Chapter 1.2

Farm Real Estate Values

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Farm real estate values and cash rents are important indicators of the financial condition of the farm sector. Real estate comprises a substantial share of the asset portfolio of farm households. Farm real estate values are influenced by net returns from agricultural production, capital investment in farm structures, interest rates, government commodity programs, property taxes, and nonfarm demands for farmland. Values have been steadily rising since 1987, but the inflation-adjusted (real) value of U.S. farm real estate is still below its 1982 peak. Cash rents have also been increasing in recent years.

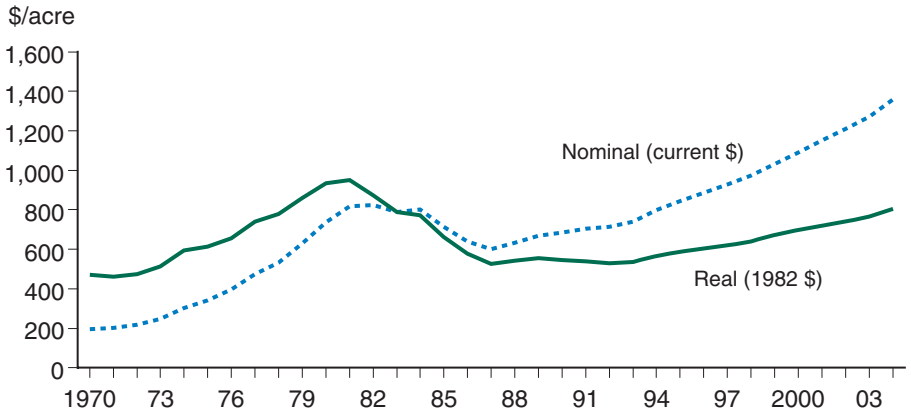
Farm Real Estate Values

Farmland values rose rapidly during the 1970s and early 1980s, followed by a sharp decline during 1982-87, then a slow upward trend beginning in 1987 (fig. 1.2.1). Since 1987, average farmland values in the Nation have increased 127 percent, from $599 per acre to $1,360 in January 2004. In real or inflation-adjusted terms (GDP deflator), however, this amounts to a 53-percent gain. It was not until January 1, 1995, that the average nominal value per acre surpassed the record high of $823 set in 1982. But the January 2004 average is still 8 percent below the 1982 average on a real (or inflation-adjusted) basis.

The 7.1-percent nominal increase in the national average value of agricultural real estate during 2004 marked the 17th consecutive increase since 1987. Over the previous 4 years, in particular, farm real estate values had increased substantially in all U.S. regions (table 1.2.1). Most notable is a 42-percent increase in the Lake States, versus 25 percent for all regions combined.

Figure 1.2.1

Average real and nominal values of U.S. farm real estate



Source: USDA, Economic Research Service.

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The increases were widespread, with most States exhibiting increases for farm real estate, cropland, and pasture. As of January 2004, several Northeast States continued to record the highest average per-acre values for farm real estate, with Connecticut and Rhode Island exceeding $10,000 per acre (fig. 1.2.2). These values reflect continued pressure from nonagricultural sources for conversion to residential or other urban-related uses. The high values in States such as California, Florida, Ohio, Illinois, Indiana, and North Carolina are the consequence of urban pressures, the production of high-value crops, or high soil fertility. The low real estate values for many States in the Northern Plains, Southern Plains, and Mountain regions can be attributed to large amounts of arid rangeland and less productive cropland. New Mexico, Wyoming, and Montana recorded the lowest average values per acre.

Table 1.2.1

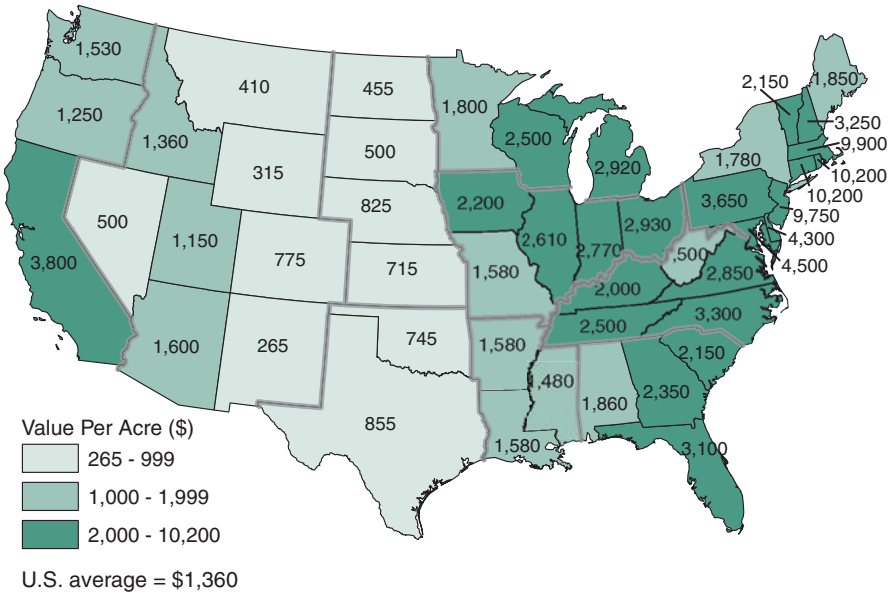
Farm real estate values, by farm production region, January 1 for selected years

Region	1982	1987	2000	2001	2002	2003	2004
				$/acre			
Northeast	1,367	1,491	2,660	2,830	3,000	3,200	3,400
Lake States	1,234	707	1,560	1,700	1,870	2,010	2,220
Corn Belt	1,642	900	1,890	1,950	2,030	2,130	2,300
Northern Plains	547	331	535	556	576	594	632
Appalachian	1,083	1,004	1,990	2,120	2,250	2,370	2,500
Southeast	1,095	1,055	1,920	2,030	2,140	2,270	2,420
Delta States	1,135	757	1,270	1,330	1,390	1,490	1,550
Southern Plains	576	532	672	715	755	788	832
Mountain	325	257	448	471	500	523	550
Pacific	1,346	1,084	2,000	2,120	2,240	2,350	2,480
48 States	823	599	1,090	1,150	1,210	1,270	1,360

Source: National Agricultural Statistics Service, USDA.

Figure 1.2.2

Farm real estate value per acre, January 1, 2004



Source: USDA, NASS, Sp Sy 3 (04), August 2004.

Cash Rents

Nearly a third of U.S. farmland is operated under some form of lease, according to the 2002 Census of Agriculture. The most common form of lease, the cash rental agreement, is a fixed payment negotiated before planting. Share rental agreements, by contrast, vary with the amount of product harvested. Under cash rental arrangements, the tenant bears all of the production and market-price risk; share rental arrangements divide production and market risks between tenant and landlord.

Cash rents are generally considered a short-term indicator of the return to a landowner's investment. To tenants, though, cash rents are a major production expense and, like farm real estate values, have been increasing for a number of years (fig. 1.2.3).

Because rents reflect the income-earning capacity of the land, they vary widely across the country. Cropland rents tend to be highest in areas where higher-value crops are grown. The highest average cash rents in 2004 were reported for irrigated land in California, at $300 per acre (fig. 1.2.4). California produces large quantities of high-value specialty crops, vegetables, fruits, and nuts. Cropland most suitable for corn and soybean production, principally in the Midwest, also commands high rents. The highest rents for nonirrigated cropland in 2004 were reported as $126 per acre in both Illinois and Iowa (fig. 1.2.4).

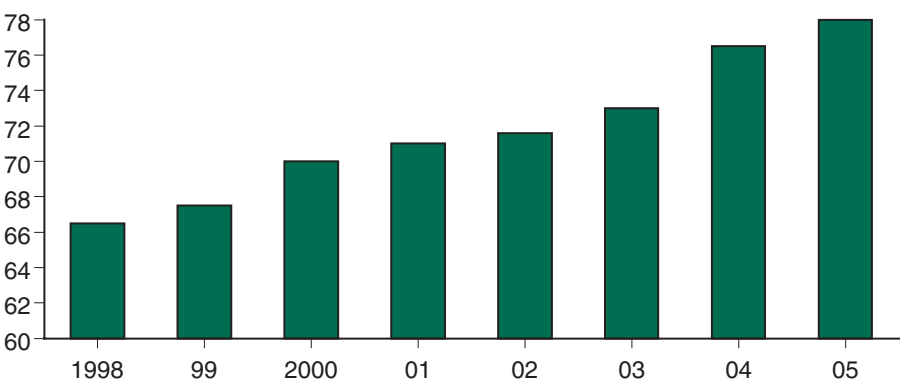
During 2004, average cash rents for pasture varied from $37 per acre in Wisconsin to $1.70 per acre in New Mexico. States in the Appalachian, Delta, Southern Plains, and Pacific regions uniformly recorded increases from 2003.

Grazing Fees

Grazing fees for use of pasture or rangeland are also a form of cash rent, except that payment is based on "grazing units" rather than tracts of land (acres). A grazing unit is defined on an animal-unit-month (AUM) basis, which is one cow or cow-calf pair, or seven sheep/goats, feeding for 1 month (NASS, 2005). Grazing fees on public lands administered by the

Figure 1.2.3

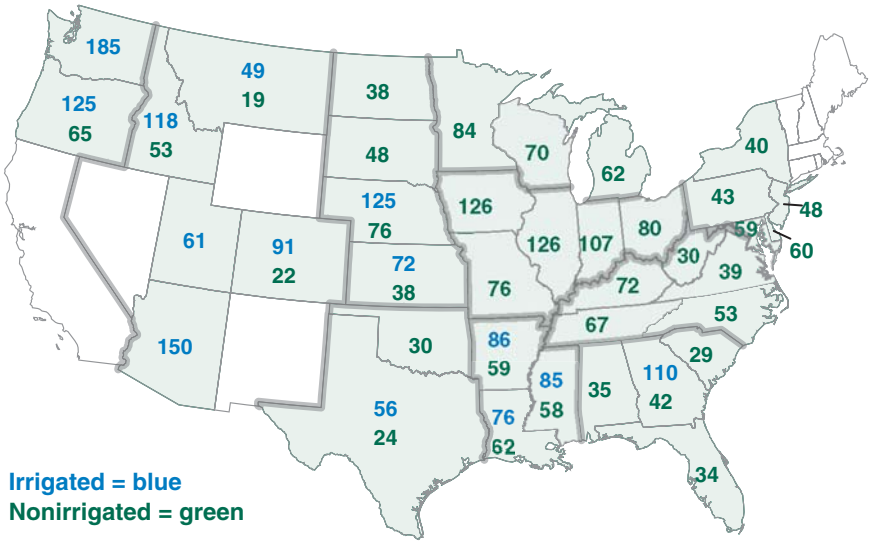
U.S. average cropland rent, nominal dollars per acre, 1998-2005



Source: USDA, NASS, August 2005.

Figure 1.2.4

Average per-acre cash rent for irrigated and non-irrigated cropland, 2004, selected States



Source: USDA, NASS, August 2004.

Bureau of Land Management (BLM) of the U.S. Department of the Interior, and the Forest Service (FS) of the U.S. Department of Agriculture (USDA) are set by law. These fees vary annually according to a legislated formula, which links the fees to changes in the cost of production. As a result of the formula, 2005 grazing fees on public land were set at $1.79 per AUM. That marks the second consecutive year in which grazing fees were set above the statutory minimum $1.35 per AUM.

Grazing rates on privately owned nonirrigated land in 16 Western States averaged $14.30 per AUM in 2004. Rates ranged from $7 in Arizona and Oklahoma to $23 per AUM in Nebraska. Private grazing rates have trended upward since the early 1990s.

Factors Affecting Farm Real Estate Values

Traditionally, farmland value was based on its agricultural productivity. Particularly in the more rural areas of the Nation, where farmers still account for most farmland purchases, net returns to agricultural uses are the principal determinant of farmland value. Interest rates, capital investment in farm structures, and many other factors also influence productivity and thus the agricultural value of farm real estate. But today, many factors unrelated to productivity—including urban influence, government program payments, and rural amenities—contribute to the value of land in rural areas. In fact, these factors may be more important than productivity. High levels of direct government payments, which have occurred particularly since 1999, may have influenced farmland values in some regions.

Urban Influence

Farmland near cities has seen its value inflated by demand for conversion to nonfarm uses. As the U.S. population continues to grow and disperse, even

primarily rural States such as Iowa are experiencing urban-related influences on farmland values. Commuters, who can now travel farther or even telecommute, are often willing to pay more than agricultural value in order to live in primarily rural areas. Other families develop hobby farms, second homes, or recreational structures in rural areas. In Iowa, for instance, there are now more nonfarmers living in rural areas than there are farmers (see Chapter 1.1, "Land Use"). Other nonagricultural factors that may contribute value include the potential to concurrently use farmland for fee-based hunting, fee-based recreation, or wildlife viewing.

Nonfarm influences on agricultural real estate values have gained increased attention as interest in farmland preservation, suburban "sprawl," and habitat conservation has grown. Recent research indicates that nonfarm influence accounts for 25 percent of the market value of U.S. farmland (Barnard, 2000). An ERS report recently addressed issues surrounding development of new houses, roads, and commercial buildings at the fringe of existing urban areas. This "sprawl" into the countryside can intersperse sometimes incompatible urban-related development with existing agriculture. Metropolitan Statistical Areas (MSAs) contain 20 percent of U.S. land area and 80 percent of U.S. population (Bureau of the Census, 2000). The area also contained more than a third of all U.S. farms in 2003 and produced about a third of agricultural production value.

Direct Federal Payments

An array of government policies influence the income derived from farmland, and hence its value. Federal commodity and conservation programs are the most obvious. But also important are farm credit programs, State and local zoning regulations, habitat and species protection laws, infrastructure development (such as roads and dams), environmental regulations, and even property and income tax policy.

Previous research has shown that capitalization of expected payments increases cropland values (Barnard et al., 2001). Also, the degree to which direct Federal payments are capitalized into cropland values depends upon the issuing program (Goodwin and Mishra, 2003). If direct payments are capitalized into cropland values, as many theorize and some research has demonstrated, then a reduction in payments could signal a decline in cropland values and a loss of wealth for landowners. Further, ERS estimates that the degree to which direct payments (even from the same program) are capitalized into cropland values varies widely, with capitalization greatest in the Northern Plains. So from a policy perspective, the effect of program changes on cropland values would vary depending on the dominant program crop in a region.

Other Market-Related Factors

Interest rates, particularly inflation-adjusted ones, are especially important determinants of U.S. farmland values. As proxies for the discount rate, interest rates determine the current value of expected future earnings from land: for a given pattern of future earnings, higher (lower) interest rates imply lower (higher) land values. During much of the mid- to late 1970s,

real interest rates were actually negative, providing a strong incentive to borrow money. Some of the borrowed money was used to purchase rapidly appreciating farmland. Conversely, real interest rates jumped from 1981 to 1985 when nominal interest rates increased rapidly just as expectations of future inflation were diminishing. The resulting increase in the real interest rate of mortgages has been cited as a cause of the slide in farmland values in the early and mid-1980s.

Inflation, lending policies of farm credit agencies and banks, and speculation also affect farmland values. And of course farmland values vary by site-specific characteristics like access to major highways, proximity to commodity and input markets, aesthetic appeal, and homesite potential.

Nonmarket Public Goods Provided by Farmland

Farmland also provides nonmonetary benefits. Until recently, these "rural amenity" benefits were supplied in such abundance that they were rarely acknowledged. But as the Nation becomes more urbanized, with the concomitant loss of farms and interspersion of urban-related activities, the decrease in those amenities has become a source of concern. The nonmonetary benefits potentially reduced or eliminated by loss of farmland and open space include recreation opportunities, aesthetic enjoyment from viewing landscapes and wildlife, environmental quality, and nostalgia related to the historic and cultural significance of rural life. It is these "rural amenity" benefits that many farmland preservation programs seek to protect. A more extended discussion is available in Chapter 5.6, "Farmland Protection Programs", an ERS report on Rural Amenities (McGranahan, 1999), and current ERS activities examining farmland.

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