
Will Rains and a National Recovery Bring Rural Prosperity?

By Jason Henderson and Nancy Novack

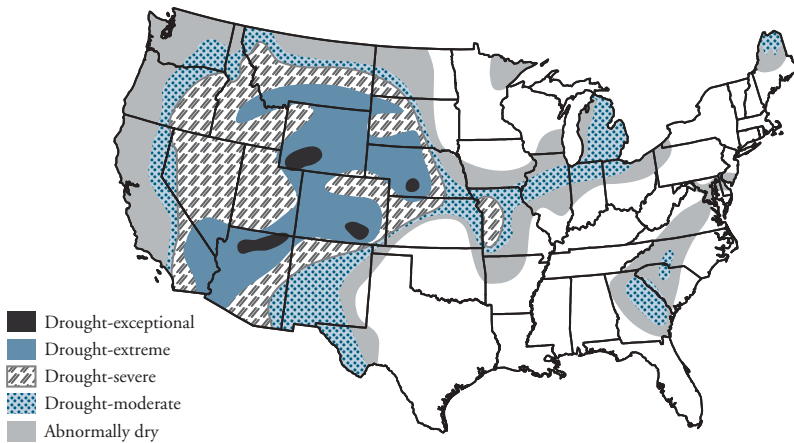
Drought and a jobless recovery battered the rural economy in 2002. The worst drought since the Dust Bowl gripped many parts of rural America, leading to forest fires, livestock liquidations, short crop supplies, and a plunge in farm incomes. After a solid start, a soft period for the national economy limited the ability of rural businesses to create new jobs. As rural stakeholders looked at their new menu of economic options, many were left wondering if rains and a stronger national recovery would be enough to lead rural America back to prosperity.

This article examines the rural outlook in the face of drought and a weak national recovery. The first section analyzes the current state of the farm economy, focusing on the drought and its impacts on the farm sector. The second section explores the jobless recovery on the Main Streets and industrial parks of rural communities. The article concludes that the return of rain and stronger national economic growth should improve the prospects for rural areas in 2003. To prosper in the long run, however, many rural places must create new opportunities forged on a renewed commitment to entrepreneurship and innovation.

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Figure 1

DROUGHT CONDITIONS: AS OF DECEMBER 10, 2002



Source: National Oceanic and Atmospheric Administration

I. DROUGHT PUSHES THE FARM ECONOMY INTO RECESSION

The drought of 2002 blanketed much of the country and will go down as one of the worst on record (Figure 1). Agriculture was particularly hard hit with wildfires in the West, lower crop production, and cattle herd liquidations. For some areas, it was a continuation of several years of dry weather—this was especially true in the Inter-Mountain region. The drought triggered a severe decline in U.S. net farm income. In the year ahead, prospects for a rebound will depend heavily on U.S. weather patterns and the resulting impacts on production and prices.

Drought cuts U.S. crop production

Uneven weather patterns brought mixed production to U.S. agriculture. Drought plagued the Wheat Belt throughout the entire growing season, leaving wheat production at its lowest level in three decades. Timely rains kept the drought from spreading into the central Corn Belt but were not enough to prevent significant crop losses. As

crop supplies tightened in the second half of the year, crop prices surged. Due to the formulas in the new farm bill, the higher prices reduced government payments. Many farmers without a crop were unable to capitalize on higher prices and were left to fall back on crop insurance payments.

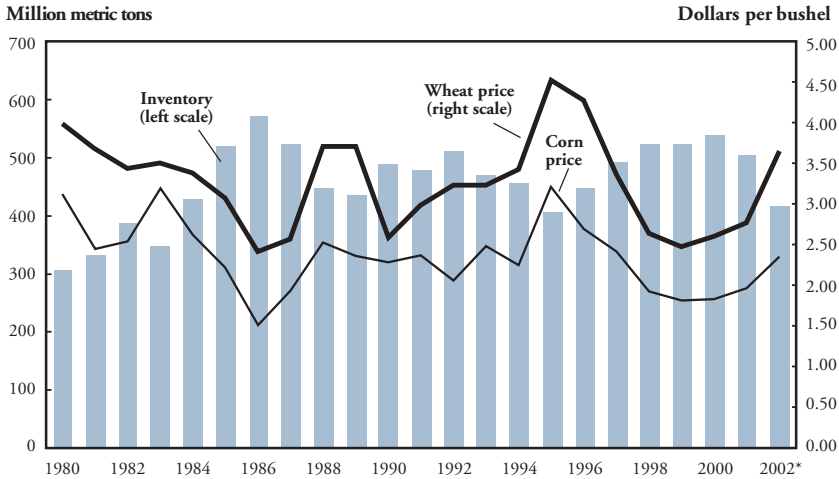
The wheat crop started the year in a vulnerable position, as major winter wheat producing regions were already very dry. The number of acres planted to wheat was also at a 30-year low. The prospects for solid yields faded as the drought intensified. U.S. wheat yields fell more than 12 percent to 35.3 bushels per acre—the lowest in ten years. Only three-fourths of the planted acreage was actually harvested because many producers simply chose to abandon the poor yielding crop. As a result, wheat production plummeted to just 1.6 billion bushels, the smallest since 1972.

After a wet spring, drought crept into the Corn Belt resulting in uneven corn and soybean production. Wet conditions delayed the planting of corn and soybean crops in some parts of the country and forced some corn growers to switch their corn acreage to soybeans. In all, corn acreage was down 5 percent, while soybean acreage held steady. As the year progressed, however, the hot, dry weather arrived just in time to hurt the corn and soybean crops. By harvest, roughly one-third of the nation's corn and soybean crops fell into USDA's poor to very poor condition ratings. Crop conditions were worst in the eastern Corn Belt and the Plains states of Kansas, Nebraska, and Missouri. The Upper Mississippi River Basin, however, continued to receive timely rains throughout the growing season and harvested excellent fall crops in 2002. On the whole, corn production was off 6 percent from its five-year average, while soybean production was down less than 1 percent.

The shortfalls in crop production resulted in sharply lower stocks and higher prices. By December, U.S. ending grain and oilseed stocks for the 2002-03 marketing year were projected to fall 35 percent from the previous year. Drought conditions in other foreign countries also contributed to falling global inventories (Chart 1). Crop prices were weak entering 2002, but quickly strengthened as crop supplies tightened sharply in the second half of the year. By November, wheat prices were 40 percent higher than the previous year. Corn and soybean prices also moved well above year-ago levels.

Chart 1

WORLD GRAIN INVENTORIES AND U.S. CROP PRICES



Source: USDA

Higher crop prices cut government payments under the 2002 farm bill. The bill was constructed to help farmers most when crops are large and prices are low. Under the new farm bill, previous ad-hoc emergency payments were formalized in a new counter-cyclical target price program to help farmers in times of high production and low prices. The new program calls for crop producers to receive additional direct-payment subsidies if crop price levels fall below target price levels specified in the bill. In 2002, the drought drove U.S. wheat, corn, and soybean prices well above the target levels, thus eliminating counter cyclical payments for producers. Moreover, loan deficiency payments (LDP) were smaller in 2002 as wheat, corn, and soybean prices remained above the loan rate levels set in the farm bill. In short, farmers hit by drought found little solace in farm bill payments.

Instead, crop insurance payments became a primary source of income for many farmers in 2002. For drought-ravaged areas of the country, crop insurance payments surged in 2002. In Tenth District states, crop insurance payments were running 88.2 percent above year-ago levels in mid-December, reaching \$803 million for 2002. Still, payments failed to offset income losses to crop producers.

Drought intensifies a livestock industry slump

Entering 2002, livestock prices were depressed as the industry struggled to overcome foreign food safety concerns and weak export markets. The drought only presented new problems for ranchers as they searched for greener pastures and other food supplies for their herds. In the end, large meat supplies and weak demand pushed U.S. livestock prices well below profitable levels.

The global food safety concerns of 2001 spilled over into the new year. In Japan, the impacts of mad cow disease kept a lid on meat demand and U.S. exports in 2002. In March, Russia imposed a ban on U.S. poultry imports amid food safety concerns. U.S. poultry exports to Russia came to a halt and remained limited after the ban was replaced with other restrictions. Due to the weak export activity, meat originally earmarked for foreign consumers was redirected to the U.S. market, and the additional domestic supplies put further downward pressure on livestock prices.

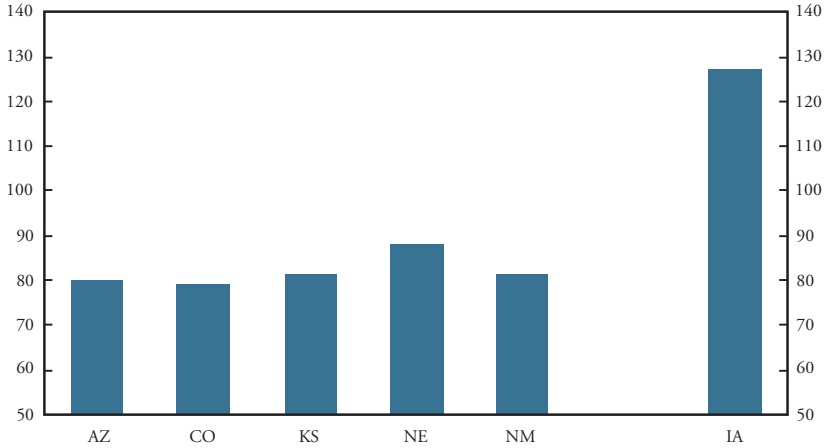
By reducing feed supplies, the drought led to significant liquidations of livestock herds. The drought severely hurt forage conditions in many parts of the country. In the spring, few wheat fields were left suitable for grazing and grass pastures quickly dried up in the summer heat. Some ranchers were forced to find alternative feed sources much earlier in the year than normal. Smaller supplies also led to higher prices for hay and feed grains, increasing costs to all livestock and poultry producers. Transportation costs left ranchers with few affordable options to buy hay and feed. As a result, some ranchers scaled back their operations by culling more of their breeding stock than normal or selling young calves early. Others were forced to sell some of their most productive animals. A number of ranchers simply threw in the towel and liquidated their entire herd.

Much of the liquidation was concentrated in the Western states. Not all of the cattle sold, however, went to slaughter. Many herds were sold to ranchers with greener pastures and abundant feed in states further east. As a result of the inventory exchange, there appears to have been a sizable regional shift in cattle placed on feed. In October, the number of cattle placed on feed in Colorado, Kansas, New Mexico, Nebraska, and Arizona was 17 percent below a year ago (Chart 2). At

Chart 2

FEEDLOT PLACEMENTS

October 2002 as a percent of October 2001

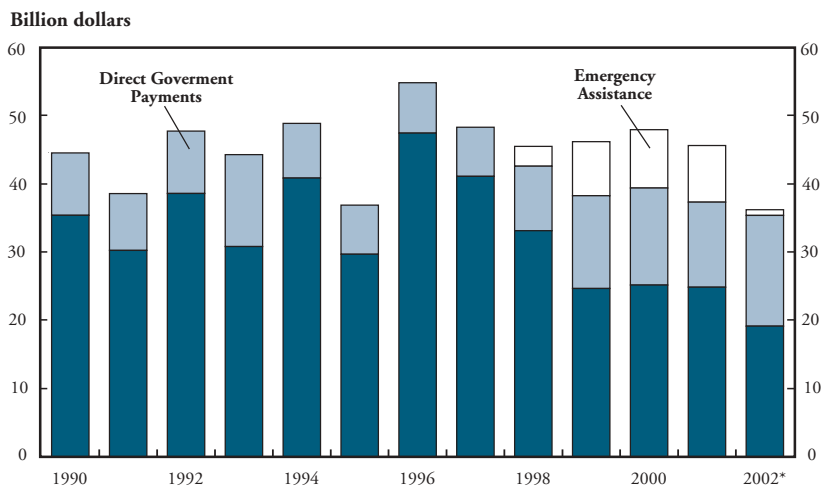


Source: USDA

the same time, the number of cattle placed on feed in Iowa was 27 percent above year-ago levels. Notwithstanding these regional shifts, ranchers still sold at depressed prices due to the large supplies on the market. Those that did not completely exit the business were left with few animals to market to meet future cash flow needs.

Rising meat production and weak export activity weighed heavily on U.S. livestock prices. Red meat production rose as larger numbers of animals were sent to market at heavier slaughter weights. As a result, beef production surged 4 percent in 2002, while pork and poultry production rose roughly 3 percent each. Larger meat supplies coupled with weak global demand created a backlog of U.S. meat held in cold storage. By April, the amount of meat held in cold storage was 30 percent above a year ago, a surplus that was maintained through the end of the year. As processors tried to work off these large meat supplies, their demand for slaughter animals dropped, pushing down U.S. slaughter prices. In 2002, average U.S. prices for slaughter steers, hogs, and broilers fell an estimated 8, 24, and 6 percent, respectively. Falling prices forced beef, pork, and poultry producers to operate in the red for most of the year.

Chart 3
U.S. NET FARM INCOME



Source: USDA
* Forecast

Financial conditions weaken as farm incomes fall

U.S. farm incomes fell sharply as the drought intensified. Low livestock prices and a decline in government payments from high crop prices led to an estimated \$9.5 billion drop in farm income for 2002 (Chart 3). The decline in farm income eroded farm credit conditions. However, farm finances remained mixed as rising land values continued to buoy most farm balance sheets.

Weakness in the livestock industry was the major factor in the plunge in farm incomes. Livestock producers operated in the red for the bulk of the year as prices stayed below breakeven levels. For the year, livestock cash receipts fell a projected \$9 billion, the biggest drop on record. Despite significant production losses, crop receipts actually edged up in 2002 due to higher crop prices and crop insurance payments.

Unlike previous years, the fall in U.S. farm income was not offset by rising government payments. Over the past three years, Congress sent farmers an average of \$13.5 billion in direct payments and \$8.2 billion in the form of emergency payments. In the new farm bill, emergency payments were formalized into the counter cyclical program that

boosts subsidies in times of high production and low prices. The drought eliminated these conditions and total government payments fell an estimated 18 percent to \$17 billion in 2002.

While income statements deteriorated severely, farm financial conditions remained mixed as rising land values continued to stabilize farm balance sheets. Tenth District bankers responding to the Survey of Agricultural Credit Conditions reported weakening credit conditions throughout the year.¹ The rate of renewals and extensions was consistently higher than in previous years, while loan repayment rates on farm loan accounts moved lower. Loan demand in the first half of the year was down relative to previous years as farmers took a more cautious approach to new debt. But as cash flows tightened, demand for new funds picked up. Finally, some bankers indicated they were requiring more collateral to secure farm loans, suggesting they perceived more risk in agriculture.

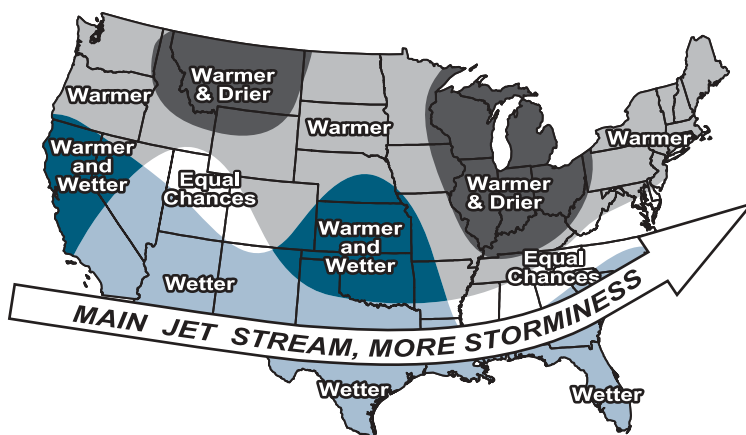
Even as farm credit conditions weakened, farmland values remained remarkably resilient. Expectations of bigger government subsidies to farmers continued to be capitalized into farmland values, boosting prices paid by all buyers. Demand from off-farm investors was also a source of strength for farmland values. Investors appeared to want farmland for many purposes, including recreation and development. However, a somewhat new phenomenon surfaced in 2002. As the stock market plummeted, investors turned to farmland as a safe harbor investment. Still, most farmland was purchased by farmers. Many farm sales cannot be justified by cash flow projections alone, so many purchases are likely being financed with income from off-farm sources. Three-fourths of bankers participating in one of the quarterly Kansas City surveys indicated that the majority of their farm borrowers supported their operations with off-farm income.

The farm economy in the year ahead

In the year ahead, the outlook for agriculture rests heavily on Mother Nature's willingness to bring drought relief. Crop prices again will be sensitive to weather issues and the impact on production. Live-stock producers will likely be even more diligent in making production decisions based on feed and pasture prospects. Weather forecasters indicate that the El Niño weather pattern has reemerged in the South

Figure 2

POTENTIAL EL NIÑO WEATHER IMPACTS: WINTER 2002–03



Source: National Oceanic and Atmospheric Administration

Pacific and could impact U.S. weather and crop production patterns in 2003. If El Niño causes the drought to linger, farmers will be challenged to deal with another year similar to 2002. If rains arrive to mitigate the drought, on the other hand, crop production is almost certain to rise and the farm economy could again face large crop supplies and declining prices. Given current supply and demand conditions, though, prices are still expected to remain solid and support financial gains in the farm economy in 2003.

Will drought conditions ease? Agriculture's prospects going forward depend largely on weather. The drought certainly has not broken and only time will tell if sufficient moisture will fall to replenish soils. Forecasters indicate a moderate El Niño is expected to bring mixed weather patterns across the country (Figure 2). Weather forecasts call for warmer temperatures in the northern half of the country. Increased precipitation is forecast for the southernmost states, stretching from California to North Carolina, as well as portions of the southern Plains. But drier than normal weather patterns are expected for much of the Corn Belt

and northern Rocky Mountains. Previous research indicates that U.S. corn production often drops sharply during an El Niño event (Drabentstott and Lamb).

A strong El Niño effect could extend the drought in the Corn Belt, northern Great Plains, and northern Rocky Mountain regions. Livestock producers in these regions would probably face another year of poor pasture conditions and higher feed costs that would delay the rebuilding of livestock herds and could lead to further liquidations.

If the El Niño weather pattern is weak, on the other hand, U.S. weather patterns could return to more normal trends and mitigate the drought. In this case, U.S. crop production would return to more normal levels, placing some downward pressure on crop prices. More normal weather patterns would also help rejuvenate pastures, lowering crop prices and reducing feed costs for livestock producers. Improved pastures and lower feed prices would help stop the liquidation of livestock herds and allow some producers to begin their rebuilding process.

Will farm revenues improve? While El Niño raises uncertainty in the farm outlook, the potential for financial improvement appears promising. Livestock prices are forecast to rise above breakeven levels in 2003 and bring some much needed profitability to U.S. livestock producers.² Crop prices are also forecast to remain strong and should support rising crop cash receipts, as long as increased production does not cause a sharp price decline.

Lower red meat production and increased exports are expected to boost livestock prices and profits. In 2003, U.S. red meat and poultry production is expected to fall 2 percent, while U.S. meat and poultry exports are expected to rise more than 5 percent. This favorable combination should lead to stronger prices in the second quarter of 2003. Steer prices are expected to average \$74.50 per hundredweight in 2003, more than \$7 higher than the 2002 estimate. After a significant fall in 2002, hog prices are expected to rebound moderately to \$38.50 per hundredweight. But many hog producers could still be operating in the red, especially in the first half of the year. Supported by recovering export markets, profit margins for poultry producers are expected to improve as prices rise to an average \$.59 per pound.

If prices remain strong and production rebounds, crop cash receipts could rise in 2003. Crop prices are expected to remain strong. Based on current supply and demand expectations, USDA forecasts wheat and soybean prices for the current marketing year to rise to \$3.65 and \$5.45, respectively. Corn prices are pegged at \$2.35 per bushel which is up 20 percent from the year before. In 2003, precipitation could boost U.S. crop production and cash receipts, if larger crop production does not cause severe downturns in crop prices. Overall, thirst-quenching rains could bring some relief to the drought-induced farm recession.

II. A SLOW RECOVERY ON MAIN STREET

As the farm economy fell into recession in 2002, the nonfarm rural economy struggled in its economic recovery. As summer drew to a close, the national economy hit a “soft spot,” producing a slowdown in the rural economy. Over the past year, rural businesses struggled to add new jobs. Despite low interest rates and robust housing activity, weakness in the manufacturing sector spread into other rural industries. If the national economy strengthens, 2003 could bring new energy to the rural economy.

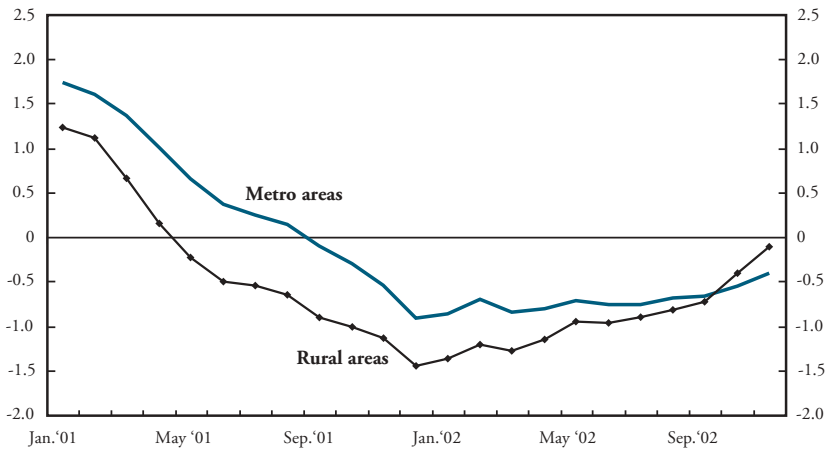
Summer slowdown on Main Street

Like much of the nation, rural areas struggled last year to find economic recovery. Heading into 2002, robust construction activity in rural areas fueled expectations for a strong recovery. But the recovery weakened as summer advanced, limiting the ability of rural businesses to add jobs or raise wages.

At the beginning of 2002, a recovery appeared to be under way in rural America. The bright spot of this recovery was strong rural construction activity. By midyear, falling long-term interest rates pushed 30-year conventional mortgage rates to record lows. The low rates energized home refinancing and residential construction activity. Throughout 2002, the number of building permits remained near the record levels posted a year earlier. Through October, the total value of rural building permits had risen 18.6 percent above the 2001 level.

Chart 4
U.S. JOB GROWTH

Percent change from year ago



Source: Bureau of Labor Statistics

Note: Growth rates are calculated based on two-month moving average data.

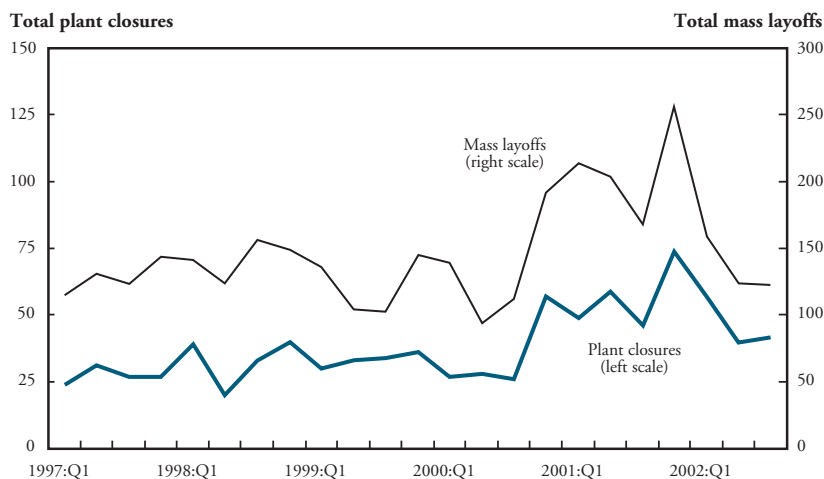
While rural housing activity remained strong, annual job growth levels suggest that after a promising start to 2002, rural businesses struggled to add new jobs. At the start of the year, job growth levels showed signs of reviving. By November, however, rural job growth was still 0.1 percent below the year-ago level (Chart 4). On a somewhat more positive note, the gap between rural and metro job growth was reversed as annual rural growth rose above metro growth.

The rural recovery lost steam throughout the summer. After gaining five percentage points in the first four months of the year, rural job growth advanced just 0.2 percent in the next four months as weakness in the national economy intensified. It appears that the recovery has evolved into another jobless recovery, similar to that of the 1991 recession. During that recovery, it took over two years before rural job levels reached prerecessionary levels.

Weakness in the rural economy also translated into limited wage gains for rural workers. During 2001, rural workers enjoyed a 3.2 percent rise in wages despite the recession. Rural wage gains remained

Chart 5

RURAL MASS LAYOFFS AND PLANT CLOSURES



Source: Bureau of Labor Statistics

healthy to start 2002. But as the recovery slowed, so did rural wage gains. By November 2002, average weekly earnings for rural workers were only 1.0 percent above year-ago levels.³

Weakness spread into nonmanufacturing sectors

The rural recovery was bogged down by continued weakness in manufacturing activity that spread into nonmanufacturing sectors. Manufacturing activity remained sluggish as many rural factories closed. Job gains in the service-producing sector also slowed throughout the summer. The weak private sector produced revenue shortfalls for state and local governments forcing tough budget decisions.

The recession took its toll on rural manufacturers and left many factories struggling to remain open. Entering 2002, job levels at rural factories were 8 percent below a year ago. The job losses in rural manufacturing were associated with a large number of factory closings and mass layoffs. In the first three quarters of 2002, rural manufacturers reported 405 incidences of mass layoffs including 139 plant closures (Chart 5).⁴ Relative to their urban counterparts, more of the rural job

losses due to mass layoffs came at the expense of factory closings, which accounted for a third of all rural mass layoffs and job losses, compared to a fourth for metro factories. As the year progressed, rural factory closings and job losses moderated, and the gap between rural and metro job growth closed. Still, the year ended with rural factories posting significant job losses.

Weakness also spread into the *service-producing* sector in 2002. A capital overhang in telecommunications companies contributed to a 3 percent job loss in rural transportation, communications, and utilities industries in the year ending November 2002. Wholesale and retail trade and finance, insurance, and real estate industries also reported a contraction in jobs during the same time frame. Throughout the year, business, health, and personal service industries posted job gains, but they barely offset job losses in other service-producing industries. As a result, job levels in the rural service-producing sector edged up just 0.2 percent in the year ending in November.

Private sector weakness quickly translated into fiscal problems for state and local governments. State revenues fell short in fiscal 2002 and *government* job growth slowed as states balanced their budgets and trimmed programs.⁵ The government sector entered the year adding jobs at a 2 percent clip, but job growth slowed to 1.3 percent above year-ago levels by September. Entering 2003, states are again faced with the daunting task of closing the budget gaps that have emerged in fiscal year 2003 and additional deficits projected for 2004. Recent projections peg total state budget shortfalls in fiscal year 2004 at \$60 to \$85 billion (Lav and Johnson). For some states, deficit spending will account for nearly one-third of government expenditures.

Main Street in the year ahead

As in the rest of the nation, the rural economic recovery is expected to strengthen in the year ahead. The rural economy tends to move in the same direction as the national economy. So, renewed strength in the national economy could boost the rural economy. As 2002 drew to a close, signals of a pick-up in the rural job growth point to renewed strength in the rural economy in the year ahead.

While national economic indicators were mixed as 2002 ended, leading indicators of national economic activity point to a strengthening rural economy. Indicators for both manufacturing and nonmanufacturing activity continued to improve during the fourth quarter of the year (ISM Reports). The Conference Board's index of leading economic indicators also continued to advance, suggesting that renewed strength lies ahead (Conference Board). Finally, many economic forecasters expect U.S. GDP growth to improve throughout 2003 (Hilsenrath and Ford).

As 2002 came to a close, indicators also suggested stronger rural growth in the year ahead. At the start of the fourth quarter, rural housing activity remained robust as the value of rural building permits was 7 percent above a year ago. Moreover, improvements in rural job growth indicated renewed vigor in the rural economy. At the beginning of the fourth quarter, annual job growth in rural factories improved, while government and service-producing industries began to add jobs at a faster pace. If these signals persist, the prospects for a stronger recovery in 2003 appear brighter.

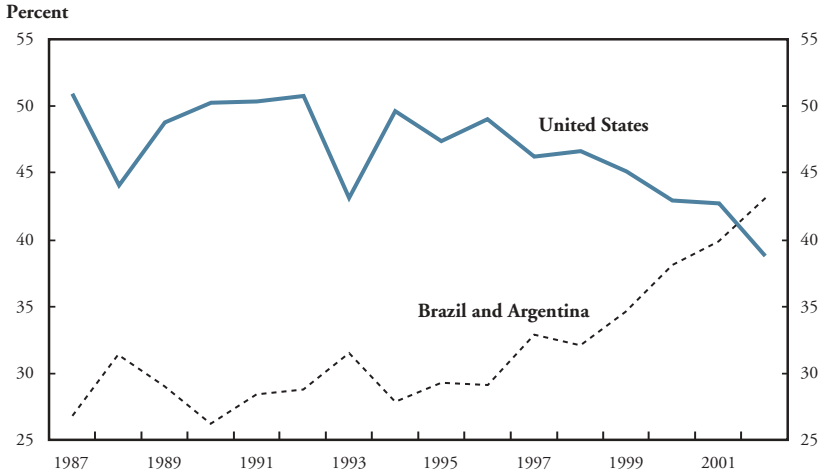
III. CAN RAIN AND A NATIONAL RECOVERY FOSTER RURAL PROSPERITY?

While rain and a stronger national recovery might bolster the prospects for some rural areas in 2003, they may not be enough to build a foundation for sustained rural prosperity. Drought, recession, and the jobless recovery have all unveiled long-term challenges for the rural economy. Foreign competitors are eroding the competitive edge of factories and farms alike. To regain their competitive advantage, rural firms, farmers, and communities will need a renewed commitment to entrepreneurship and technological innovation.

Traditionally, the success of rural economies has been founded on low-cost land and labor. Rural businesses competed with their urban neighbors primarily by being the low-cost producer. Rural firms developed competitive advantages surrounding the availability of these low-cost resources. And, many rural economic developers pursued development strategies that targeted land and labor-intensive industries to take advantage of these assets in their communities.

Chart 6

SHARE OF WORLD SOYBEAN PRODUCTION



Source: USDA

But globalization of the U.S. and world economies has brought new competitors to the rural landscape. Rural manufacturers are competing with foreign factories in addition to factories in U.S. cities. Foreign factories are able to compete effectively with rural manufacturers because they have even lower cost land and labor—a challenge also facing America’s farmers. Because of cheaper land and labor, South American farmers have emerged as leading competitors to U.S. agriculture.

Signs of rural America’s eroding competitive advantage are emerging. As stated earlier, roughly a third of rural factory job losses were caused by factory closings. Some of the losses in factory jobs can be attributed to the relocation of branch plants to foreign countries that have lower labor costs (Nebraska). And, U.S. farmers face increased competition from South American producers in global markets. In 2002, South American soybean production outpaced U.S. production for the first time in history, continuing a severe contraction in U.S. market share over the past decade (Chart 6).

To compete in the future, rural industries will need to be innovative in finding business solutions that go well beyond low-cost land and labor. Success will depend on management skills in addition to production capabilities. New products will need to be developed. New technologies will need to be adopted to increase production efficiencies and create a new competitive edge for rural industries.

While these challenges are daunting, some rural areas are already finding new ways to prosper. One such example comes from England, Inc., a rural furniture manufacturer in New Tazewell, Tennessee (Morse). England is a custom-order furniture manufacturer that produces roughly 11,000 built-to-order sofas and chairs each week. To regain its competitive advantage over foreign competitors that have dramatically increased their market share, England geared its success to reducing delivery time for custom products. By using new technologies and smaller, more flexible production runs, England cut its delivery times of custom-made furniture to less than a month, a significant reduction from five years ago. Competitors have found it very difficult to match the shorter delivery schedule. The result has been prosperity for England and job benefits for a very rural community. In 2001, for instance, the U.S. furniture industry as a whole saw both sales and workforce fall by 9.3 percent, while England enjoyed an 8.3 percent increase in sales and expanded its workforce by 7.4 percent.

New Tazewell has prospered by delivering existing products in new ways, but other rural communities are benefiting from firms that create new products from advanced technology. For example, in November 2001, Cargill/Dow LLC opened a processing plant in Blair, Nebraska, that turns corn into packaging and other synthetic fibers.⁶ Using the latest technology, the facility produces polylactide (PLA) polymers that are used in a variety of fabric products ranging from clothing, to upholstery, to diapers. At capacity, the facility is expected to employ over 100 people and use 14 million bushels of corn to produce more than 140,000 metric tons of PLA annually.

In sum, technological innovations and entrepreneurial firms are helping some rural businesses find new ways to compete in a global economy. Today's global environment means rural America must build new sources of competitive advantage, ones that go beyond

low-cost land and labor for its communities. Rural farmers, businesses, and communities will need innovative, entrepreneurial solutions to discover new engines of growth. New technologies will be needed to develop new rural products. New regional partnerships will be needed to build critical mass in the industries of the future. In short, the rural economy appears to be at another turning point in its history, a point where the most innovative and entrepreneurial communities are in the best position to create new opportunities and prosperity in tomorrow's economy.

ENDNOTES

¹The Federal Reserve Bank of Kansas City is the Tenth Federal Reserve District and covers the states of Colorado, Kansas, Nebraska, Oklahoma, Wyoming, western Missouri, and northern New Mexico.

²Price and production forecasts are based on various USDA estimates.

³Calculations based on three-month average of Current Population Survey weekly earnings data.

⁴A mass layoff is identified when 50 or more unemployment insurance benefit claims are made in a single establishment in a given month.

⁵The fiscal year for most states runs from July 1 of the preceding year through June 30 of the current year. For example, the 2002 fiscal year began on July 1, 2001 and ended June 30, 2002.

⁶More information on the Blair, Nebraska processing facility is available at www.cargilldow.com and at the National Corn Growers Association, www.ncga.com.

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- Forecast-Based Monetary Policy
Jeffery D. Amato and
Thomas Laubach RWP 99-10
- Tests of Equal Forecast Accuracy and Encompassing for Nested Models
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McCracken RWP 99-11
- How Does Labor Mobility Affect Income Convergence?
Jordan Rappaport RWP 99-12
- Why Are Population Flows So Persistent?
Jordan Rappaport RWP 99-13
- Private Money, Settlement, and Discount: A Comment
Stacey L. Schreft RWP 00-01
- On The Importance of Geographic and Technological Proximity For R&D Spillovers: An Empirical Investigation
Michael J. Orlando RWP 00-02
- Market Makers' Supply and Pricing of Financial Market Liquidity
Pu Shen and
Ross M. Starr RWP 00-03
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Charlotte Ostergaard,
Bent E. Sorensen, and
Oved Yosha RWP 00-04
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Todd E. Clark RWP 00-05
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- Government Budgetary Policies,
Economic Growth, and
Currency Substitution in a
Small Open Economy
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- The Effect of Old-Age Insurance
on Male Retirement:
Evidence from Historical
Cross-Country Data
Richard Johnson RWP 00-09
- Is the Speed of Convergence
Constant?
Jordan Rappaport RWP 00-10
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Flows Affect Growth?
Jordan Rappaport RWP 00-11
- Fiscal Reaction Rules in Numerical
Macro Models
Richard Johnson RWP 01-01
- What Do You Expect? Imperfect
Policy Credibility and Tests of
the Expectations Hypothesis
Sharon Kozicki
and P.A. Tinsley RWP 01-02
- Dynamic Specifications in
Optimizing Trend-Deviation
Macro Models
Sharon Kozicki
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- Should Monetary Policy Respond
to Asset Price Bubbles?
Some Experimental Results
Andrew J. Filardo RWP 01-04
- Liquidity Provision vs. Deposit
Insurance: Preventing Bank
Panics Without Moral Hazard
Antoine Martin RWP 01-05
- The Economics of Labor
Adjustment: Mind the Gap
Russell Cooper and
Jonathan L. Willis RWP 01-06
- When Should Labor Contracts
Be Nominal?
Antoine Martin
and Cyril Monnet RWP 01-07
- Effects of Old-Age Insurance
on Female Retirement:
Evidence From Cross-Country
Time-Series Data
Richard Johnson RWP 01-08
- The Conduct of Monetary Policy
with a Shrinking Stock of
Government Debt
Stacey L. Schreft
and Bruce D. Smith RWP 01-09
- A Bottleneck Capital Model of
Development
Jordan Rappaport RWP 01-10
- The U.S. as a Coastal Nation
Jordan Rappaport
and Jeffrey Sachs RWP 01-11
- Implications of Real-Time Data
for Forecasting and Modeling
Expectations
Sharon Kozicki RWP 01-12
- The Birth and Growth of
the Social Insurance State:
Explaining Old-Age and Medical
Insurance Across Countries
Richard Johnson
and David Cutler RWP 01-13

- Evaluating Long-Horizon Forecasts
Todd E. Clark and Michael W. McCracken
RWP 01-14
- Magazine Prices Revisited
Jonathan L. Willis RWP 01-15
- Market-Time Strategies That Worked
Pu Shen RWP 02-01
- Optimal Pricing of Intra-Day Liquidity
Antoine Martin RWP 02-02
- Endogenous Multiple Currencies
Antoine Martin RWP 02-03
- Coyote Crossings: The Role of Smugglers in Illegal Immigration and Border Enforcement
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- Forecast-Based Model Selection in the Presence of Structural Breaks
Todd E. Clark and Michael W. McCracken
RWP 02-05
- Measuring R&D Spillovers: On the Importance of Geographic and Technological Proximity
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- Term Premia: Endogenous Constraints on Monetary Policy
Sharon Kozicki and P. A. Tinsley RWP 02-07
- Implementing Arrow-Debreu Equilibrium by Trading Infinitely-Lived Securities
Kevin X. D. Huang and Jan Werner RWP 02-08
- Why Does the Cyclical Behavior of Real Wages Change Over Time?
Kevin X. D. Huang, Zheng Liu, and Louis Phaneuf RWP 02-09
- Reconciling Bagehot with the Fed's Response to Sept. 11
Antoine Martin RWP 02-10
- The Cost of Labor Adjustment: Inferences from the Gap
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- Alternative Sources of the Lag Dynamics of Inflation
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