock market declines have further slowed consumer spending. Despite unprecedented fiscal and monetary stimulus, forecasts by both the private and public sectors project that economic contractions could extend into the first part of 2009.<sup>17</sup>

Following national patterns, rural economic conditions are likely to weaken further in 2009, especially during the first half of the year. Rural job losses steepened and unemployment rates rose sharply heading into 2009. Rural labor markets will likely remain weak until national economic conditions improve. Job losses and associated income reductions are likely to spill over to other segments of the rural economy, slowing consumer spending and curtailing business spending on Main Street. Industry contractions and tighter credit standards could further trim business investment if companies put capital spending projects on hold to cut costs.

Depressed global economies and weak commodity prices could cut farm and energy incomes in 2009. Farm income expectations weakened at the end of 2008 as commodity prices plummeted with weaker economic growth (Henderson and Akers 2009). Weaker economic growth

trimmed agricultural exports and world energy demand, depressing prices for both agricultural and energy commodities. In addition, agricultural and energy prices are forecast to decline further in 2009. Weaker commodity prices, in turn, would likely dampen the farm and energy-dependent economies, which paced rural growth in 2008 (Table 1).

Rural economic strength will probably vary across the nation. In 2008, nonfarm activity was strongest in rural communities with healthier housing markets and those that depended less on financial markets and more on commodity production. As of November of last year, the strongest rural employment gains were reported in the Great Plains states of the Mountain and West Central regions (Map 1). In contrast, rural employment fell sharply in the Great Lakes states and the Southeast.<sup>18</sup> These geographic differences are likely to persist into 2009. Weaker commodity prices, however, would slow rural economies that depend heavily on agriculture and energy—economies that are highly concentrated in the Great Plains.

Any economic rebound in 2009 will turn on the national financial crisis. According to the Federal Reserve Senior Loan Officer Survey, banks have tightened credit standards for all types of consumers and business loans. Credit standards have been raised even for agriculture, which has enjoyed several years of historically high prosperity and low debt levels. Bankers continue to report that funds remain readily available for agricultural loans but have raised collateral requirements and reduced the term length on loans. Even if loan demand rebounds, tighter credit standards and increased collateral requirements could limit loan originations.

In response to deteriorating financial conditions and frozen credit markets, the U.S. Treasury Department and the Federal Reserve System have provided considerable fiscal and monetary policy stimulus to the economy.<sup>19,20</sup> Despite the stimulus from fiscal and monetary policy, consumer and business demand has yet to rebound. Retail sales and consumer spending declined sharply in the fourth quarter, and additional contractions were expected in the first part of 2009.<sup>21</sup> Weak consumer spending is likely to trim demand for rural goods and services in 2009. Industry contacts suggest that consumers were also shifting their food consumption patterns toward grocery store purchases at the expense of restaurant sales and buying less meat and other high-priced items.<sup>22</sup>

Table 1  
AGRICULTURAL AND ENERGY PRICES

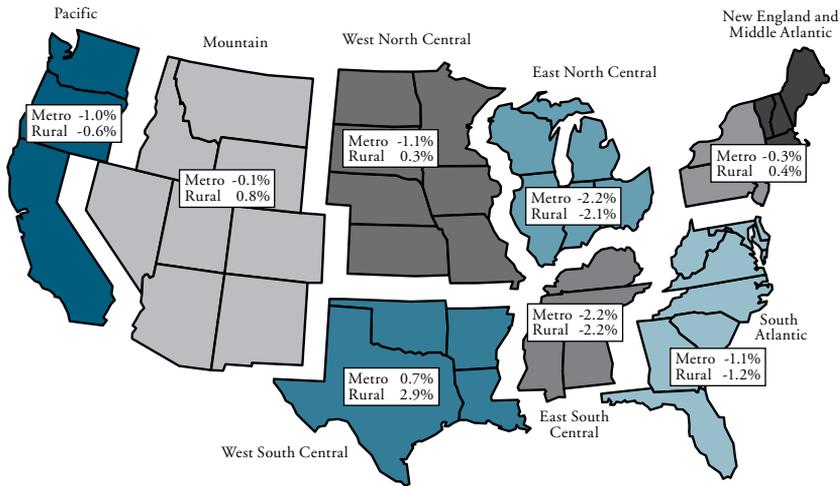
Commodity	2006-2007		2007-2008		2008-2009	
	Forecast date	(August 2008)	(Dec 2008)	(August 2008)	(Dec 2008)	
Corn (\$ per bushel)	3.04	4.25	4.20	4.90-5.90	3.65-4.35	
Soybeans (\$ per bushel)	6.43	10.15	10.10	11.50-13.00	8.25-9.75	
Wheat (\$ per bushel)	4.26	6.48	6.48	6.50-8.00	6.40-7.00	
	2007	2008	2008	2009		
Forecast date	(August 2008)	(Dec 2008)	(August 2008)	(Dec 2008)		
Cattle (\$ per cwt)	91.82	93-95	92.59	92-100	92-99	
Hogs (\$ per cwt)	47.09	48-49	47.73	51-56	48-52	
Broilers (\$ per pound)	76.4	80-82	79.7	83-90	81-87	
Milk (\$ per cwt)	19.13	18.85-19.05	18.30-18.40	18.25-19.25	14.85-15.75	
Crude oil (\$ per barrel)	72.32	112.68	100.4	118.03	51.71	
Natural gas (\$ per mcf)	7.17	10.04	9.17	9.01	6.25	

Note: Agricultural commodity prices obtained from *World Agricultural Supply and Demand Estimates*, U.S. Dept. of Agriculture. Energy commodity prices obtained from *Short-term Outlook Report*, Energy Information Administration.

## Map 1

## RURAL AND METRO EMPLOYMENT GROWTH

(Percent change November 2007 to November 2008)

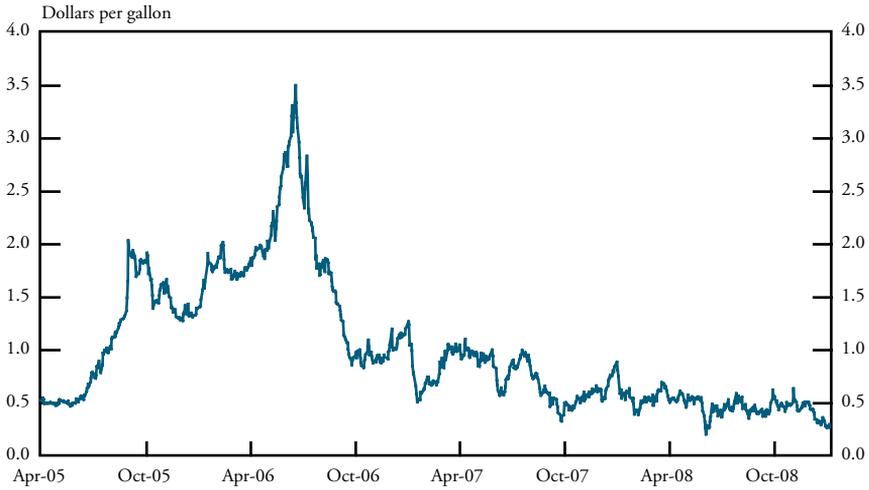


Note: Calculations based on Bureau of Labor Statistics, LAUS data

Weaker economic growth has also slowed demand for fuel and ethanol. According to the Energy Information Administration, 2008 year-to-date motor gasoline use through October fell 5.0 percent below 2007 levels. Weaker fuel demand translated into reduced demand for ethanol and lower ethanol prices, slashing profitability in the ethanol industry (Chart 9). Construction on some proposed ethanol plants has been halted. And, VeraSun, one of the largest ethanol producers, filed for bankruptcy protection, halting production at some locations (McE-owen 2008). While policy mandates will continue to underpin ethanol production, the ethanol industry will struggle to be an engine of new growth in 2009.

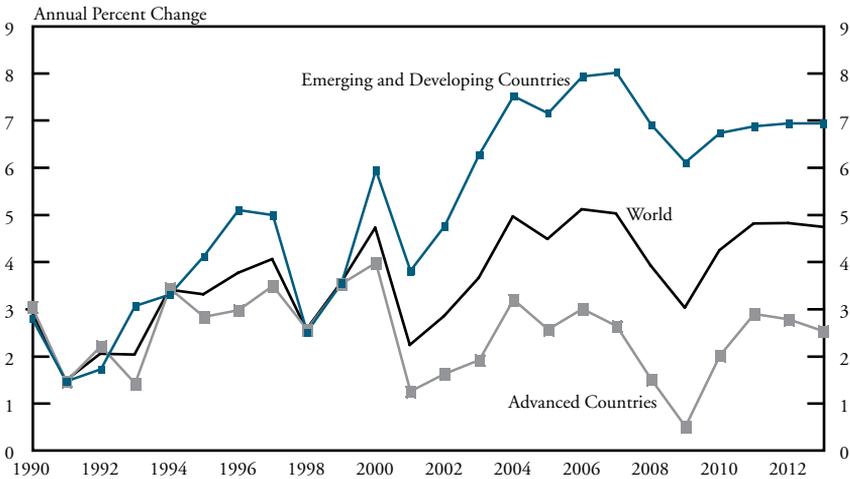
With anemic domestic demand expectations, export activity will be crucial to rural prosperity. Robust export activity drove the strong national economic gains in the second quarter of 2008. And rural areas enjoyed a surge in agricultural export activity in the second quarter of 2008, rising over 50 percent above 2007 levels.<sup>23</sup> Economic strength in developing countries underpinned robust demand and record prices for food and energy commodities in 2008, from which many rural areas prospered. However, by November agricultural exports were only 12

*Chart 9*  
**ETHANOL CORN PRICE SPREAD**



Calculation based on Commodity Research Bureau data.  
 The spread shows the net return from the sale of a gallon of ethanol after paying for the corn used to produce it.  
 One bushel of corn is assumed to yield 2.8 gallons of ethanol. (Spread = ethanol price – corn price/2.8)

*Chart 10*  
**WORLD ECONOMIC GROWTH**



Source: International Monetary Fund, October 2008

percent above 2007 levels due to weaker global economies. In October, the International Monetary Fund projected a 2010 rebound in world growth with some early signs of strength toward the tail end of 2009, led by strong gains in developing countries (Chart 10). Similar to the U.S., fiscal and monetary policy stimulus and the timing of these impacts will be key to re-starting foreign economic demand and U.S. exports.

In sum, rural economies have weathered the recession much better than their metro peers. Fallout from the housing correction and financial market crisis has been less dramatic. And, the summer surge in commodity prices boosted the farm economy and regions heavily dependent on farm and energy activity. However, rural economies are starting to buckle under the global recession. Weak commodity prices threaten incomes at the farm gate, and deteriorating demand has eroded prospects on Main Street. Still, economic forecasts call for a modest economic recovery to start in the second half of 2009. Prospects for rural prosperity will hinge on the ability of fiscal and monetary policy to rekindle demand and jump start the world economy.

## ENDNOTES

<sup>1</sup>Crop planted acres, production, yields and annual prices were obtained from the National Agricultural Statistical Service, U.S. Department of Agriculture, on December 19, 2008, [www.nass.usda.gov](http://www.nass.usda.gov).

<sup>2</sup>U.S. agricultural export activity was obtained from the Economic Research Service, U.S. Department of Agriculture, on December 19, 2008, [www.ers.usda.gov](http://www.ers.usda.gov). The fiscal year starts in October and ends in September of the following year.

<sup>3</sup>Global crop inventories are measured as the percent of annual use and are calculated with data available from World Agricultural Supply and Demand Estimates, World Outlook Board, U.S. Department of Agriculture.

<sup>4</sup>Farm income, gross revenue and annual production cost estimates were obtained from the Economic Research Service, U.S. Department of Agriculture, on December 19, 2008, [www.ers.usda.gov](http://www.ers.usda.gov). A more complete description of USDA 2008 farm income forecast is provided in the “Agricultural Income and Finance Outlook” (Harris et al).

<sup>5</sup>U.S. agricultural trade statistics obtained on December 19, 2008, from the U.S. Trade Internet System, Foreign Agricultural Service, <http://www.fas.usda.gov/ustradel>.

<sup>6</sup>Livestock production and slaughter information obtained from the December Livestock, Dairy and Poultry report [www.ers.usda.gov](http://www.ers.usda.gov).

<sup>7</sup>The Federal Reserve Bank of Kansas City covers the states of Colorado, Kansas, Nebraska, Oklahoma, Wyoming, the western third of Missouri and the northern part of New Mexico.

<sup>8</sup>In the fourth quarter of 2008, surveyed bankers in the Tenth Federal Reserve District reported nonfarm purchases of land fell to 33.7 percent, down from 37.5 percent in 2007 (Henderson and Akers 2008).

<sup>9</sup>In this article, rural areas are defined as nonmetropolitan counties or areas outside metropolitan areas.

<sup>10</sup>The Bureau of Labor Statistics uses two different surveys to estimate employment and job levels. The BLS conducts the Current Employment Statistics (CES) survey, a survey of businesses and government agencies, to estimate jobs levels. The Local Area Unemployment Statistics (LAUS) program provides resident employment and unemployment levels for state and counties. Employment and job growth will differ due to commuting patterns and the level of self-employment.

<sup>11</sup>On December 11, 2008, the National Bureau of Economic Research recession data committee dated the start of the recession as December 2007.

<sup>12</sup>Rural housing permits are defined as housing permits outside metropolitan areas and are measured by the difference between national housing permits and metropolitan housing permits using Census Bureau data.

<sup>13</sup>A comparison of various U.S. home price indexes can be found in Rapaport (2007).

<sup>14</sup>Rising incomes are not the only factor influencing home values. Other factors, such as lower interest rates, can also influence mortgage payments and home values.

<sup>15</sup>Calculations based on Bureau of Economic Analysis 2006 data available at [www.bea.gov](http://www.bea.gov). Securities, commodity contracts, and investment firms include investment banks, securities brokerages, commodity brokerages, securities and commodity exchanges, and portfolio and investment advisors.

<sup>16</sup>According to Bureau of Economic Analysis data, food manufacturing firms accounted for 12.4 percent of manufacturing income, respectively, in rural (non-metro) counties during 2006, compared to 6.0 percent in metro counties. Similarly, machinery manufacturers accounted for 9.5 percent of rural manufacturing income, compared to 8.0 percent in metro counties.

<sup>17</sup>Federal Reserve economic forecasts are based on the minutes of the Federal Open Market Committee, October 28-29, 2008. Private sector forecasts are based on the December Blue Chip Consensus forecasts.

<sup>18</sup>The geographic pattern of rural employment across U.S. states was similar to the geographic pattern of metropolitan growth.

<sup>19</sup>More information on the TARP program is available at the U.S. Department of Treasury, [www.treasury.gov](http://www.treasury.gov).

<sup>20</sup>Detailed descriptions of Federal Reserve discount window facilities are available at <http://www.federalreserve.gov/monetarypolicy/default.htm>.

<sup>21</sup>By November, the U.S. Census reported that 2008 retail sales were 4.0 percent below 2007 levels. Moreover, Blue Chip Consensus forecasts expected a 5.6 percent decline in consumer expenditures in the fourth quarter of 2007 with another 4.2 percent decline in the first quarter of 2008.

<sup>22</sup>According to USDA, at-home food sales declined almost 5 percent from July 2008 to November 2008, with a larger 7 percent drop in away-from-home food sales. Moreover, Kansas State University indicated that beef and pork demand has fallen in 2008 ([www.agmanager.info](http://www.agmanager.info)).

<sup>23</sup>The Foreign Agricultural Services (FAS) at the USDA provides U.S. agricultural trade data on the U.S. Trade Internet System, <http://www.fas.usda.gov/ustradel>.

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