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## Farm, Rural, and Natural Resource Indicators

	2005	2006	2007	2008	2009	Annual percent change			
						2005-06	2006-07	2007-08	2008-09
Cash receipts (\$ bil.)	240.9	240.8	284.8p	324.2p	294.6f	0.0	18.3	13.8	-9.1
Crops	116.0	122.6	147.0	181.1p	162.4f	5.7	19.9	23.2	-10.3
Livestock	124.9	118.2	137.9	143.1p	132.2f	-5.4	16.7	3.8	-7.6
Direct government payments (\$ bil.)	24.4	15.8	11.9	12.4p	11.4f	-35.2	-24.7	4.2	-8.1
Gross cash income (\$ bil.)	281.5	274.1	313.4	354.3p	324.1f	-2.6	14.3	13.1	-8.5
Net cash income (\$ bil.)	86.6	68.0	87.4	93.4p	77.3f	-21.5	28.5	6.9	-17.2
Net value added (\$ bil.)	123.6	103.1	132.5	137.3p	120.0f	-16.6	28.5	3.6	-12.6
Farm equity (\$ bil.)	1,642.2	1,851.0	1,998.4	2,134.5p	2,171.1f	12.7	8.0	6.8	1.7
Farm debt-asset ratio	10.5	9.6	9.6	9.2p	9.1f	-8.6	0.0	-4.2	-1.1
Farm household income (\$/farm household)	81,086	81,251	86,223	86,864f	85,140f	0.2	6.1	0.7	-2.0
Farm household income relative to average U.S. household income (%)	128.0	122.1	127.5	na	na	na	na	na	na
Nonmetro-metro difference in poverty rate (% points) <sup>1</sup>	2.3	3.4	5.5	na	na	na	na	na	na
Cropland harvested (million acres)	314	304p	na	na	na	-3.2	na	na	na
USDA conservation program expenditures (\$ bil.) <sup>1,2</sup>	4.3	4.3	4.4p	5.0f	na	0.0	2.3	13.6	na

## Food and Fiber Sector Indicators

U.S. gross domestic product (\$ bil.)	12,422	13,178	13,808	14,281	na	6.1	4.8	3.4	na
Share of agriculture & related industries in GDP (%) <sup>1</sup>	4.5	4.3	4.6	na	na	na	na	na	na
Share of agriculture in GDP (%) <sup>1</sup>	0.8	0.7	1.0	na	na	na	na	na	na
Total agricultural imports (\$ bil.) <sup>2</sup>	57.7	64.0	70.1	79.3	82.5f	10.9	9.5	13.1	4.0
Total agricultural exports (\$ bil.) <sup>2</sup>	62.5	68.6	82.2	115.5	95.5f	9.8	19.8	40.5	-17.3
Export share of the volume of U.S. agricultural production (%) <sup>1</sup>	21.5	23.0	23.8p	na	na	na	na	na	na
CPI for food (1982-84=100)	190.7	195.3	202.9	214.1	221.0f	2.4	3.9	5.5	3.2
Share of U.S. disposable income spent on food (%)	9.7	9.8	9.7	9.6	na	1.0	-1.0	-1.0	na
Share of total food expenditures for at-home consumption (%)	51.4	51.5	51.5	51.5	na	0.2	0.0	0.0	na
Farm-to-retail price spread (1982-84=100)	239.2	246.2	248.1	na	na	2.9	0.8	na	na
Total USDA food and nutrition assistance spending (\$ bil.) <sup>2</sup>	50.9	53.1	54.3	na	na	4.3	2.3	na	na

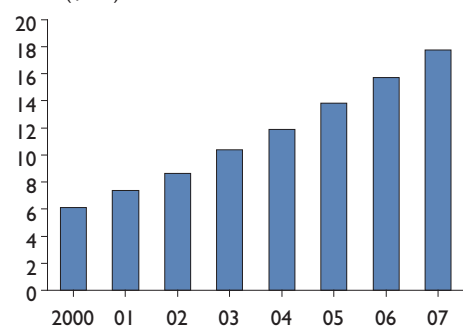
f = Forecast. p = Preliminary. na = Not available. All dollar amounts are in current dollars.

<sup>1</sup> The methodology for computing these measures has changed. These statistics are not comparable to previously published statistics. Sources and computation methodology are available at: [www.ers.usda.gov/amberwaves/indicatorsnotes.htm](http://www.ers.usda.gov/amberwaves/indicatorsnotes.htm)

<sup>2</sup> Based on October-September fiscal years ending with year indicated.

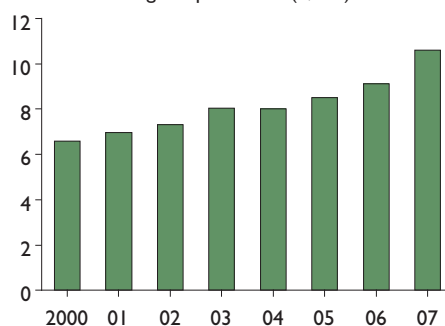
### U.S. organic food sales are increasing faster than...

Value (\$ bil.)

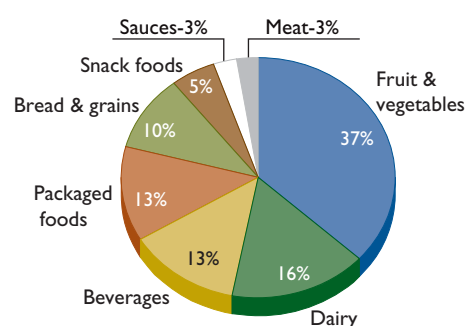


### ...domestic producers certified by USDA-accredited certifiers

U.S. certified organic producers (1,000)



### Fruit, vegetables, and dairy accounted for 53 percent of the \$18 billion organic food market in 2007



For more information, see [www.ers.usda.gov/amberwaves](http://www.ers.usda.gov/amberwaves)

## Behind the Data

### Validation Study Tests Accuracy of Homescan Data

Nielsen Homescan data provide a wealth of information about household purchasing patterns, allowing researchers to address questions relating to the dynamics of retail food markets. Households participating in the Homescan panel use a scanner to record prices and quantities of food products purchased at a wide variety of stores. ERS and other researchers have used these data to understand consumer purchase behavior. However, some researchers question the credibility of the data since the data are self-recorded and the recording process is time consuming.

With most surveys and primary statistical samplings, it is nearly impossible to estimate the accuracy of participants' self-recorded information. However, due to a unique data overlap, researchers were able to compare Homescan data with retail store data on consumer purchases. This analysis suggests that Homescan data contain some recording errors, but the overall accuracy seems to be in line with other commonly used economic data sets.

A challenge in comparing Homescan data with other data sources is the unique way in which Homescan data are collected. For each shopping trip, participating households record the date and store using a scanner provided by Nielsen. They then scan barcodes of the products purchased and enter the quantity of each item, whether it was bought at the regular or promotional price (such as a loyalty-card discount), and the coupon amount (if used) associated with the purchase. To lessen the time burden, Nielsen does not require households to enter prices for items bought from major supermarket chains for which Nielsen has store-level price data. Instead, Nielsen uses the chain store-level data to construct average weekly prices for the items.

ERS and academic researchers used store checkout data from a major supermarket chain to examine the accuracy of Homescan data. A procedure was developed to match shopping trips in each data set based on the products purchased. Transactions were compared in several ways to determine the similarity of self-reported Homescan information to retailer records. There was no corresponding transaction in the retailer's data for approximately 20 percent of food-shopping trips recorded in the Nielsen Homescan data, suggesting that the household misrecorded either the store name or the date of the shopping trip.

For shopping trips that did match, researchers analyzed which items were more likely to be missing in the Homescan trip by grouping the missed items into product categories. Two types of items were commonly missing. The first group included on-the-go consumables such as

snacks or small drinks. It is likely that such items were often consumed on the way home, before the purchase could be scanned.

The second group included items in categories containing many products with distinct, yet similar Universal Product Codes (UPCs), such as different-flavored yogurts and baby foods. It is likely that individuals simply scanned one container and entered a large quantity instead of scanning each flavor (which would have a distinct UPC) separately.

The study also found that a greater share of expenditures was missed on larger trips, suggesting that scanning a large number of items at one time may have been too time consuming for the household. Overall, roughly 20 percent of the items purchased were not recorded by the Homescan panelists. The quantity of recorded items, however, was reported fairly accurately: 94 percent of the quantity information matched in the two data sets. The match for prices was lower; in almost half the cases, the two data sets did not agree. However, much of this difference can be attributed to transactions that involved promotional or other temporary sale prices. Nielsen's practice of using store-level data as an estimate of what households actually paid—rather than recording errors by panelists—is likely the cause of the price differences in these situations. For prices that involve no promotion or temporary price reduction, there are recording errors in about 17 percent of the cases.

Do the recording errors matter? Random errors are less of an issue than if recording errors are more prevalent for certain items or types of households. Such errors could affect statistical analyses and lead to incorrect conclusions. The researchers found that certain demographic measures are more likely to lead to inconsistent results between the two data sets. For example, the study shows that age, race, education level, and male employment status affect prices paid for food differently when analyzed in Homescan versus retailers' data. Although neither data set in this study, nor most data in general, can be 100 percent accurate in all measures, these differences imply that caution may be warranted when drawing conclusions from some research results using Homescan data.

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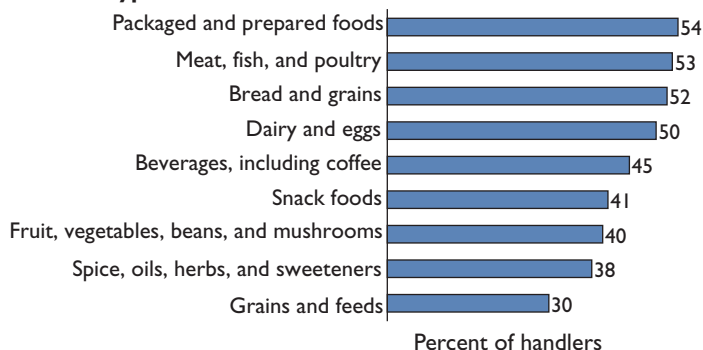
**For more information, see . . .**

*On the Accuracy of Nielsen Homescan Data*, by Liran Einav, Ephraim Leibtag, and Aviv Nevo, ERR-69, USDA, Economic Research Service, December 2008, available at: [www.ers.usda.gov/publications/err69/](http://www.ers.usda.gov/publications/err69/)

### Markets and Trade

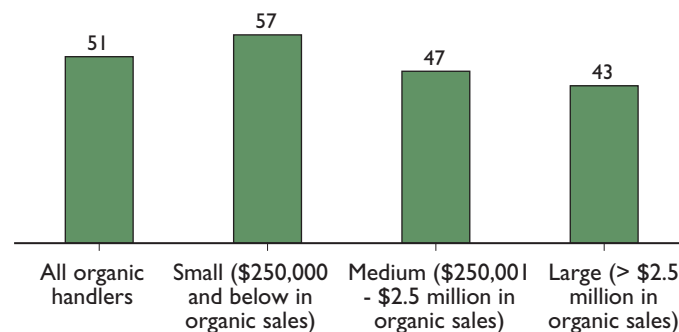
**Forty-three percent of all organic handlers in 2007 manufactured privately labeled products...**

**Product type:**



**...and the smallest organic handlers sell the largest share of their products under private labels**

**Percent of average gross sales sold under private label**

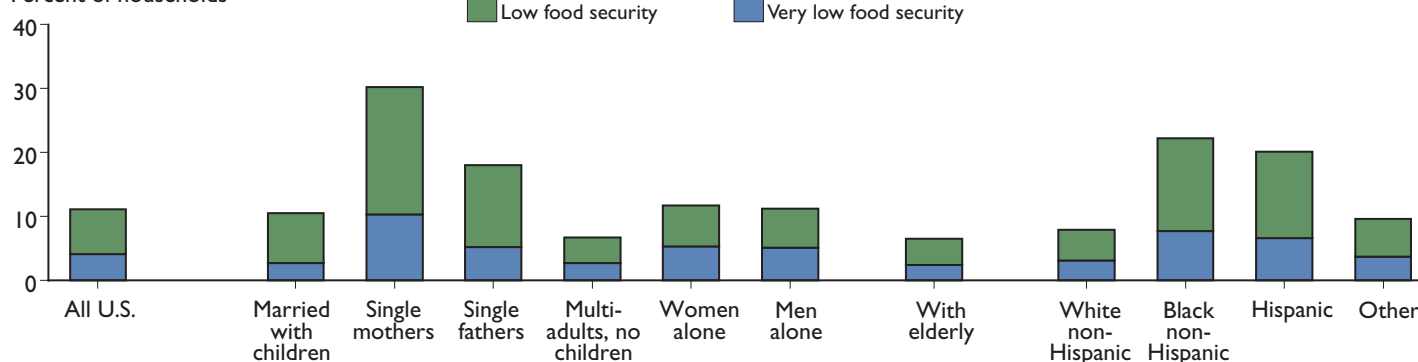


Source: USDA, Economic Research Service using 2007 Nationwide Survey of Organic Manufacturers, Processors, and Distributors.

### Diet and Health

**Single mothers and Black and Hispanic households were more likely to have difficulty putting adequate food on the table in 2007**

**Percent of households**

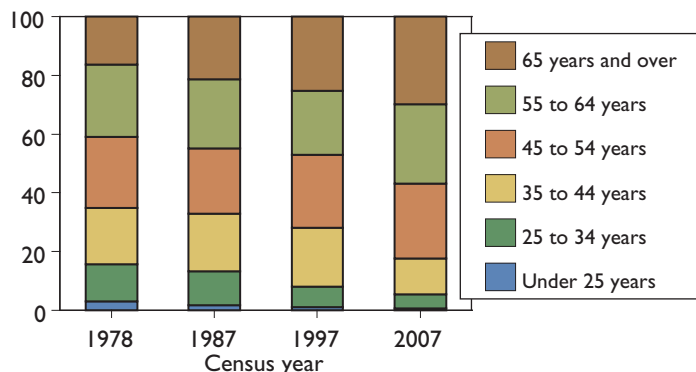


Source: Calculated by ERS using data from the December 2007 Current Population Survey Food Security Supplement.

### Farms, Firms, and Households

**Principal farm operators are an aging population, with more than half 55 years or more**

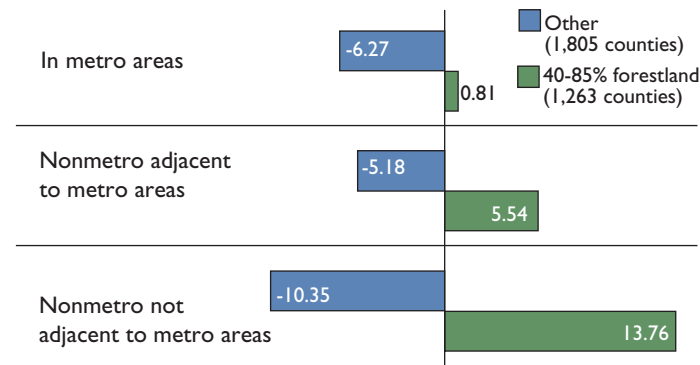
**Percent**



Source: 1978-2007 Censuses of Agriculture.

### Rural America

**Housing values relative to household income are higher in counties with a mix of forest and open land**



Note: Value of housing relative to norm for household income expressed as a percent deviation, 2000.

Source: Census of Population, 2000.

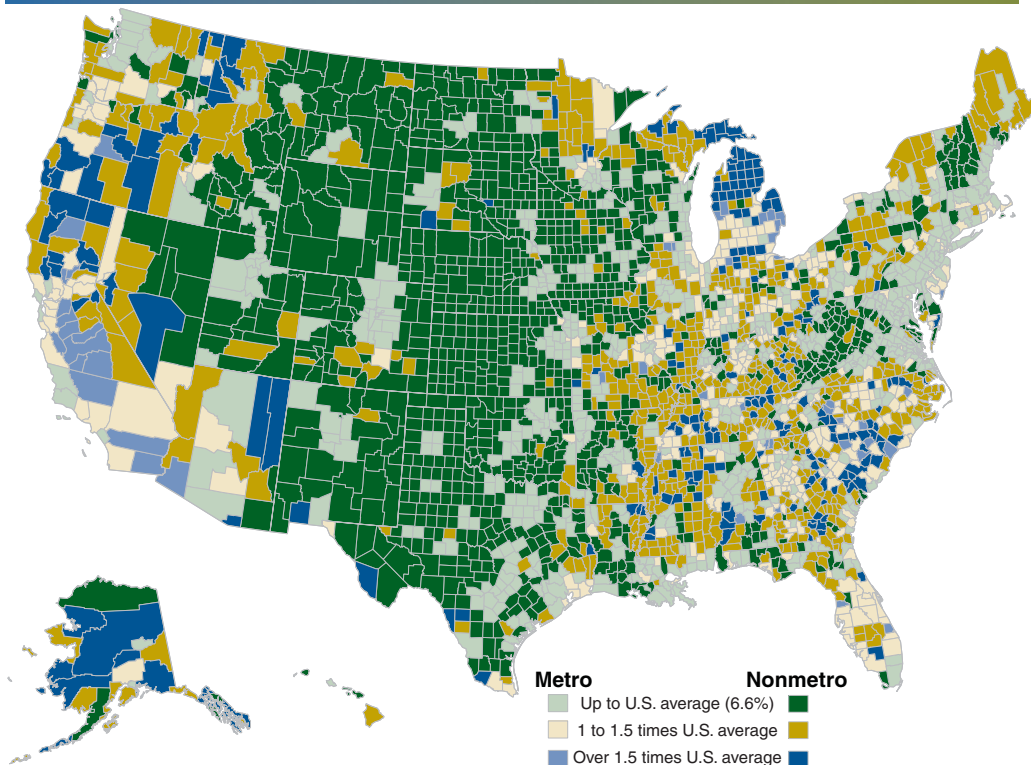
**On the Map**

**Unemployment Rate Highest in Michigan**

Nationally, the unemployment rate was 6.6 percent (not seasonally adjusted) for the fourth quarter of 2008. The unemployment rates ranged from highs in Michigan (9.5 percent) and Rhode Island (8.8 percent), to lows in North Dakota (2.9 percent) and Wyoming (3.1 percent). The States with the highest nonmetro unemployment rates were South Carolina (11.2 percent), Michigan (10.4 percent), and California (9.4 percent). In South Carolina, employment declines were primarily in retail trade, manufacturing, and the public sector. In Michigan, layoffs in auto assembly and parts manufacturing have hit both nonmetro and metro areas. The lowest nonmetro unemployment rate was 3.0 percent in Wyoming, where job gains in oil and gas production have increased significantly. In metro areas, Michigan had the highest rate of 9.3 percent, followed by Rhode Island at 8.8 percent, and California at 8.4 percent.

**Timothy Parker,**  
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**County unemployment rates, fourth quarter 2008**



Source: USDA, Economic Research Service analysis of Bureau of Labor Statistics data.

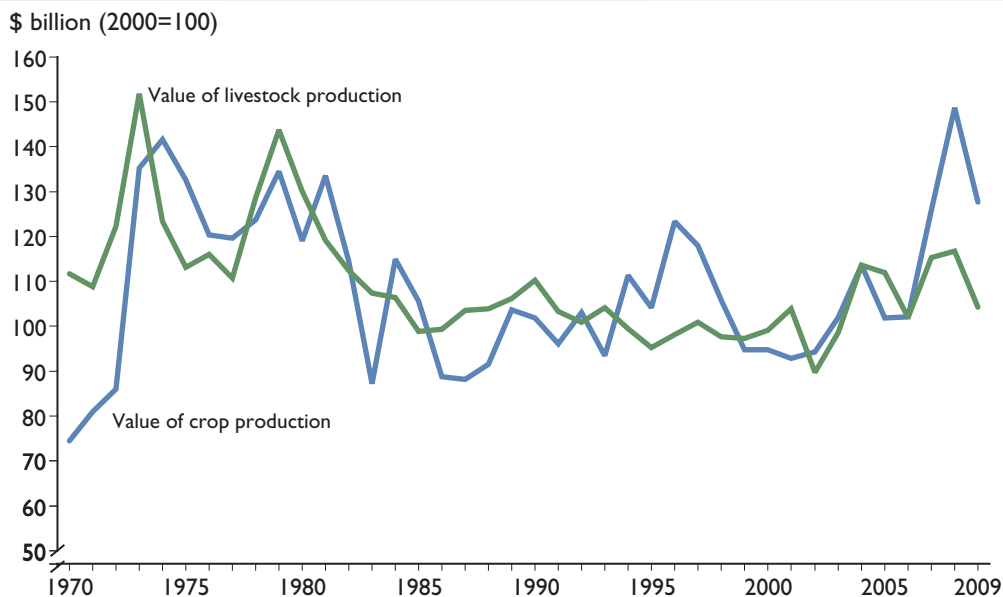
**In the Long Run**

**Markets, Policies, and Weather Contribute to Disparities in Value of Crop and Livestock Production**

During the 1970s, the value of production (farm price times quantity produced) for U.S. crops and livestock tended to move in sync, with peaks in 1973 for livestock and in 1974 for crops. In the 1980s, Payment-In-Kind and acreage reduction programs, along with adverse weather, combined to reduce crop production. Economic growth in many developing countries in the mid-1990s led to greater demand for U.S. crops and a surge in crop prices. The recent spike in the value of crop production reflects higher prices due to poor weather in major producing areas and use of crops in biofuels production.

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**Crop and livestock value of production trends**



Source: Prepared by USDA, Economic Research Service.