United States
Department of
Agriculture

Economic
Research
Service

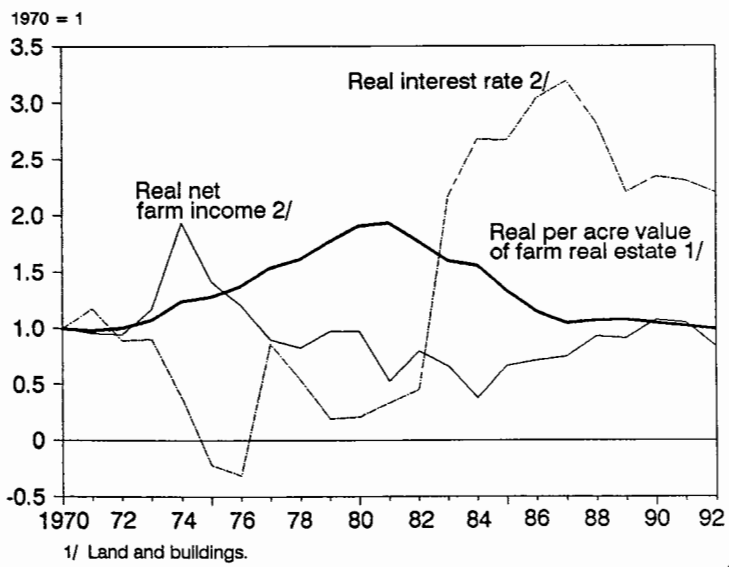
AR-26
June 1992

Agricultural Resources

Agricultural Land Values and Markets

Situation and Outlook Report

U. S. Farm Real Estate (Inflation-Adjusted) Values Edge Lower



1/ Land and buildings.

2/ Income and interest rates lagged 1 year.

Agricultural Resources: Agricultural Land Values and Markets Situation and Outlook Report. Resources and Technology Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20005-4788, June 1992, AR-26.

Contents

Situation Coordinator and Principal Contributor
Roger Hexem (202) 219-0423

Special Articles Coordinator
Fred Kuchler (202) 219-0428

Contributors
J. Peter DeBraal (Foreign Ownership) (202) 219-0425
J. Peter DeBraal (Farm Real Estate Taxes) (202) 219-0425
Patrick Canning (Farm Building Values) (202) 219-0428
Karl Gertel (Senior Author, Special Article) (202) 219-0428
Denise M. Rogers (Special Article) (202) 219-0422

Graphics and Tables
John Jones (202) 219-0428

Data Processing and Estimation
Felix Llacuna (202) 219-0491

This report draws on data from a national survey of farmers and ranchers who provide estimates of farmland values and cash rents. Real estate brokers and appraisers, officials of the Farmers Home Administration and the Farm Credit System, and others furnish information on farm sales. USDA gratefully acknowledges respondent participation in both surveys.

Approved by the World Agricultural Outlook Board. Summary released June 24, 1992. The next summary of *Agricultural Resources*, featuring cropland, water, and conservation, is scheduled for September 3. Summaries of situation and outlook reports may be accessed electronically through the USDA CID system. For details, call (202) 720-5505.

The *Agricultural Resources Situation and Outlook Report* is published four times a year. Subscriptions are available from ERS-NASS, Box 1608, Rockville, MD 20849-1608. Or call, toll free 1-800-999-6779 (U.S. and Canada only). Rates: 1 year, $12; 2 years, $23; 3 years, $33. Please add 10 percent for shipment to domestic addresses, 35 percent for foreign addresses (includes Canada). Make checks payable to ERS-NASS. Single copies are available for $8.00 each.

Time to renew? Your subscription to *Agricultural Resources Situation and Outlook Report* expires in the month and year shown on the top line of your address label. If your subscription is about to expire, renew today. Call 1-800-999-6779.

Summary

The per acre value of U.S. farm real estate is expected to average unchanged to 2 percent higher in 1992, a range that includes last year's 1-percent increase. Underlying the forecast are expectations that net farm income, interest rates on farm real estate loans, and inflation will be lower in 1992.

The January 1, 1992, value of U.S. farm real estate averaged $685 per acre. Although values have risen 5 consecutive years, bringing combined gains to 14 percent above the 1987 low of $599, the January 1 value remained 17 percent below the record $823 in 1982.

With a 3.6-percent inflation rate in 1991 more than offsetting the 1-percent increase in farm real estate value, the inflation-adjusted value fell 3 percent from January 1991. This decline continued the downward trend in real values that began in 1981, reducing the current value to 49 percent below the 1981 peak.

Although most investors in farm real estate attempt long term assessments of future economic conditions, several key indicators in 1991 did not support higher farm real estate values. Following substantially higher farm incomes in 1989 and record highs in 1990, U.S. net cash income fell 8 percent in 1991 and net farm income dropped 17 percent. While nominal interest rates on farm real estate loans declined in 1991, inflation-adjusted rates remained near a year earlier, and at high levels compared with rates in the 1970's and early 1980's.

The overall financial position of farmers and ranchers strengthened during 1985-90 as farm debt and debt ratios declined. But, farm debt increased in 1991, as did debt-to-equity and debt-to-asset ratios. Farm debt and asset values are expected to increase slightly in 1992. Also, the return on equity in farm real estate fell from 3.6 percent in 1990 to 2.9 percent in 1991. The weak U.S. economy continued to dampen investor demand for farmland for nonagricultural uses, particularly land near some urban areas and in regions along the East Coast.

Changes in regional and State farm real estate values differed as investors responded to regional and local economic factors and to their interpretations of national indicators. During 1991, regional values rose in six regions and declined in four.

Three-percent increases in the Corn Belt in 1990 and 1991 helped raise the regional per acre average ($1,158) to 29 percent above its 1987 low. Appalachia's 3-percent gain in 1991 partly offset the previous year's 5-percent drop. Annual increases averaging 8 percent in the Northern Plains during 1987-90 moderated to a 2-percent gain in 1991, partly because of a 3-percent drop in North Dakota in 1991. Increases in Lake States' values also tapered off as gains averaging 7 percent from 1987 through 1990 dropped to 1 percent in 1991.

Northeast and Mountain region values averaged 1 percent higher in 1991. After rising for several decades, Northeast values had declined slightly in 1989 and 1990, as the region's economy weakened. Values in the Mountain region have recovered about 12 percent from their 1987 low, with annual increases averaging about 3 percent during 1987 to 1990 before slowing to 1 percent in 1991.

The Southeast reported a 3-percent decline in 1991, following no change the previous year. Delta States' values also averaged 3 percent lower in 1991, but changes have varied without trend since 1987. The Southern Plains' downward movement, which began in 1986, continued as values fell 2 percent in 1991. Following 3 years of increases in the Pacific region, values declined 1 percent in 1991.

Cash rents for farms will likely rise in the Northeast, fall in the Lake States, and vary in other regions in 1992. Higher cash rents for irrigated cropland are expected in most Western States. Changes in cropland rents in other States are mixed, as are most pasture rents.

Voluntary and estate sales accounted for about 71 percent of farmland transfers in 1991, while family transfers represented an additional 17 percent. The share of foreclosures and other involuntary transfers has declined since 1987 and constituted only 9 percent in 1991.

Based on reported sales in late 1991, owner-operators participated in 60 percent of farmland purchases, involving 62 percent of the acres bought, and 57 percent of the total value of farmland purchased. Nonfarmers made 28 percent of the reported purchases which were associated with 29 percent of acres purchased and 34 percent of the total value. Owner-operators controlled 52 percent of the farmland prior to sale, and are expected to operate 70 percent of the land after sale. Tenant shares are expected to decline from 37 percent operating the land before sale to only 18 percent following sale.

About 92 percent of farmland sold in late 1991 is expected to remain in agriculture over the next 5 years. Largest shifts to nonagricultural uses are anticipated in East Coast regions where demand for nonagricultural uses is strongest.

Nearly 61 percent of reported sales involved financing, with the ratio of debt to purchase price averaging 74 percent. Seller financing accounted for 30 percent of the credit extended to purchasers, up from 23 percent a year earlier. Other principal sources included commercial banks (30 percent), the Farm Credit System (25 percent), and insurance companies (9 percent).

Foreign interests acquired an additional 0.4 million acres of U.S. agricultural land in 1991, bringing total foreign holdings to 14.8 million acres as of December 31, 1991. U.S. corporations in which foreigners held a significant interest or substantial control owned 53 percent of this acreage. Foreign-owned land currently represents just over 1 percent of all privately owned U.S. agricultural land and about 0.6 percent of all U.S. land. Most foreign-owned agricultural land is forest land (49 percent), while cropland (17 percent), and pasture or other uses (34 percent) account for the rest.

Taxes on U.S. farm real estate totaled $4.6 billion in 1990, 3.7 percent above a year earlier. Nationwide, taxes averaged $5.27 per acre in 1990, compared with $5.06 in 1989. Taxes per $100 of full market value averaged 78 cents, up from 76 cents in 1989.

Outlook

The value of U.S. farm real estate during 1992 is forecast to average within a range of no change to 2 percent higher. Analysts developed the forecast with the assistance of a national forecasting model that incorporates expectations of lower net farm income, reduced interest rates on farm real estate, and slower inflation in 1992. While the expected change at the national level is similar to the 1-percent increase during 1991, regional and State changes likely will show more variation.

The real (inflation-adjusted) value of U.S. farm real estate is expected to decline between 1 and 3 percent in 1992, following a 3-percent decline in 1991. If realized, this would continue the downward trend that began in 1981, but moderated to between 2 and 3 percent during the past 3 years.

Investors attempt to assess future incomes, interest rates, and inflation rates and their impacts on farm real estate values several years ahead. Past movements in incomes, interest and inflation rates, and farmland values help form these expectations. The national economy is forecast to improve in 1992 following its poor performance in 1991. The impacts on interest and inflation rates will partly depend on the strength and timing of recovery. Regional economic recoveries will likely be uneven with differing effects on demand for farmland for nonagricultural uses.

Stock market averages reached historic highs in 1991, but investors are concerned about the stock market as an investment alternative in 1992 and beyond. For investors considering farm real estate as a hedge against inflation, returns to equity in farming averaged 3.4 percent over the past 5 years, while inflation measured by the GDP deflator averaged 3.8 percent. Return to equity during 1992 is forecast to average between 2 and 3 percent at the national level.

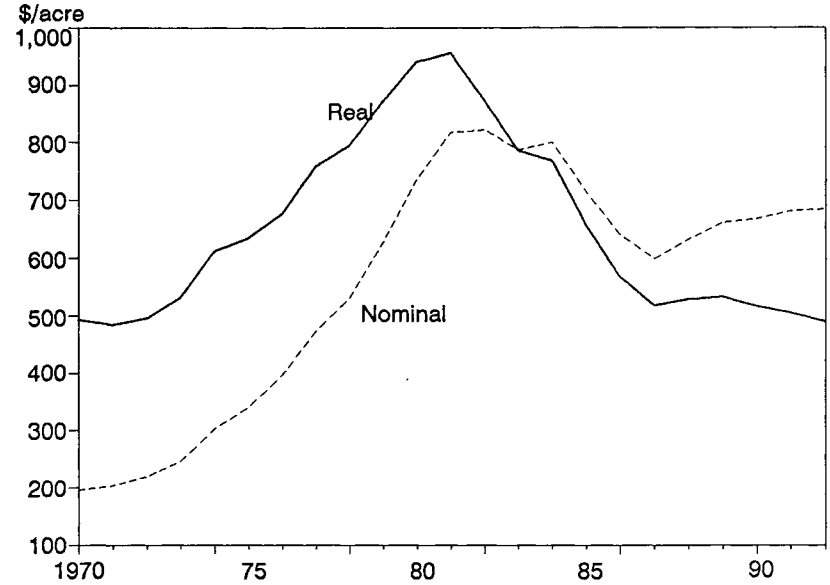
National indicators of the economic health of farm and ranch operations improved from 1985 through 1990, as farm debt and debt-to-equity ratios declined. In 1991, however, farm debt and the ratios of debt to equity and debt to assets increased. Current debt indicators for 1992 are similar to those for 1991. Slightly lower nominal interest rates in 1992 (but slightly higher real rates) should not have a sizable effect on finance costs for purchasing farm real estate or for annual operating expenses.

The value of U.S. agricultural exports in fiscal 1992 is forecast at 6 percent above a year earlier. With an expanding export market providing the best opportunities for significant increases in U.S. commodity prices and in economic returns to farm real estate, outcomes of current trade negotiations and economic conditions in importing countries are critical.

Quarterly surveys of a national panel of rural appraisers provide the Economic Research Service (ERS) with year-ahead forecasts of farmland value changes. In the January 1992 survey, the panel forecast a 1.1-percent increase in the average value of U.S. farmland during January 1992 to January 1993. Just over a third of the appraisers expected higher values, while 53 percent anticipated no change. Appraisers were more bullish in the April 1992 survey when they forecast a 1.8-percent increase for April 1992 to April 1993, with 44 percent expecting higher year-ahead values, and nearly 50 percent anticipating no change in values.

Figure 1

Average Real and Nominal Values of U. S. Farm Real Estate



Value of U.S. Farm Real Estate 1 Percent Higher

The per acre value of U.S. farm real estate gained 1 percent during 1991, advancing to $685 as of January 1, 1992 (table 1). This represents the fifth consecutive increase since the downturn in values ended in 1987. Although the current value reflects a 14-percent increase from the 1987 low of $599, it remains 17 percent below the record $823 in 1982. Value increases recently leveled off, averaging only 1 to 2 percent annually during 1990 to 1992.

Because inflation averaged 3.6 percent in 1991, the inflation-adjusted per acre value of U.S. farm real estate fell 3 percent from January 1991. With real values trending lower since 1981, the current value falls 49 percent below the 1981 peak. Real values have been about flat since 1987, as real interest rates remained high, while farm incomes rose through 1990. (See cover chart and app. table 1.) Even though real interest rates fell in 1986 and 1987, they leveled off in subsequent years, although at high levels.

While 1991 represents only 1 year in multi-year planning periods, several national economic indicators in 1991 did not tend to support higher farm real estate values. Net cash income fell 8 percent and net farm income dropped 17 percent below record highs in 1990. Yet, despite declines in 1991, incomes continued at historically high levels. Although nominal interest rates declined in 1991, real rates remained high. Farm debt edged higher in 1991 as did debt-to-equity and debt-to-asset ratios. But, debt in 1991 was near 1988-89 levels and 28 percent below the 1984 peak. Economic returns on equity fell from 3.6 percent in 1990 to 2.9 percent in 1991.

On January 1, 1992, the value of farmland and buildings for the 48 contiguous States totaled $670.8 billion (app. table 2). Because the acreage in farms and ranches does not change much from year to year, State and regional percent changes in total value closely parallel percent changes in per acre values.

The average value per farm/ranch across the 48 contiguous States rose 0.5 percent in 1991 to $319,519 as of January 1, 1992 (app. table 3). Farms/ranches averaged 467 acres per operation in 1991. Average values varied widely among States and regions due to differences in per acre values (table 1) and average size of operation. Highest values resulted for the Mountain region ($587,811), partly because of large-scale operations averaging 2,041 acres in 1991. The per acre value ($288), however, was relatively low, ranging from $138 in Wyoming to $687 in Idaho. About 75 percent of the region's land in farms and ranches is grazing land.

Northeast conditions differ. Operations are relatively small, averaging 169 acres, with cropland accounting for nearly 70 percent of the land in farms and woodland accounting for 25 percent. But, when combined with high per acre values, averaging $1,712 as of January 1, 1992, the value per operation averaged $289,482.

Farm building values totaled $125.4 billion as of January 1, 1992 (app. table 4) and represented 18.7 percent of the total value of farmland and buildings. Farm building values were

Table 1.--Average per acre value of farm real estate, by State, 1985-92 1/

State	April 1	As of February 1				As of January 1			Percent change
	1985	1986	1987	1988	1989	1990	1991	1992	1991-92
	Dollars								Percent
Northeast:	1,346	1,340	1,491	1,586	1,763	1,722	1,703	1,712	1
Maine	774	854	885	962	1,019	1,019	978	931	-5
New Hampshire	1,439	1,682	1,847	2,112	2,237	2,237	2,148	2,045	-5
Vermont	947	1,060	1,114	1,124	1,190	1,190	1,142	1,087	-5
Massachusetts	2,377	2,761	3,012	3,553	3,763	3,763	3,612	3,439	-5
Rhode Island	2,990	3,284	3,389	4,748	5,028	5,028	4,827	4,595	-5
Connecticut	3,005	3,372	3,557	4,171	4,417	4,417	4,240	4,036	-5
New York	820	843	960	993	1,024	974	1,031	1,051	2
New Jersey	2,951	2,997	3,729	3,969	4,543	4,634	4,912	4,774	-3
Pennsylvania	1,427	1,332	1,540	1,579	1,874	1,807	1,757	1,820	4
Delaware	1,596	1,684	1,677	1,765	2,058	2,259	2,248	2,126	-5
Maryland	2,197	2,023	2,009	2,261	2,462	2,420	2,196	2,255	3
Lake States:	952	797	707	788	819	841	906	915	1
Michigan	1,108	1,012	924	971	983	1,005	1,085	1,105	2
Wisconsin	944	836	777	826	846	803	853	870	2
Minnesota	898	694	587	700	745	805	873	873	0
Corn Belt:	1,108	972	900	1,003	1,100	1,096	1,129	1,158	3
Ohio	1,215	1,136	1,097	1,199	1,262	1,204	1,217	1,249	3
Indiana	1,344	1,167	1,061	1,158	1,244	1,244	1,275	1,303	2
Illinois	1,381	1,232	1,149	1,262	1,383	1,389	1,433	1,500	5
Iowa	1,091	873	786	947	1,101	1,102	1,157	1,178	2
Missouri	689	648	604	640	673	679	689	689	0
Northern Plains:	412	360	331	368	398	425	440	449	2
North Dakota	373	334	303	319	326	340	368	358	-3
South Dakota	289	267	238	269	291	328	351	365	4
Nebraska	485	416	400	457	523	550	556	569	2
Kansas	488	415	373	413	435	462	467	484	4
Appalachia:	1,035	1,025	1,004	1,037	1,077	1,111	1,059	1,091	3
Virginia	1,112	1,179	1,154	1,198	1,333	1,516	1,295	1,363	5
West Virginia	607	616	633	682	702	613	625	719	15
North Carolina	1,331	1,254	1,259	1,263	1,317	1,263	1,243	1,264	2
Kentucky	955	941	878	896	911	981	962	993	3
Tennessee	944	935	936	1,001	1,002	996	988	985	0
Southeast:	1,068	1,038	1,055	1,130	1,194	1,253	1,254	1,212	-3
South Carolina	898	870	792	871	939	909	948	931	-2
Georgia	886	853	889	920	998	1,012	995	902	-9
Florida	1,599	1,537	1,605	1,790	1,887	2,085	2,133	2,062	-3
Alabama	797	803	786	800	822	839	791	832	5
Delta States:	1,012	880	757	781	797	782	797	771	-3
Mississippi	855	778	685	697	713	728	754	738	-2
Arkansas	907	779	724	761	778	750	770	724	-6
Louisiana	1,407	1,191	921	940	954	915	905	905	0
Southern Plains:	675	579	532	531	516	495	482	472	-2
Oklahoma	597	520	475	480	521	497	486	494	2
Texas	694	594	546	544	515	495	481	466	-3
Mountain:	300	267	257	257	260	267	286	288	1
Montana	243	233	200	205	209	238	243	252	4
Idaho	739	631	552	572	595	661	659	687	4
Wyoming	181	159	157	147	142	149	153	138	-10
Colorado	437	360	368	369	367	358	410	367	-10
New Mexico	185	161	156	180	191	196	230	239	4
Arizona	295	271	299	279	274	263	285	302	6
Utah	513	476	451	425	421	389	403	425	5
Nevada	244	219	240	227	234	194	219	231	5
Pacific:	1,293	1,201	1,084	1,089	1,129	1,163	1,206	1,199	-1
Washington	943	840	756	739	757	779	798	792	-1
Oregon	615	570	541	542	535	571	583	603	3
California	1,841	1,730	1,554	1,575	1,657	1,704	1,787	1,765	-1
48 States	713	640	599	632	661	668	681	685	1

1/ Value of farmland and buildings in nominal dollars.

2 percent above the 1991 value, but 11 percent below the 1989 peak. The combination of rising farm real estate values beginning in 1987 and rapidly declining inflation rates led to the 1989 peak in building values. A slowing of increases in real estate values in 1989 and 1990, coupled with substantially higher inflation caused building values to fall significantly in both years. A modest decline in inflation in 1991 together with a 1-percent increase in real estate values resulted in a 2-percent gain in building values. (Procedures for estimating farm building values were described in "Measuring Farmland and Farm Building Values" in the June 1991 issue of *Agricultural Resources: Agricultural Land Values and Markets Situation and Outlook Report*).

Building values as a proportion of total farm real estate values ranked highest in Wisconsin (35 percent) and New York (32 percent). Both States have a large number of dairying operations that often involve a substantial building complex. Proportions in building values averaged lowest in Arizona (8 percent) and New Mexico (10 percent) where extensive range operations are common.

When building values are subtracted from the total value of farm real estate, the per acre value of U.S. farmland averaged $557 as of January 1, 1992 (app. table 5). Per acre farmland values in Wisconsin and New York were $564 and $710, compared with per acre values of farmland and buildings at $870 and $1,051, respectively.

Corn Belt and Appalachia Lead Regional Increases

Three-percent gains in the Corn Belt's average value of farm real estate in 1990 and 1991 caused values to recover 29 percent from the 1987 trough year to $1,158 as of January 1, 1992 (figure 3). Nearly 85 percent of the region's land in farms is cropland. Cropland values averaged higher in all States in 1991. Changes in State averages ranged from no change in Missouri to 5 percent higher in Illinois. Lower 1991 values for pasture and woodland, which jointly accounted for 30 percent of Missouri's land in farms, offset higher values for cropland, resulting in essentially no change in the average value of farm real estate. Illinois' 5-percent gain primarily resulted from higher cropland values. About 90 percent of the State's land in farms is cropland.

Appalachia's 3-percent gain in farm real estate values in 1991 partially offset the 5-percent drop in 1990. Demand for farmland for nonagricultural uses helped support farm real estate values in the mid-1980's when values fell sharply in predominantly agricultural regions. The January 1, 1992, value ($1,091) is only slightly below the highs of $1,107 per acre in 1984 and $1,111 in 1990. West Virginia's 15-percent gain in 1991 stemmed from higher values for all farmland uses, and from higher farm building values. Higher woodland values in Tennessee offset lower values for cropland and pasture, leading to virtually unchanged farm real estate values.

A 3-percent drop in North Dakota's farm real estate values in 1991 tempered the Northern Plains' overall gain to 2 percent, after regional values averaged 8 percent higher annually from 1987 through 1990. Drought in portions of western North Dakota likely contributed to lower values for both cropland and pasture. Kansas and South Dakota both reported 4-percent increases in overall farmland values. Higher values for pasture and cropland in both States, particularly for irrigated cropland, contributed to each State's gain. By 1992, the region had recovered about 36 percent from its low value of $331 per acre in 1987 (figure 3). However, the region's value remains 18 percent below its 1982 high of $547.

The Lake States' 1-percent gain during 1991 was the smallest since values turned higher in 1988, averaging about 7 percent during 1987-90. Minnesota showed no change in 1991, while Michigan and Wisconsin reported 2-percent increases. Most of Minnesota's farmland is in cropland, which showed no change in value during 1991. Higher cropland and pasture values in Michigan supported its increase. Higher values for woodland, which accounts for one- fifth of Wisconsin's land in farms, and higher pasture values led to the State's increase.

After rising for several decades, Northeast values declined in 1989 and 1990, as the regional economy stalled. Higher farm real estate values in New York, Pennsylvania, and Maryland more than offset lower values in other Northeast States so that the regional average gained 1 percent in 1991. The slowed economy likely contributed to lower values in 1991 . Values for all farmland uses tended to be higher in States showing 1991 gains.

Alabama's 5-percent increase in farm real estate value was more than counterbalanced by declines in other States, leading to a 3-percent drop in the Southeast's average value to $1,212 per acre. This was the first regional decline since 1986. The 9-percent drop in Georgia primarily resulted from lower values in relatively urban counties and in the northern third of the State, much of which is in recreational uses. Higher cropland and pasture values in Alabama supported the State's 5-percent gain. Alabama showed a 6-percent drop in values during 1990, so the relatively strong gain this year may represent an adjustment to last year's change.

Delta States' values averaged 3 percent lower in 1991, but the region has shown no trend in value changes since 1988. The current value ($771) is 33 percent below the 1981 peak. Lower values for all farmland uses occurred in Mississippi and Arkansas. Higher cropland values in Louisiana were offset by lower values for pasture and woodland.

Figure 2

Percent Change in Farm Real Estate Value Per Acre (Nominal Dollars): January 1, 1991 to January 1, 1992

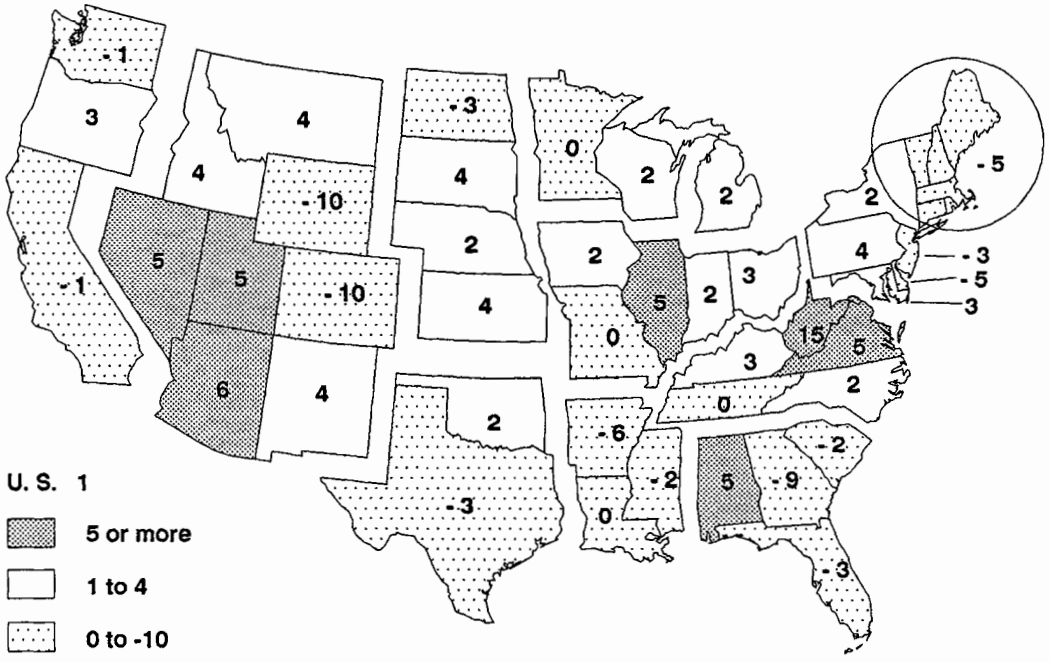
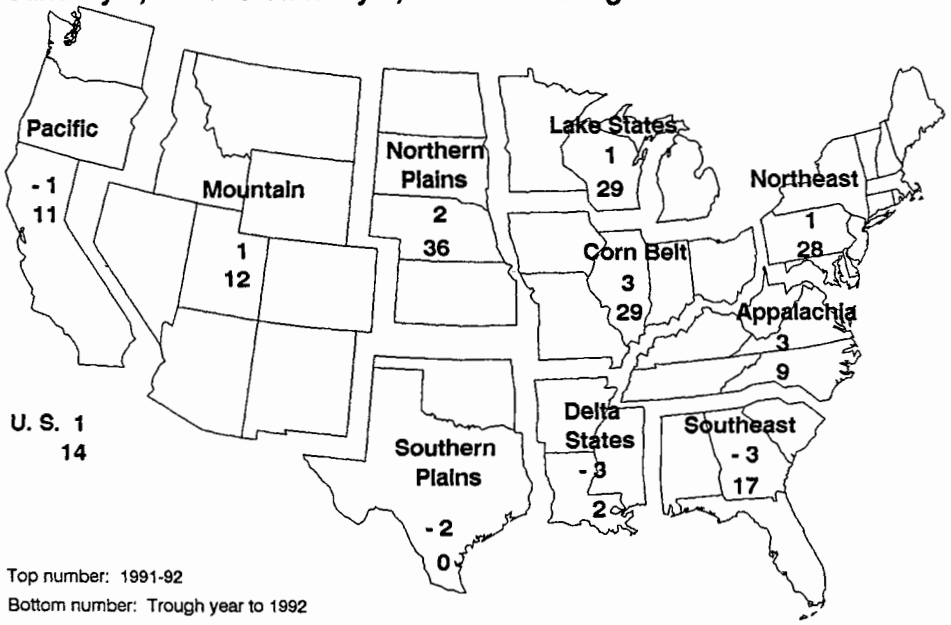


Figure 3

Percent Change in Farm Real Estate Value Per Acre, January 1, 1991 to January 1, 1992 and Trough Year to 1992



Texas' 3-percent drop in 1991 outweighed Oklahoma's 2-percent gain, leading to a 2-percent decline in the Southern Plains' average value. The drop continued a downward trend that began in 1986. Oklahoma's cropland values rose, while pasture values edged lower. Values for all farmland uses in Texas declined, with the largest drop for pasture, which accounts for two-thirds of the State's land in farms and ranches.

All Mountain States, except Colorado and Wyoming, showed increases in 1991. Drought in eastern portions of Wyoming may have contributed to lower values for all uses. Slightly higher values in Colorado's eastern half were more than offset by lower values in the relatively urban areas and in the western half of the State, much of which is in recreational uses. Arizona's 6-percent gain came from higher values for cropland and pasture.

The Pacific region's 1-percent drop followed 4 years of rising values. Higher values in Oregon (3 percent) stemmed from higher values for nonirrigated cropland and pasture. California's 1-percent decline primarily resulted from lower cropland values, even though pasture values were higher. Lower values for irrigated cropland and pasture more than offset higher values for nonirrigated cropland and woodland in Washington, with the average value of farmland declining 1 percent in 1991.

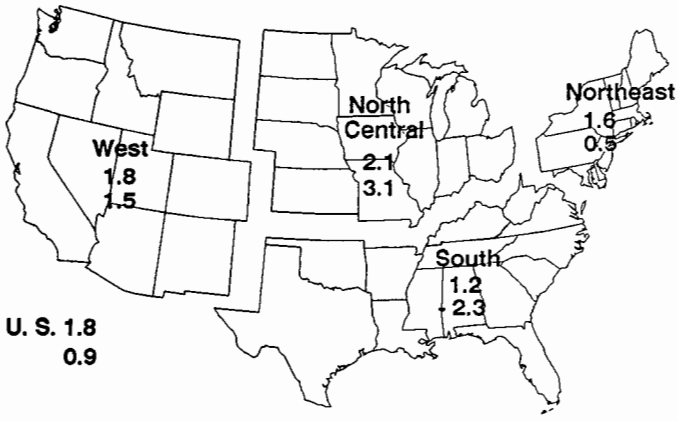
Recent Update in Farmland Values

Based on the April 1992 quarterly survey of a national panel of rural appraisers, U.S. farmland values are expected to average 1.8 percent higher during April 1992-93 (table 2). While nearly half expect unchanged values, 44 percent look for increases and 7 percent for declines. This year-ahead forecast is stronger than the 1.1-percent gain forecast for January 1992-93 in the preceding survey.

Because appraisers' information for specific areas is weighted to form regional and national estimates, their expected changes in farmland values are developed differently from the forecast in the Outlook section of this report.

Figure 4

Appraisers Expect Higher Values for April 1992-93



Top number: Expected percent change during April 1992 to April 1993
Bottom number: Reported percent change during April 1991 to April 1992

Year-ahead increases are expected in all regions. The strongest gain (2.1 percent) is expected in the North Central region (figure 4). If realized, it would be below the 3.1-percent increase reported for the preceding 12 months (table 2). Appraisers in the West are nearly equally divided between higher or unchanged values. Overall, they forecast a 1.8-percent gain in April 1992-93, up slightly from the preceding year's 1.5-percent rise. Most (84 percent) Northeast appraisers expect higher values and a 1.6-percent gain, substantially above the preceding year's 0.5-percent increase. Appraisers in the South forecast a turnaround from last year's 2.3-percent decline in values to a 1.2-percent gain in the year ahead.

Table 2.--North Central leads expected year-ahead increases 1/

	Percent expecting values during April 1992 to April 1993 to be:				Percent reporting values during April 1991 to April 1992 were:			
	Higher	Same	Lower	Change in value	Higher	Same	Lower	Change in value
	Percent							
Northeast	84	16	0	1.6	9	91	0	0.5
North Central	45	48	7	2.1	65	31	4	3.1
South	36	53	11	1.2	19	30	51	-2.3
West	48	47	5	1.8	63	21	16	1.5
United States	44	49	7	1.8	50	29	21	0.9

1/ Based on 419 responses from the April 1992 survey of a national panel of rural appraisers.

Cash Rents in 1992

About 40 percent of all U.S. farmland operated in 1991 was rented, according to USDA's 1991 Farm Costs and Returns Survey. (This count excludes land leased on an animal-unit-month basis, most of which is located in the Mountain and Pacific regions). Renting occurred most often in the Corn Belt, Delta States, and Southern Plains, where nearly 50 percent of all land operated was leased. Renting was least common in the Mountain region, where only 29 percent of the land operated was leased. Tenants leased between 31 and 44 percent of the land in other regions.

Tenants most often rented on a cash basis. In 1991, 63 percent of all rented land was rented for cash, 33 percent for shares, and 4 percent rent-free. Cash renting was most widespread in the Southeast (91 percent), Lake States (82 percent), and the Mountain region (73 percent). Tenants cash rented least often in the Corn Belt (42 percent) and the Northern Plains (56 percent). Renting on a share basis was frequently used in both regions.

Cash rents are indicators of gross economic returns to farmland. Rents may vary from year to year as market and growing conditions change. Farmland values, however, reflect longer time spans of past and expected returns to land. So, annual changes in rent-to-value ratios may be more volatile than changes in farmland values. Some year-to-year changes also result from sampling and other variations in the annual surveys.

Higher Farm Rents in the Northeast

Estimates of cash rents for entire farms are generally limited to States east of the Plains regions. Renting entire farms is less common in other areas.

Higher cash rents are expected in all Northeast States in 1992 (table 3). The large increase for Delaware may be due to sampling variation, because rents in 1990 and 1991 averaged around $60 per acre.

Higher rents are also anticipated in Appalachia, except for Tennessee, where rents are expected to fall from $37.30 per acre in 1991 to $35.50 in 1992. Rent-to-value percentages in 1992 are unchanged for North Carolina, but lower for all other States. Higher rents are also expected in the Southeast and Delta States, except for South Carolina and Arkansas which show declines.

Lower rents are expected in all the Lake States and all the Corn Belt States except Illinois ($101.70) and Iowa ($101).

Irrigated Cropland Rents Generally Higher

Recent droughts in some irrigated areas may have pushed rents for irrigated cropland higher in 1992. Among commodities, wheat has shown price strength over past months and sizable acreage of wheat is irrigated in several States in the Plains, Mountain, and Pacific regions. Irrigated cropland rents are expected to be higher in most States in 1992, except Arizona, Oklahoma, Utah, and Washington (table 4). Rents for nonirrigated cropland in Plains and Western States are generally similar or lower in 1992, except in Utah and Oregon.

While all eastern States report some irrigation, ERS does not attempt to develop separate estimates for irrigated and nonirrigated cropland. States within most eastern regions did not show uniform 1991-92 changes in cropland rents (table 4). In the Corn Belt, for example, rents are $2 to $3 per acre higher in Illinois and Iowa, but about $4 per acre lower in Missouri. Michigan rents average higher in the Lake States, while rents are lower in Wisconsin and Minnesota.

The sizable drops in South Dakota rents and Nebraska nonirrigated rents largely result from a change in estimating procedure in 1990 and 1991 which probably generated above-trend rents. Rents in other Northern Plains States were similar or higher in 1992.

Mixed Changes in Pasture Rents

The Northern and Southern Plains and the Mountain region jointly account for 85 percent of the Nation's grazing land in farms and ranches. Expected pasture rents in the Northern Plains are near a year ago (table 5). Southern Plains' rents are lower in 1992, particularly in Texas, where rents are expected to drop from $9 per acre in 1991 to $6.90 in 1992. Rents are expected to be generally higher in the Mountain States in 1992. The relatively higher rents in Idaho and Utah may reflect sampling differences or some reporting of rents for irrigated pasture.

Comparisons of 1991 and 1992 rents in other regions show no consistent movement. Rents average highest in the Corn Belt, with 1992 rents ranging from $23.70 per acre in Missouri to $35 in Indiana. Ohio shows a decline from a year ago.

The 16-State average value for cattle grazing fees on privately owned nonirrigated land leased on an animal-unit-month basis was $9.78 in 1991, down from $10.86 a year earlier (table 6). Substantially higher 1991 rents were reported for Montana, Idaho, and Utah.

Table 3.--Farms rented for cash: Average gross cash rent per acre and rent as a percent of value, selected States, 1988-92

State	Rent per acre					Rent to value 1/				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
	Dollars					Percent				
Northeast:										
Maine	30.40	38.00	36.30	34.10	41.70	5.2	3.2	3.8	5.2	2.6
Vermont	30.10	28.30	31.30	23.30	27.40	2.7	3.3	2.6	2.3	2.0
New York	29.40	34.60	25.90	30.40	33.80	4.1	3.2	4.0	4.5	3.5
New Jersey	51.70	60.80	*	37.80	41.70	0.5	0.3	*	0.2	0.5
Pennsylvania	43.80	44.10	44.10	41.20	43.20	2.5	2.1	2.3	1.9	1.8
Delaware	55.20	52.30	60.60	59.70	76.10	2.9	2.1	4.2	3.2	3.8
Maryland	58.50	53.60	54.00	53.20	*	2.1	2.3	3.3	2.5	*
Lake States:										
Michigan	39.20	42.50	43.80	52.80	44.90	5.6	6.0	5.9	6.6	6.0
Wisconsin	50.30	51.10	56.90	58.30	57.10	7.8	7.8	8.0	7.9	8.1
Minnesota	52.10	54.10	61.80	66.30	61.40	8.5	8.4	7.8	7.6	7.7
Corn Belt:										
Ohio	62.00	66.70	68.40	67.60	62.50	6.1	6.0	5.9	5.9	5.2
Indiana	73.90	78.00	83.10	85.80	84.90	7.2	7.0	6.8	6.6	7.1
Illinois	83.20	87.10	98.20	100.00	101.70	6.8	6.3	6.7	6.7	6.6
Iowa	82.10	91.40	96.00	97.00	101.00	8.4	8.3	7.9	8.5	8.0
Missouri	44.70	47.00	50.30	46.80	43.10	8.3	8.2	9.0	8.4	7.3
Northern Plains:										
North Dakota	25.40	24.20	24.30	27.00	24.70	8.1	8.1	8.8	8.3	8.3
South Dakota	18.90	20.90	20.50	21.00	21.90	8.8	7.8	*	7.4	8.2
Appalachia:										
Virginia	28.70	29.20	30.10	28.20	29.40	2.7	1.8	2.4	2.7	2.4
West Virginia	21.40	19.90	22.50	18.70	24.20	3.5	2.9	4.0	2.6	1.7
North Carolina	28.40	34.10	31.00	31.90	33.50	2.4	2.5	2.6	2.9	2.9
Kentucky	42.90	41.10	38.00	38.40	41.40	4.9	5.0	5.3	5.5	5.0
Tennessee	34.70	39.10	37.40	37.30	35.50	3.8	4.3	7.1	5.3	4.1
Southeast:										
South Carolina	21.50	24.80	21.10	21.10	19.80	2.6	3.1	3.2	2.7	2.6
Georgia	26.80	28.40	23.80	26.10	26.40	3.5	3.3	3.5	3.8	3.0
Alabama	29.30	25.70	28.40	23.20	24.90	4.9	4.0	4.8	3.9	4.1
Delta States:										
Mississippi	30.40	31.80	26.20	29.80	30.10	5.6	5.7	4.8	5.4	5.9
Arkansas	35.80	39.80	42.10	45.20	41.00	6.0	5.9	6.8	6.9	6.8
Louisiana	36.00	44.10	32.00	41.30	43.70	3.7	4.9	4.3	6.6	5.9

* = Insufficient information.
1/ Cash rent as a percent of per acre value of rented farmland.

Table 4.--Cropland rented for cash: Average gross cash rent per acre and rent as a percent of value, selected States, 1988-92

State	Rent per acre					Rent to value 1/				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
	Dollars					Percent				
Northeast:										
Maine	36.90	36.40	35.70	34.30	37.10	5.4	3.2	5.2	5.7	2.5
Vermont	45.20	38.20	25.60	22.60	34.30	3.2	3.7	2.9	2.5	1.6
New York	31.30	37.80	30.20	33.90	36.20	3.7	3.8	4.7	5.0	4.5
New Jersey	61.10	67.40	*	66.50	52.00	0.6	0.3	*	0.4	0.5
Pennsylvania	42.70	46.50	43.30	42.10	42.40	2.4	1.9	2.3	2.2	1.8
Delaware	51.70	57.10	55.80	59.60	62.30	2.9	2.7	3.8	3.6	3.3
Maryland	50.50	55.10	49.30	53.30	*	2.0	1.8	3.7	3.0	*
Lake States:										
Michigan	41.70	44.20	41.40	45.50	47.40	5.9	5.9	5.7	6.0	6.2
Wisconsin	45.40	50.90	50.00	52.30	51.40	7.3	7.7	7.2	7.1	7.3
Minnesota	52.70	59.80	61.50	63.30	62.30	8.5	8.4	7.6	7.4	7.6
Corn Belt:										
Ohio	65.60	70.80	69.10	69.10	70.20	6.3	6.4	6.0	5.8	5.6
Indiana	77.00	83.10	86.60	86.70	85.70	7.2	7.2	6.9	6.8	7.5
Illinois	89.20	94.30	99.40	100.90	103.30	7.1	6.5	6.7	6.6	6.5
Iowa	86.30	95.80	99.60	100.80	104.60	8.6	8.2	8.0	8.2	8.0
Missouri	54.70	59.80	61.90	62.20	58.20	9.1	8.9	9.9	9.3	8.0
Northern Plains:										
North Dakota	28.80	29.40	25.20	28.70	29.10	8.1	8.4	8.9	9.0	8.7
South Dakota	27.10	27.30	36.20	37.40	30.40	9.5	8.8	8.4	8.0	8.3
Nebraska--										
(Nonirrigated)	48.50	51.30	59.40	58.30	49.60	10.2	8.4	8.8	8.6	8.6
(Irrigated)	85.50	100.10	101.60	98.90	102.80	10.5	9.8	9.3	8.9	9.5
Kansas--										
(Nonirrigated)	30.60	30.20	33.10	32.50	31.90	8.3	7.6	8.0	7.7	7.2
(Irrigated)	54.10	62.50	61.50	60.60	62.70	9.8	10.3	9.1	8.7	9.5
Appalachia:										
Virginia	36.20	37.40	37.70	34.50	34.40	2.9	2.2	2.7	2.8	2.1
West Virginia	29.70	35.70	29.70	29.50	30.40	4.6	3.8	4.9	4.6	3.4
North Carolina	34.00	38.70	32.90	34.60	37.70	2.6	2.8	2.7	3.0	2.8
Kentucky	52.70	62.10	47.50	52.70	52.60	6.1	6.5	6.3	6.6	5.4
Tennessee	46.60	46.80	46.00	51.20	48.80	5.3	5.9	7.1	6.0	5.1
Southeast:										
South Carolina	23.00	26.00	23.20	22.30	21.70	2.9	3.1	3.6	3.0	2.5
Georgia	30.70	32.80	27.30	27.90	29.70	4.2	4.0	3.9	3.9	3.5
Florida	106.90	114.10	105.00	126.10	101.50	3.0	3.1	2.0	3.6	3.0
Alabama	30.40	29.70	33.90	28.60	28.10	4.8	4.1	5.5	4.7	4.1
Delta States:										
Mississippi	36.30	40.60	33.80	37.90	40.80	5.8	6.3	5.6	6.0	6.7
Arkansas	50.40	52.00	49.80	55.50	48.00	7.2	6.4	6.7	6.6	7.3
Louisiana	44.60	55.00	46.30	49.50	48.30	4.8	6.0	6.1	7.0	6.1
Southern Plains:										
Oklahoma--										
(Nonirrigated)	24.30	25.80	27.20	25.60	26.10	5.3	5.1	5.5	5.7	5.6
(Irrigated)	33.70	36.10	42.50	42.10	39.10	6.8	6.8	6.1	7.1	5.9
Texas--										
(Nonirrigated)	20.50	22.60	20.10	20.30	20.00	2.5	3.1	2.9	3.1	3.3
(Irrigated)	41.10	49.50	43.10	42.50	45.30	4.8	6.1	4.8	4.9	7.3
Mountain:										
Montana--										
(Nonirrigated)	20.30	23.90	21.80	18.40	19.80	7.8	8.4	8.3	7.3	8.3
(Irrigated)	42.00	54.40	60.20	43.60	50.60	5.6	8.5	8.3	6.6	5.0
Idaho--										
(Nonirrigated)	30.80	38.70	36.90	41.30	33.90	6.7	7.0	6.4	7.4	5.6
(Irrigated)	91.20	96.00	94.80	92.00	114.30	8.5	8.1	9.3	8.9	9.9
Wyoming--										
(Nonirrigated)	12.00	14.30	13.90	10.20	9.60	7.8	8.5	9.3	6.6	5.7
(Irrigated)	42.50	45.30	37.90	40.30	49.40	8.7	8.7	8.0	8.3	8.7
Colorado--										
(Nonirrigated)	24.30	28.90	20.50	23.50	20.40	4.7	6.3	6.9	8.1	5.6
(Irrigated)	63.80	68.70	70.90	70.80	72.70	6.7	7.5	8.6	6.1	7.2
New Mexico--										
(Irrigated)	74.40	70.50	62.00	70.40	87.70	2.3	3.9	4.1	3.9	2.6
Arizona--										
(Irrigated)	146.40	153.40	139.20	144.20	128.10	1.4	1.5	3.8	3.4	3.8
Utah--										
(Nonirrigated)	25.80	27.30	24.00	26.50	30.50	3.3	3.8	5.6	6.3	3.8
(Irrigated)	54.30	56.00	59.00	60.30	57.60	2.8	3.3	4.3	4.3	3.4
Nevada--										
(Irrigated)	77.40	79.30	72.10	87.70	92.70	5.0	7.0	4.5	5.1	4.8
Pacific:										
Washington--										
(Nonirrigated)	42.30	50.90	56.00	53.30	49.80	5.7	6.8	7.5	6.1	5.5
(Irrigated)	89.70	92.50	125.60	117.40	113.10	5.1	6.5	9.8	6.3	5.7
Oregon--										
(Nonirrigated)	42.20	55.70	50.00	53.10	58.20	4.4	7.2	5.4	4.7	6.0
(Irrigated)	81.50	84.00	88.50	96.00	106.70	5.8	7.9	5.6	6.2	6.1
California--										
(Irrigated)	166.80	184.20	155.00	167.60	179.60	3.9	5.0	5.3	4.8	3.4

* = Insufficient information.
1/ Cash rent as a percent of per acre value of rented cropland.

Table 5.--Pasture rented for cash: Average gross cash rent per acre and rent as a percent of value, selected States, 1988-92

State	Rent per acre					Rent to value 1/				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
	Dollars					Percent				
Northeast:										
Maine	21.40	17.60	16.30	18.10	25.50	4.3	1.3	2.8	3.4	1.8
Vermont	19.00	17.20	15.20	12.50	20.90	2.0	2.2	1.8	2.1	1.4
New York	16.50	16.00	16.10	16.90	19.90	3.7	3.4	4.3	5.2	4.2
New Jersey	19.90	22.90	*	*	*	1.9	2.0	*	*	*
Pennsylvania	19.90	22.90	23.50	21.60	21.80	1.9	2.0	2.1	1.7	1.5
Delaware	34.40	34.00	34.40	39.30	44.40	3.3	2.7	3.8	3.0	3.0
Maryland	31.90	30.80	30.80	33.80	31.90	2.0	1.6	2.6	2.5	2.1
Lake States:										
Michigan	15.90	20.00	20.50	21.70	19.60	3.5	4.7	4.4	4.8	4.2
Wisconsin	21.40	23.30	25.00	23.30	25.60	7.2	6.7	6.8	6.5	7.6
Minnesota	18.10	17.80	20.70	22.90	18.60	7.2	6.6	7.4	8.8	6.3
Corn Belt:										
Ohio	28.40	27.60	28.80	30.50	26.50	4.7	4.5	5.0	4.5	4.3
Indiana	31.30	33.90	35.30	33.40	35.00	5.8	5.6	5.9	5.4	6.1
Illinois	28.60	32.80	33.20	33.50	34.90	6.3	6.0	6.1	6.0	5.6
Iowa	28.80	30.00	32.60	35.40	33.60	8.6	7.7	7.2	7.7	7.3
Missouri	22.70	22.80	24.10	24.10	23.70	6.0	6.2	6.8	6.2	5.4
Northern Plains:										
North Dakota	8.50	8.40	8.50	8.80	9.20	6.6	6.8	6.9	6.6	7.1
South Dakota	6.40	7.10	6.80	8.60	8.20	8.3	7.9	7.6	8.0	7.4
Nebraska	11.40	12.30	10.60	12.40	11.80	10.9	7.7	7.1	7.9	7.4
Kansas	11.80	10.80	11.50	11.60	12.00	5.5	5.2	5.2	5.1	5.0
Appalachia:										
Virginia	20.40	21.00	22.40	21.20	22.60	2.4	1.6	2.1	2.6	2.2
West Virginia	14.00	14.50	11.50	11.10	14.70	3.2	3.1	2.7	2.3	1.9
North Carolina	20.70	22.50	20.00	18.70	21.30	1.9	1.8	2.5	2.3	2.1
Kentucky	27.50	25.50	24.90	25.20	25.90	4.7	4.0	4.8	4.3	3.3
Tennessee	22.70	26.40	26.90	25.20	23.50	3.3	3.3	5.7	4.6	2.9
Southeast:										
South Carolina	17.60	18.40	17.90	17.50	15.30	2.2	2.2	3.4	2.7	2.2
Georgia	20.80	21.00	19.50	19.90	19.70	2.9	2.4	3.1	3.3	2.6
Florida	25.20	27.10	20.20	22.50	21.40	0.9	1.2	0.8	1.7	0.8
Alabama	18.60	18.00	20.60	18.20	18.80	3.8	3.7	3.9	3.4	3.2
Delta States:										
Mississippi	14.70	15.90	14.70	15.60	14.90	3.4	3.4	3.6	3.7	3.4
Arkansas	16.00	19.90	16.90	15.50	18.60	3.7	3.7	3.7	3.3	4.0
Louisiana	14.70	16.10	18.30	17.70	17.20	1.8	2.1	3.4	3.0	2.7
Southern Plains:										
Oklahoma	10.40	9.50	9.70	10.50	10.20	3.3	2.8	3.2	3.4	3.4
Texas	7.80	7.30	9.20	9.00	6.90	1.2	1.4	1.6	1.7	1.8
Mountain:										
Montana	4.20	5.00	6.00	5.10	6.60	3.3	6.3	6.8	5.0	5.5
Idaho	16.10	20.60	16.40	17.20	26.50	6.3	7.3	5.6	5.2	6.1
Wyoming	4.50	5.50	4.90	3.50	3.60	5.9	5.2	4.9	3.4	3.6
Colorado	9.30	7.30	8.20	7.50	6.80	3.1	2.3	5.0	4.7	3.2
Utah	17.10	19.00	20.20	20.20	25.70	2.3	3.2	4.6	4.3	3.5
Pacific:										
Washington	32.40	29.10	30.00	*	21.90	4.9	6.8	8.5	*	4.0
Oregon	14.50	14.40	*	*	22.60	4.8	6.5	*	*	4.0
California	33.80	37.10	42.50	*	37.90	1.4	4.0	9.0	*	2.2

* = Insufficient information.

1/ Cash rent as a percent of per acre value of rented pasture.

Table 6.--Cattle grazing rates on privately owned nonirrigated land, 1986-91

State	1986	1987	1988	1989	1990	1991
	Dollars per animal unit month 1/					
Northern Plains:						
North Dakota	7.63	7.41	7.67	8.26	8.52	8.93
South Dakota	9.19	8.61	9.98	10.65	12.53	12.74
Nebraska	9.75	10.29	10.40	13.13	15.78	14.83
Kansas	8.17	8.87	9.42	10.13	10.58	11.10
Southern Plains:						
Oklahoma	5.08	5.68	6.09	9.94	4.31*	7.23
Texas	8.79	8.30	8.06	9.37	7.61*	8.60*
Mountain:						
Montana	8.30	7.94	9.79	9.61	9.61	10.58
Idaho	7.51	6.60	6.99	6.93	8.42	10.18
Wyoming	8.31	6.31	8.93	10.06	9.64	9.98
Colorado	8.28	8.27	8.43	8.39	10.20	9.30
New Mexico	5.98	5.82	5.46*	7.51	6.66	3.02*
Arizona	5.82	7.19	4.47*	3.92*	3/	3/
Utah	5.34	5.98	8.70	9.06	7.79	9.64
Nevada	2.95	7.31	3/	4.18*	3/	9.45
Pacific:						
Washington	9.77	9.55	7.28*	7.94	7.82	7.81
Oregon	7.69	5.91	7.03*	7.40	8.28	8.93
California	7.93	8.46	9.43*	10.72	9.81*	9.61
16-State average 2/	8.33	8.09	8.98	10.06	10.86	9.78

* = Coefficient of variation exceeds 15 percent.

1/ Includes cow-calf rates converted to animal unit month (1 aum = cow-calf X 0.833). 2/ All State except Texas. 3/ Insufficient number of reports for an accurate estimate of grazing rates.

Source: USDA, NASS. Agricultural Prices. Pr 1 (12-91). Dec. 1991 and earlier issues.

Farmland Transfers

ERS' 1992 Farmland Market Survey collected data on 5,800 sales between September 1 and December 31, 1991, involving nearly 1.7 million acres of farmland. Respondents provided details on up to five of the most recent voluntary and estate sales completed in their county(s). Sales comprised at least 10 acres used primarily for agriculture at time of sale. Reported sales are not necessarily representative of all sales during the year.

Farmers Home Administration officials represented 30 percent of the survey respondents. Other groups included real estate brokers and appraisers (27 percent), commercial bankers (21 percent), Farm Credit System officials (11 percent), and "all other" (11 percent).

Respondents also estimated the types of farmland transfers within their county(s) during calendar 1991. Nationwide, voluntary and estate sales represented 71 percent of reported transfers. Family transfers (17 percent); foreclosures, bankruptcies, and condemnation sales and transfers (9 percent); and "other sales and transfers" (3 percent) accounted for the rest. Percent shares matched those reported for 1990. The share of foreclosures and other involuntary sales has declined since 1987, while voluntary and estate sales increased.

Average Price and Acres Per Sale Down

Based on reported sales, acres per sale averaged 293 at the national level, down from the 2 preceding years (table 7). Regional averages also generally declined, except in the Southern Plains. Several sales of large tracts of grazing land in the Southern Plains raised the regional average and also contributed to most (74 percent) of the acres sold being in pasture and grazing land prior to sale (table 8). A year earlier, 63 percent of the acreage sold was in grazing. Because grazing land is relatively low priced, the average price per acre for Southern Plains' sales dropped from $415 in 1991 to $293 in 1992 (table 7). Grazing land accounted for 58 percent of the value of reported sales in 1992 in the Southern Plains (table 8), compared with 48 percent in 1991.

Price per acre at the national level averaged $599, compared with $637 in 1991 (table 7). Although many regions reported higher average prices in 1992, lower averages for the Southern Plains and Mountain regions, each with large acre-

Table 7.--Farmland transfers: Average acres per sale and price per acre, 1984-92 1/

Region	1984	1985	1986	1987	1988	1989	1990	1991	1992
					Acres per sale				
Northeast	143	132	138	138	141	137	132	122	129
Lake States	147	129	121	140	144	139	134	141	122
Corn Belt	133	127	129	134	142	139	138	135	126
Northern Plains	270	297	387	323	403	383	375	375	330
Appalachia	112	110	123	131	115	130	226	128	117
Southeast	181	210	185	219	194	211	204	221	172
Delta States	224	164	196	277	237	349	224	222	207
Southern Plains	340	324	325	356	529	397	542	356	562
Mountain	1,009	1,380	1,051	977	1,891	1,179	1,243	1,752	1,585
Pacific	225	245	165	245	383	567	489	508	373
47 States	232	259	245	236	317	290	306	307	293
					Price per acre				
Northeast	1,142	1,182	1,248	1,658	1,768	2,105	2,430	2,027	1,619
Lake States	1,119	945	806	666	644	744	800	798	886
Corn Belt	1,459	1,187	944	870	955	1,088	1,097	1,187	1,216
Northern Plains	525	408	265	265	260	294	323	315	369
Appalachia	1,151	981	984	961	951	1,060	1,022	1,018	926
Southeast	1,234	935	1,064	1,037	1,253	1,455	1,400	1,277	1,835
Delta States	1,120	924	793	662	527	565	649	665	669
Southern Plains	647	598	792	448	321	379	324	415	293
Mountain	364	306	274	273	160	236	242	235	170
Pacific	2,211	1,856	2,079	1,447	1,310	1,192	1,509	1,107	1,479
47 States	888	747	725	607	566	639	654	637	599

1/ Reported acres and prices for each State are weighted to regional and U.S. averages according to the State's acreage of land in farms. Arizona is excluded from averages for the Mountain region and the 47 States. Based on reported sales during the 5 months ending March 1, 1984-85, the 5 months ending February 1, 1986-89, and the 4 months ending January 1, 1990-92.

age, pulled down the national average. Higher averages in the Southeast ($1,835) and Pacific ($1,479) regions partly resulted from smaller tracts sold, but usually at higher prices per acre. Also, reported sales in the Southeast showed a higher proportion of acreage in relatively high-valued cropland in 1992 than a year earlier. Pacific region sales had higher proportions of high-valued irrigated cropland in 1992.

Owner-Operators Continue To Dominate Purchases

Owner-operators, including part owners, accounted for the majority of farmland purchases in 1992. They made 60 percent of the reported purchases, which involved 62 percent of the acres transferred and 57 percent of the value of farmland sold (table 9). Shares of purchases by others included nonfarmers (28 percent), tenants (10 percent), and retired farmers (2 percent).

Shares among buyer groups have been fairly stable over the past several years. Ten years ago when the average value of U.S. farm real estate peaked, owner-operators made 61 percent of reported purchases, nonfarmers 25 percent, tenants 12 percent, and retired farmers 2 percent. Five years ago, when declines in the U.S. average value bottomed out, reported purchases were distributed among owner-operators (56 percent), nonfarmers (31 percent), tenants (10 percent), and retired farmers (3 percent).

Most regional distributions of buyer groups approximate those for a year earlier. Exceptions occurred in the Southern Plains, where owner-operators accounted for 71 percent of acres purchased (54 percent in 1991), while nonfarmer shares declined from 35 percent to 22 percent. An opposite shift happened in the Pacific region, where nonfarmers bought proportionately more acres (16 percent in 1991 and 44 percent in 1992), while shares by owner-operators dropped from 80 percent to 51 percent. This shift also shows up in Pacific region shares of value of farmland sold, with owner-operators associated with substantially less in 1992 (47 percent compared with 76 percent in 1991) and nonfarmers substantially more (49 percent in 1992 and 19 percent in 1991).

Table 8.--Principal use of farmland prior to sale: Percent of acres and value, 1992 1/

Region	Nonirrigated cropland	Irrigated cropland	Pasture and grazing land	Woodland on farms
		Percent of acres		
Northeast	77	5	12	6
Lake States	87	5	3	5
Corn Belt	80	2	13	5
Northern Plains	41	13	46	*
Appalachia	35	1	43	21
Southeast	36	15	24	25
Delta States	28	34	25	13
Southern Plains	18	5	74	3
Mountain	10	7	82	1
Pacific	12	47	41	*
48 States	33	10	53	4
		Percent of value		
Northeast	73	10	13	4
Lake States	89	6	2	3
Corn Belt	90	2	6	2
Northern Plains	50	28	22	*
Appalachia	40	1	45	14
Southeast	16	49	22	13
Delta States	29	43	20	8
Southern Plains	28	10	58	4
Mountain	16	36	48	*
Pacific	7	84	9	*
48 States	48	26	22	4

* = Less than 0.5 percent.

1/ Based on reported sales during the 4 months ending January 1, 1992.

More Acres Sold by Farm Operators

Although percent shares of sales by seller groups at the U.S. level have been similar in recent years, percent shares of acres sold changed in 1992. Active farmers who remained in farming accounted for 33 percent of the reported acres sold, up substantially from 22 percent in 1991 (table 10). The share by nonfarmers/nonfarm businesses fell to 21 percent in 1992, down from 35 percent in 1991. Consequently, active farm operators sold, on the average, larger tracts of farmland in 1992, while nonfarmers/nonfarm businesses sold smaller tracts. This shift was most evident in the Southern Plains and Mountain regions. Also, nonfarmer/nonfarm businesses had reduced shares of acres sold in Appalachia (31 percent in 1991 and 18 percent in 1992), while shares of most other seller groups increased.

Owner-Operators Expected To Control More Land

Based on reported sales, owner-operators controlled 52 percent of the farmland prior to sale. Following sale, however, they are expected to operate 70 percent of that land. Tenant shares are expected to decline from 37 percent before sale to only 18 percent following sale. Respondents expect largest shifts from tenant-operated land to owner-operated land in the Northern Plains, Corn Belt, and Lake States regions. Smallest shifts appear likely in the Southeast, Mountain, and Delta States regions.

National comparisons of acres held by tenure groups before and after sale show that about 66 percent of land operated by owners prior to sale is expected to continue under their control after sale (table 11). The rest is expected to be operated by hired managers (10 percent), tenants (20 percent), or not farmed (4 percent).

Changes in other tenure groups indicate shifts to more control by owner-operators. About 48 percent of the farmland operated by hired managers prior to sale is expected to be owner-operated following sale (table 11). Similarly, owner-operators are expected to control 76 percent of the farmland operated by tenants prior to sale and 55 percent of the land not farmed before sale.

Table 9.--Farmland buyers: Percent of purchases, acres, and value by type of buyer, 1990-92 1/

Region	Buyer											
	Tenant			Owner-operator 2/			Retired farmer			Nonfarmer		
	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992
	Percent of purchases											
Northeast	14	12	9	44	44	53	1	1	2	41	43	36
Lake States	18	17	14	55	59	60	2	2	2	25	22	24
Corn Belt	12	12	11	62	61	60	2	2	3	24	25	26
Northern Plains	14	12	10	74	75	74	1	1	2	11	12	14
Appalachia	7	9	9	51	51	51	2	2	3	40	38	37
Southeast	4	6	4	46	56	58	2	1	2	48	37	36
Delta States	12	15	9	48	49	49	1	4	3	39	32	39
Southern Plains	14	14	12	62	56	55	2	3	2	22	27	31
Mountain	12	14	9	69	59	63	2	1	2	17	26	26
Pacific	12	8	8	66	63	67	*	3	1	22	26	24
48 States	12	12	10	59	59	60	2	2	2	27	27	28
	Percent of acres											
Northeast	14	16	10	47	47	58	1	1	2	38	36	30
Lake States	21	22	14	56	57	62	1	2	2	22	19	22
Corn Belt	11	11	10	62	58	59	2	1	2	25	30	29
Northern Plains	16	13	13	72	74	73	1	1	1	11	12	13
Appalachia	5	7	10	33	48	50	1	1	2	61	44	38
Southeast	2	4	4	54	66	57	1	1	1	43	29	38
Delta States	7	13	16	40	43	43	2	2	3	51	42	38
Southern Plains	7	8	6	53	54	71	*	3	1	40	35	22
Mountain	6	19	5	55	50	58	1	*	*	38	31	37
Pacific	13	3	4	70	80	51	*	1	1	17	16	44
48 States	9	14	8	57	57	62	1	1	1	33	28	29
	Percent of value											
Northeast	9	10	12	31	53	48	1	1	1	59	36	39
Lake States	20	23	15	58	60	63	2	2	2	20	15	20
Corn Belt	11	10	10	60	59	60	2	2	2	27	29	28
Northern Plains	15	12	11	75	72	75	*	1	2	10	15	12
Appalachia	6	6	10	46	46	46	1	1	2	47	47	42
Southeast	1	2	3	64	79	59	*	*	1	35	19	37
Delta States	7	13	10	39	40	36	1	2	3	53	45	51
Southern Plains	9	11	7	61	54	57	1	3	2	29	32	34
Mountain	7	11	11	52	52	51	1	*	1	40	37	37
Pacific	5	3	4	79	76	47	*	2	*	16	19	49
48 States	8	9	8	60	62	57	1	1	1	31	28	34

* = Less than 0.5 percent.

1/ Percentages may not add to 100 because of rounding. Based on reported sales during the 4 months ending January 1, 1990-92. 2/ Includes part- and full-owner operators.

Table 10.--Farmland sellers: Percent of sales, acres, and value by type of seller, 1990-92 1/

Region	Seller														
	Estate			Active farm operator who: Remained in farming			Active farm operator who: Retired or quit			Retired farmer			Nonfarmer/ nonfarm business		
	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992
	Percent of sales														
Northeast	8	10	13	21	22	22	26	28	30	20	20	17	25	20	18
Lake States	17	13	16	15	19	18	16	17	20	18	23	22	34	28	24
Corn Belt	28	30	28	17	16	17	15	13	16	14	14	14	26	27	25
Northern Plains	30	31	29	15	14	20	12	13	13	15	19	17	28	23	21
Appalachia	20	25	26	20	22	20	22	17	18	13	11	13	25	25	23
Southeast	15	16	15	25	29	33	11	17	14	13	10	11	36	28	27
Delta States	14	16	13	19	26	26	19	16	14	12	16	14	36	26	33
Southern Plains	21	23	27	24	24	24	15	12	11	13	12	11	27	29	27
Mountain	12	12	12	27	31	29	20	17	22	8	12	9	33	28	28
Pacific	8	12	6	32	29	41	22	23	15	8	12	15	30	24	23
48 States	21	23	22	20	21	22	16	15	16	14	15	15	29	26	25
	Percent of acres														
Northeast	9	8	12	20	18	19	29	31	37	20	24	18	22	19	14
Lake States	15	16	17	16	17	16	19	19	25	16	21	20	34	27	22
Corn Belt	27	28	27	16	15	17	14	13	18	12	13	12	31	31	26
Northern Plains	25	25	23	19	14	19	15	26	16	13	18	18	28	17	24
Appalachia	13	23	28	12	22	22	19	15	19	27	9	13	29	31	18
Southeast	12	18	13	38	37	42	10	9	14	8	10	7	32	26	24
Delta States	13	14	14	16	28	30	20	13	12	8	10	8	43	35	36
Southern Plains	14	23	28	35	18	39	27	18	8	6	9	5	18	32	20
Mountain	7	3	7	21	28	49	13	14	26	3	6	4	56	49	14
Pacific	11	8	10	35	25	32	16	21	11	7	5	5	31	41	42
48 States	15	15	19	23	22	33	17	17	18	10	11	9	35	35	21
	Percent of value														
Northeast	9	14	15	17	26	17	34	25	37	15	19	16	25	16	15
Lake States	16	18	18	15	17	17	18	18	26	17	21	20	34	26	19
Corn Belt	32	33	30	17	15	17	12	12	15	11	12	11	28	28	27
Northern Plains	30	30	31	15	13	18	16	17	14	13	19	16	26	21	21
Appalachia	18	25	26	18	26	23	22	17	23	12	11	12	30	21	16
Southeast	5	14	5	55	56	61	14	9	9	4	5	4	22	16	21
Delta States	12	14	14	18	31	33	23	13	11	6	9	7	41	33	35
Southern Plains	16	24	25	33	21	29	20	17	11	8	10	7	23	28	28
Mountain	8	7	14	24	34	34	14	17	25	5	9	6	49	33	21
Pacific	4	9	4	57	33	39	21	18	8	4	4	7	14	36	42
48 States	15	20	19	32	28	30	18	15	16	9	11	10	26	26	25

1/ Percentages may not add to 100 because of rounding. Based on reported sales during the 4 months ending January 1, 1990-92.

Table 11.--Tenancy before and after sale, in percent of acres sold, 48 States, 1992 1/

Person farming before sale	Person farming after sale				
	Owner	Hired manager	Tenant	Not farmed	Total
	Percent				
Owner	66	10	20	4	100
Hired manager	48	34	16	2	100
Tenant	76	2	20	2	100
Not farmed	55	2	6	37	100

1/ Based on reported sales during the 4 months ending January 1, 1992.

Most Farmland Expected To Stay in Agriculture Over Next 5 Years

When asked to indicate probable use of farmland 5 years after sale, respondents at the national level expect 92 percent of that farmland to remain in agriculture, 1 percent in forestry, and 7 percent in other uses such as recreation, residential, and commercial/industrial operations (figure 5). These expected uses are nearly identical to those reported a year earlier.

In most regions, 85 percent or more of the farmland sold is expected to continue in agriculture. Exceptions include the Southeast (79 percent), Appalachia (80 percent), and the Northeast (82 percent). "Other uses" are expected to be more prevalent in regions along the East Coast, where demand for farmland for nonagricultural uses is most active. Forestry is an important expected use in the Southeast (10 percent), Delta States (9 percent), and Appalachia (6 percent).

Farmland sold in late 1991 and expected to remain in agriculture over the next 5 years averaged 310 acres per sale and $591 per acre at the national level (table 12). Regional averages varied widely. Acreage averaged highest (1,766 acres) and price per acre lowest ($157) in the Mountain region, where several sales of large tracts of relatively low-priced grazing land occurred. Price per acre averaged highest in the Southeast ($2,143), partly because of sales of relatively high-priced irrigated cropland (table 8).

Acres in "other uses" averaged highest in the Mountain (679 acres) and Southern Plains (657 acres) regions. Both regions had several sales of large acreage expected to be in recreational use within 5 years. The Pacific region's highest average price per acre ($6,634) partly resulted from farmland expected to be converted to residential use within 5 years.

Financing Rate Slightly Lower

About 61 percent of the reported sales in late 1991 involved financing, down from last year's 64 percent (table 13). This proportion has been steadily declining since 1980 when 91 percent of reported sales involved financing. The trend toward less financing generally holds for all regions, with largest drops in the Delta States, Mountain region, and the Northern Plains. All regions, except the Northeast, showed declines in 1992, with largest drops in the Delta States and the Lake States.

Debt as a percent of purchase price (74 percent) was unchanged at the national level in 1992 (table 13). Largest re-

Figure 5

Probable Use of Farmland 5 Years After Purchase

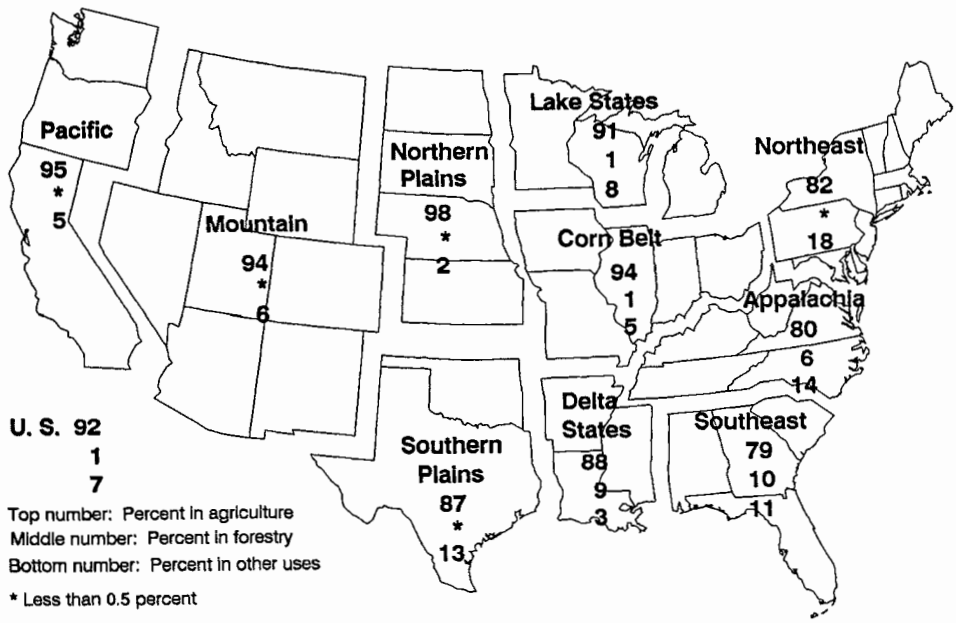


Table 12.--Farmland transfers: Average acres per sale and price per acre by probable use of property 5 years after purchase, 1990-92 1/

Region	Agriculture 2/			Forestry			Other 3/		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
				Acres per sale					
Northeast	140	135	139	163	81	*	111	85	112
Lake States	143	153	136	147	83	122	73	84	70
Corn Belt	141	138	130	140	101	187	94	115	89
Northern Plains	384	363	302	*	*	*	198	127	224
Appalachia	142	117	125	204	102	112	429	141	82
Southeast	212	267	194	200	155	167	212	128	113
Delta States	262	253	238	139	113	145	124	122	69
Southern Plains	523	354	527	252	137	186	530	425	657
Mountain	1,258	1,922	1,766	*	40	*	1,131	555	679
Pacific	540	547	419	292	80	*	264	77	172
48 States	314	335	310	173	120	147	276	172	190
				Price per acre					
Northeast	1,485	1,687	1,507	497	625	*	4,483	2,692	1,936
Lake States	772	799	906	165	386	533	800	580	835
Corn Belt	1,053	1,192	1,239	507	394	314	1,101	1,021	986
Northern Plains	305	325	389	*	*	*	284	571	491
Appalachia	912	1,016	947	336	534	590	499	1,256	1,157
Southeast	2,064	1,794	2,143	621	661	520	1,399	1,393	1,537
Delta States	675	687	705	506	526	372	650	695	686
Southern Plains	318	377	285	322	663	518	331	495	443
Mountain	196	158	157	*	725	*	309	573	361
Pacific	1,640	882	1,223	514	1,108	*	1,350	11,664	6,634
48 States	643	563	591	490	593	480	817	939	908

* = Insufficient information or none reported.

1/ Based on reported sales during the 4 months ending January 1, 1990-92. 2/ Cropland and grazing land. 3/ Includes uses for recreation, rural residences, residential subdivisions, and commercial/industrial purposes.

Table 13.--Credit-financed farmland transfers, 1985-92 1/

Year	North-east	Lake States	Corn Belt	Northern Plains	Appa-lachia	South-east	Delta States	Southern Plains	Moun-tain	Pacific	U.S.
					Percent of transfers on which debt was incurred						
1985	85	87	77	78	81	82	83	81	85	86	82
1986	82	83	72	69	75	74	82	76	78	78	76
1987	76	79	70	64	76	72	76	68	71	75	73
1988	78	78	67	62	72	63	74	68	76	73	70
1989	71	80	65	62	68	56	63	65	64	68	66
1990	76	77	64	65	65	60	59	64	68	68	66
1991	69	74	66	66	57	56	65	61	63	61	64
1992	70	65	62	62	56	55	54	60	60	60	61
					Debt as a percent of purchase price						
1985	78	81	76	77	78	79	87	79	72	69	76
1986	77	77	73	79	81	83	85	82	72	71	77
1987	76	81	73	74	78	81	81	81	82	72	77
1988	68	77	70	75	75	74	80	79	61	68	72
1989	73	78	73	75	76	64	81	75	76	71	73
1990	76	78	72	70	78	72	82	74	76	46	69
1991	76	76	72	69	77	76	84	72	73	70	74
1992	74	76	73	73	78	77	83	79	67	67	74

1/ Based on reported sales during the 5 months ending March 1, 1985, the 5 months ending February 1, 1986-89, and the 4 months ending January 1, 1990-92.

Table 14.--Credit-financed farmland transfers: Percent of credit volume extended, by type of lender, 1982-92 1/

Regions and type of lender	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
						Percent					
Northeast:											
Sellers	38	29	29	32	28	31	27	22	19	20	23
Commercial banks	6	9	16	17	24	27	36	32	30	36	20
Insurance companies	*	1	1	*	*	2	*	1	*	*	5
Farm Credit System	35	39	27	23	20	19	24	40	41	35	43
Others	21	22	27	27	28	20	12	5	10	9	9
Lake States:											
Sellers	60	44	44	49	53	41	39	38	33	37	44
Commercial banks	4	6	10	12	16	30	31	37	39	36	37
Insurance companies	1	1	3	1	1	*	*	*	2	2	3
Farm Credit System	25	38	32	24	17	18	20	20	16	14	15
Others	10	11	11	15	13	10	10	5	10	11	2
Corn Belt:											
Sellers	37	37	32	27	30	20	17	20	21	18	21
Commercial banks	4	10	15	16	38	45	54	44	37	43	44
Insurance companies	5	5	4	8	3	7	2	7	10	6	6
Farm Credit System	44	37	36	33	16	15	15	25	25	28	23
Others	10	10	13	16	12	13	12	4	7	5	6
Northern Plains:											
Sellers	35	32	27	25	49	24	19	24	31	29	26
Commercial banks	4	4	7	14	20	36	33	30	26	34	33
Insurance companies	3	2	4	4	10	2	3	4	2	*	1
Farm Credit System	39	42	43	39	14	23	34	33	26	32	34
Others	19	21	20	19	7	14	11	9	15	5	6
Appalachia:											
Sellers	27	17	17	26	27	15	18	30	18	14	10
Commercial banks	12	20	27	25	35	54	47	40	45	51	52
Insurance companies	2	4	1	1	*	1	1	*	*	3	*
Farm Credit System	38	33	33	25	18	13	21	24	27	26	27
Others	21	26	24	23	20	16	14	6	10	6	11
Southeast:											
Sellers	14	17	24	22	24	35	25	8	26	14	15
Commercial banks	5	19	9	10	16	23	44	48	37	33	22
Insurance companies	3	1	7	1	2	12	7	18	15	43	40
Farm Credit System	63	50	41	43	34	17	16	22	18	8	20
Others	15	12	20	23	23	12	9	4	4	2	3
Delta States:											
Sellers	15	13	19	15	9	19	7	13	16	18	15
Commercial banks	5	15	14	18	27	22	25	31	33	37	38
Insurance companies	15	3	3	9	10	3	7	20	6	14	4
Farm Credit System	44	42	38	29	34	12	40	31	32	19	35
Others	21	26	27	30	19	44	21	5	13	12	8
Southern Plains:											
Sellers	43	31	23	24	30	15	14	27	35	29	24
Commercial banks	5	9	13	11	13	23	26	29	16	27	39
Insurance companies	1	9	3	3	18	9	*	2	1	1	3
Farm Credit System	34	27	37	35	25	24	39	35	40	33	28
Others	17	25	23	28	14	29	21	7	8	10	6
Mountain:											
Sellers	56	41	22	50	42	52	33	40	37	30	39
Commercial banks	1	2	3	3	3	8	6	17	9	8	15
Insurance companies	5	7	18	1	1	2	7	7	9	11	16
Farm Credit System	27	35	37	29	27	26	35	27	32	42	22
Others	10	15	20	17	26	11	19	9	13	9	8
Pacific:											
Sellers	56	52	30	39	31	30	39	40	45	49	69
Commercial banks	1	2	6	7	9	12	3	10	5	2	7
Insurance companies	6	1	17	5	1	21	19	2	15	7	1
Farm Credit System	26	31	38	32	49	24	22	35	28	36	21
Others	11	13	9	17	10	12	18	13	7	6	2
48 States:											
Sellers	41	33	28	33	32	30	24	24	28	23	30
Commercial banks	4	9	11	13	21	28	32	34	28	32	30
Insurance companies	4	4	7	3	5	7	5	7	8	13	9
Farm Credit System	37	37	36	31	25	19	25	29	27	26	25
Others	14	16	18	20	17	16	14	6	9	6	6

* = Less than 0.5 percent

1/ Based on reported sales during the 5 months ending March 1, 1982-85, the 5 months ending February 1, 1986-89, and the 4 months ending January 1, 1990-92. Beginning in 1989, the Farm Credit System includes the former Federal Land Banks and Production Credit Associations (PCA's). In preceding years, the PCA's were included in the "Others" group.

Table 15.--Average interest rates by holder of first lien on property sold, 1991-92 1/

Region	Seller financing		Commercial banks		Farm Credit System	
	1991	1992	1991	1992	1991	1992
	Percent					
Northeast	9.5	9.2	10.8	9.3	10.4	8.9
Lake States	9.1	8.8	10.6	9.5	10.0	9.0
Corn Belt	9.4	8.6	10.5	9.0	10.1	8.4
Northern Plains	9.1	8.5	10.2	9.3	10.2	8.6
Appalachia	9.6	9.4	11.1	9.5	10.4	8.9
Southeast	10.5	9.7	11.0	10.0	10.9	9.3
Delta States	9.7	9.3	11.2	9.9	11.1	9.9
Southern Plains	9.5	8.9	11.5	9.6	10.6	9.1
Mountain	9.5	9.2	9.9	10.0	10.2	9.7
Pacific	9.8	9.9	11.4	8.7	10.4	10.2
48 States	9.6	9.2	10.8	9.4	10.4	9.1

1/ Based on reported sales during the 4 months ending January 1, 1991-92.

gional changes between 1991 and 1992 occurred in the Southern Plains, with an increase from 72 to 79 percent, and in the Mountain Region, where the percent dropped from 73 to 67.

More Seller Financing

Sources of credit vary from year to year, as borrowers look for financing at most favorable terms. Also, some variation likely results from respondents' selection of sales from which they provide financial information.

At the national level, seller financing accounted for 30 percent of the credit extended among reported sales in 1992, up from last year's 23 percent, but more in line with 1990's 28 percent (table 14). Over the past 10 years, seller financing has been most prevalent in the Lake States, Mountain, and Pacific regions. The largest 1991-92 change in seller financing came in the Pacific region, where seller financing jumped from 47 to 69 percent.

Commercial banks provided 30 percent of the credit associated with reported sales in 1992. Some sizable 1991-92 regional changes occurred, with sharp decreases in the Northeast (36 to 20 percent) and in the Southeast (33 to 22 percent). However, commercial bank shares increased from 27 to 39 percent in the Southern Plains, and 8 to 15 percent in the Mountain region.

While the Farm Credit System share (25 percent) remained steady at the national level, large 1991-92 increases were reported in the Southeast and Delta States. Percent shares fell most noticeably in the Mountain and Pacific regions.

Interest rates on reported sales at the national level averaged from 9.1 to 9.4 percent among principal lenders in 1992 (table 15). Reported rates for 1991 were more variable, ranging from 9.6 percent for seller financing to 10.8 percent for commercial banks. Interest rates varied among regions in both years.

Foreign Ownership of U.S. Agricultural Land

The U.S. Department of Agriculture monitors foreign ownership of U.S. agricultural land (farm and forest lands) under the Agricultural Foreign Investment Disclosure Act of 1978.

Beginning February 1, 1979, this law requires all foreign owners of U.S. agricultural land to submit reports to the Secretary of Agriculture detailing the number of acres owned and associated information. Thereafter, subsequent transactions (acquisitions and dispositions) must be reported to the Secretary within 90 days of their occurrence. This provides the Department with a continuing inventory of foreign ownership of U.S. agricultural land.

Foreign interests reported owning 14.8 million acres of U.S. agricultural land as of December 31, 1991 (table 16). This represents slightly more than 1 percent of the 1.27 billion acres of privately owned U.S. agricultural land, and about 0.6 percent of all U.S. land. Although total foreign holdings are 3 percent above a year earlier, the proportion of U.S. agricultural land held by foreigners has remained close to 1 percent since 1981.

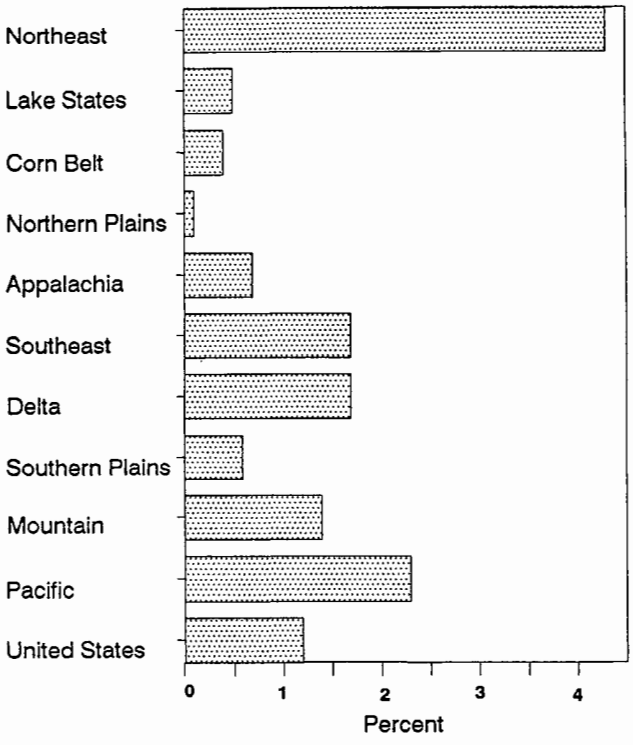
Table 16.--U. S. agricultural landholdings of foreign owners, by State, December 31, 1991

State	Total land area of State 1/	Privately owned agricultural land 2/	Foreign-owned agricultural land	Proportion of foreign-owned to privately owned agricultural land
	Thousand acres		Acres	Percent
Northeast:				
Maine	19,837	18,065	2,828,483	15.7
New Hampshire	5,756	4,251	220,199	5.2
Vermont	5,935	5,153	120,374	2.3
Massachusetts	5,008	2,664	1,934	0.1
Rhode Island	675	357	0	0
Connecticut	3,118	1,884	1,074	0.1
New York	30,321	21,893	263,895	1.2
New Jersey	4,779	2,438	19,343	0.8
Pennsylvania	28,728	21,518	56,824	0.3
Delaware	1,237	972	5,870	0.6
Maryland	6,296	4,510	52,186	1.2
Lake States:				
Michigan	36,451	25,742	203,588	0.8
Wisconsin	34,833	26,729	23,467	0.1
Minnesota	50,911	36,343	220,775	0.6
Corn Belt:				
Ohio	26,243	22,519	174,717	0.8
Indiana	22,996	20,493	79,713	0.4
Illinois	35,613	31,633	185,062	0.6
Iowa	35,818	33,582	32,012	0.1
Missouri	44,125	39,289	82,195	0.2
Northern Plains:				
North Dakota	44,352	39,211	30,851	0.1
South Dakota	48,609	39,556	42,882	0.1
Nebraska	49,052	45,444	76,251	0.2
Kansas	52,338	49,780	73,574	0.1
Appalachia:				
Virginia	25,410	20,963	117,063	0.6
West Virginia	15,436	13,531	102,459	0.8
North Carolina	31,260	26,392	229,659	0.9
Kentucky	25,388	22,578	93,226	0.4
Tennessee	26,339	21,873	174,298	0.8
Southeast:				
South Carolina	19,330	15,851	190,692	1.2
Georgia	37,156	32,338	573,040	1.8
Florida	34,658	23,975	562,039	2.3
Alabama	32,491	28,620	409,759	1.4
Delta States:				
Mississippi	30,229	26,713	502,458	1.9
Arkansas	33,330	27,981	188,329	0.7
Louisiana	28,494	24,523	688,373	2.8
Southern Plains:				
Oklahoma	43,939	38,500	53,795	0.1
Texas	167,691	154,417	1,078,999	0.7
Mountain:				
Montana	93,048	53,052	555,651	1.0
Idaho	52,744	15,256	22,944	0.2
Wyoming	62,073	24,459	170,896	0.7
Colorado	66,301	36,618	584,455	1.6
New Mexico	77,654	35,705	926,014	2.6
Arizona	72,645	10,502	326,700	3.1
Utah	52,527	11,892	68,107	0.6
Nevada	70,332	8,248	179,912	2.2
Pacific:				
Washington	42,567	22,530	375,841	1.7
Oregon	61,558	28,022	746,285	2.7
California	100,031	44,042	915,882	2.1
Hawaii	4,112	1,998	175,517	8.8
Total	1,899,774	1,264,605	14,807,662	1.2

1/ 1980 land area from Geography Division, Census Bureau. 2/ Privately held land based on A. Daugherty, unpublished data, Econ. Res. Serv., US Dept. Agr., 1987. Estimate of total land less public, Indian, transportation, and urban land. Includes forest land, pastureland, cropland, range, and miscellaneous uses.

Figure 6

Share of Privately Owned Agricultural Land Held by Foreigners



Foreign-owned acreage is concentrated in the Northeast (3.6 million acres), accounting for 4.3 percent of the region's privately owned agricultural land (figure 6). Proportions owned by foreigners in other regions ranged from 0.1 percent in the Northern Plains to 2.3 percent in the Pacific region.

Foreign owners do not exclusively own all 14.8 million acres. About 53 percent is owned by U.S. corporations in which foreigners had a significant interest or substantial control. The other 47 percent is held by foreigners not affiliated with U.S. corporations.

Because of U.S. corporate landholding arrangements, an increase in foreign-owned land does not necessarily represent new acquisitions by foreigners. That is, corporate landholdings may show up as foreign-owned in one year, but not another, as the corporation's stock passes in and out of foreign ownership. The land, however, is still owned by the same corporation.

Forest land represented 49 percent (7.3 million acres) of all foreign-owned agricultural land. Other uses included cropland at 17 percent (2.5 million acres), pasture and other agricultural land--citrus groves, orchards, cattle feedlots, and others--at 31 percent (4.6 million acres), and agricultural land not used for cultivation at 3 percent (420,000 acres).

The amount of "farmland"--cropland, pasture, and other agricultural land-- owned exclusively by foreigners not associated with a U.S. corporation was about 4 million acres.

Investors from the following six countries owned 69 percent of all foreign-owned land: Canada (25 percent), the United Kingdom (21 percent), Germany (8 percent), France (7 percent), Switzerland (4 percent), and the Netherlands Antilles (4 percent). Japanese investors, including U.S./Japanese affiliations, owned 3 percent of the foreign-held acreage (app. table 6).

Corporations (U.S. and foreign) owned 10.8 million acres, partnerships held 2.9 million acres, and individuals accounted for 942,000 acres. The remaining 245,000 acres were owned by estates, trusts, associations, and others.

Foreigners reported agricultural landholdings in all States, except Rhode Island and Alaska (figure 7). Most States reported a small percentage of privately owned agricultural land held by foreign interests (table 16 and figure 8). However, relatively high percents resulted for Maine (15.7), Hawaii (8.8), and New Hampshire (5.2).

Foreign-owned land in Maine accounts for 19 percent of all foreign-owned U.S. agricultural land. Most (93 percent) of the Maine acreage is forest land owned by four companies. Two companies are Canadian, the third is a U.S. corporation that is partially Canadian-owned, the fourth is a U.S. corporation that is partially French-owned.

Foreign owners do not appear to be taking their agricultural land out of production. At the time of reporting, foreign owners stated that they intended to keep 94 percent of the acreage in agricultural use. They also reported no change in tenure for 49 percent of the acreage, some change for 24 percent, and no information on the remaining 27 percent.

Figure 7

State Concentration of Foreign Ownership of Agricultural Land, December 31, 1991

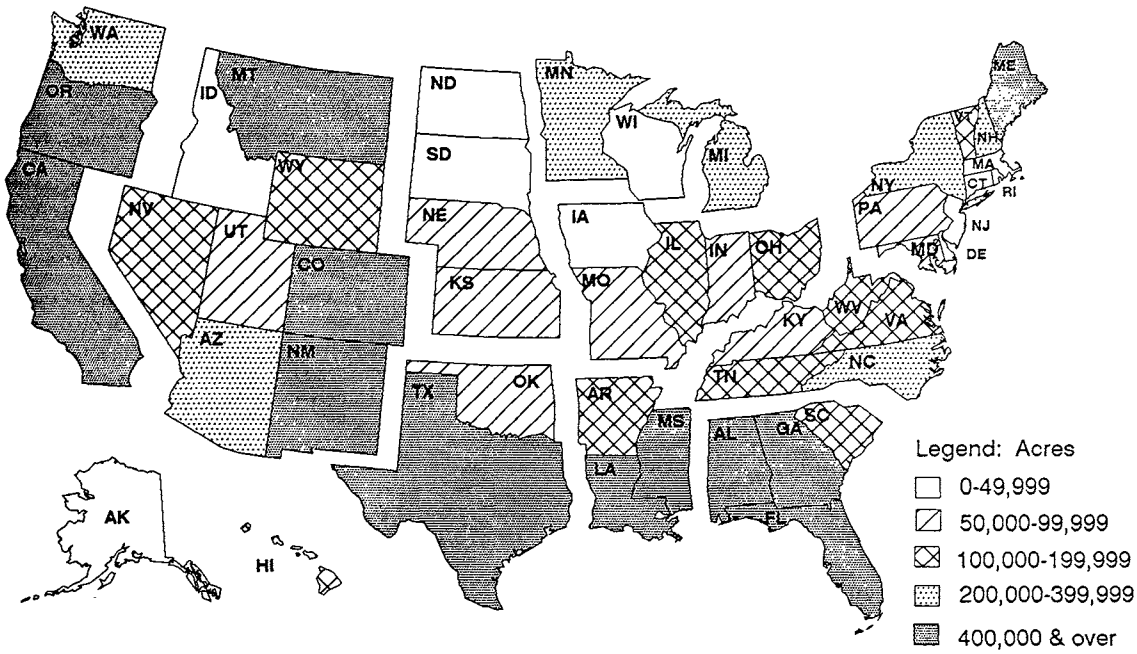
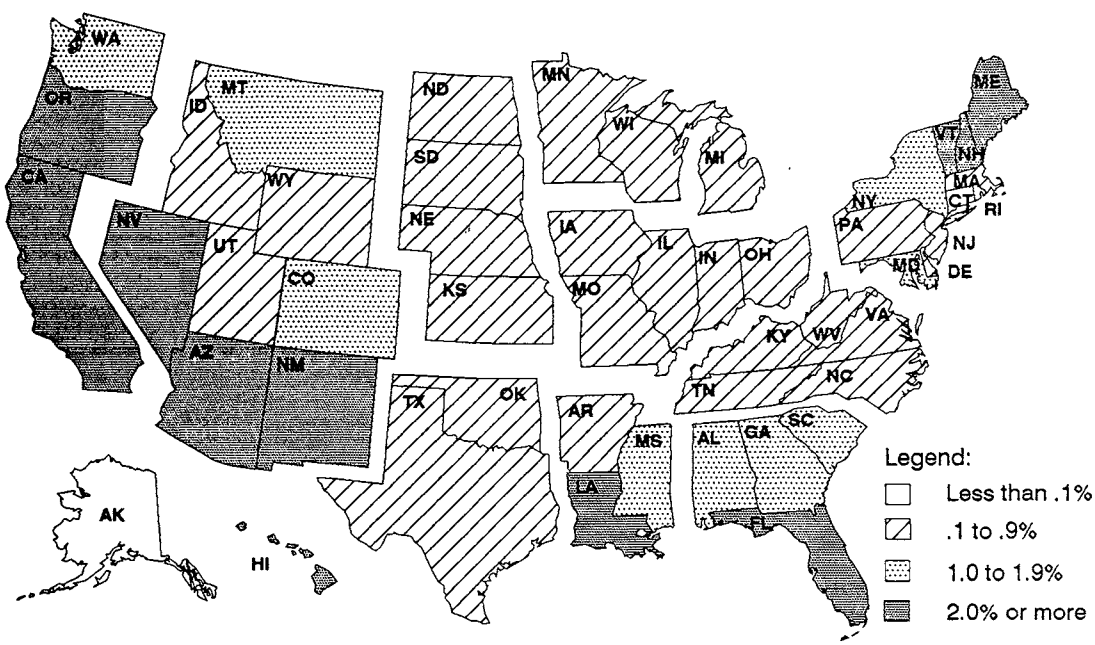


Figure 8

Proportion of Foreign-Owned Agricultural Land to All Privately Owned Agricultural Land in the United States, December 31, 1991



Farm Real Estate Tax Developments

Taxes levied on U.S. farm real estate (land and buildings) by State and local governments totaled $4.6 billion in 1990, 3.7 percent above a year earlier (table 17). (Alaska is excluded because of difficulties in determining the amount of privately owned taxable farmland in the State.) The U.S. average tax per acre was $5.27, up from $5.06 in 1989. The increase in tax per acre was slightly greater than the increase in farmland values so that the average tax per $100 of full market value on U.S. farm real estate rose slightly from $0.76 in 1989 to $0.78 in 1990. Since 1957, increases in taxes per acre have surpassed changes in taxes per $100 of full market value (figure 9).

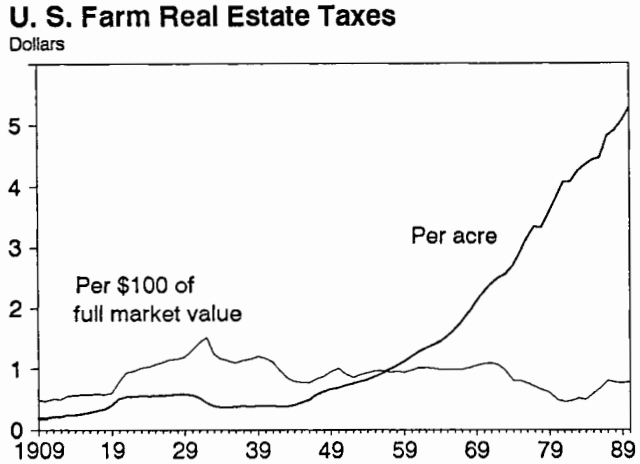
Compared with 1989, taxes per acre in 1990 averaged higher in 39 States and lower in 10. Taxes per $100 of full market value in 1990 were higher in 34 States, lower in 13, and unchanged in 2.

Taxes varied widely among the States. For example, average tax per acre in 1990 ranged from $0.40 in New Mexico to $48.22 in Rhode Island (table 17 and figure 10). State taxes also varied within regions. In the Corn Belt, for example, tax per acre ranged from $2.51 in Missouri to $15.24 in Illinois. Similarly, tax per acre in the Southeast ranged from $1.32 in Alabama to $11.97 in Florida.

Tax per $100 of full market value ranged from $0.08 in Delaware to $3.30 in Michigan (table 17 and figure 11). It also varied considerably within regions. Within the Mountain region, for example, the tax ranged from $0.21 in New Mexico to $2.10 in Arizona.

Figure 9

U. S. Farm Real Estate Taxes



Variations in State taxes partly result from (1) the degree that States rely on real estate taxes, rather than income or sales taxes, as a source of local revenue, and (2) the extent that States provide tax relief, such as preferential land-use assessment, homestead and old age exemptions, and veterans' preferences.

Background on Tax Data

USDA maintains a data series on farm real estate taxes, by State and the Nation, that dates from 1890 for taxes per acre and from 1909 for total taxes and taxes per $100 of full market value. The Bureau of Economic Analysis, predecessor to the ERS, made initial estimates in 1922 and subsequently extended the series back to 1890 and 1909. To date, only minor adjustments have been made in the procedures adopted in the mid-1930's for computing these taxes.

Under the Agricultural Adjustment Act of 1938, Congress specifically directed USDA to collect tax data, which are a component in the prices-paid index for commodities and services, interest, taxes, and farm wages. The tax data are also used, for example, to estimate farm expenditures. Special tax assessments for improvements, such as drainage and irrigation (presumably based on benefits received rather than value of the system), are excluded.

ERS uses taxes levied (the tax bill) rather than taxes paid because of taxpayer challenges or delinquencies, both of which may take several years to resolve. ERS assumes that over time taxes levied and taxes paid are about equal. The data are obtained from a nationwide survey of approximately 4,200 taxing jurisdictions. Each provides tax and acreage information for a sample of 10 farm or ranch parcels in its jurisdiction for the current and preceding years. Respondents in jurisdictions with fewer than 10 parcels are requested to provide information on all parcels in the jurisdiction.

For 1990, the response rate from the 4,200 jurisdictions was about 66 percent. ERS uses Census of Agriculture data on acres of land in farms to expand the survey data to State- and national-level estimates. For noncensus years, the Census data are adjusted by annual percent changes in acres of land in farms, as reported by USDA's National Agricultural Statistics Service.

Table 17.--Taxes levied on farm real estate, by State, 1989-90

State	Total taxes		Average tax per acre		Taxes per $100 of full market value	
	1989	1990	1989	1990	1989	1990
	Million dollars		Dollars		Dollars	
Northeast:						
Maine	11.6	12.4	8.74	9.52	0.86	0.55
New Hampshire	7.9	8.7	18.96	21.13	0.85	0.94
Vermont	18.7	20.0	13.43	14.43	1.13	1.21
Massachusetts	15.3	15.5	26.33	26.73	0.70	0.71
Rhode Island	2.8	2.6	48.23	48.22	0.96	0.96
Connecticut	9.7	10.2	24.76	26.08	0.56	0.59
New York	147.6	152.5	18.30	19.11	1.79	1.96
New Jersey	31.4	34.5	36.63	39.72	0.81	0.86
Pennsylvania	123.0	129.6	16.18	17.05	0.86	0.94
Delaware	0.8	1.0	1.45	1.70	0.07	0.08
Maryland	21.9	22.3	9.81	10.01	0.40	0.41
Lake States:						
Michigan	325.8	334.6	32.31	33.18	3.29	3.30
Wisconsin	272.7	281.1	16.58	17.18	1.96	2.14
Minnesota	162.1	171.9	6.12	6.49	0.82	0.81
Corn Belt:						
Ohio	142.6	142.3	9.44	9.42	0.75	0.78
Indiana	122.5	129.8	7.51	8.11	0.60	0.65
Illinois	451.8	431.9	15.94	15.24	1.15	1.10
Iowa	353.6	345.1	11.21	10.94	1.02	0.99
Missouri	70.3	72.5	2.43	2.51	0.36	0.37
Northern Plains:						
North Dakota	79.8	84.7	2.13	2.27	0.65	0.67
South Dakota	104.8	105.7	2.83	2.86	0.97	0.87
Nebraska	290.8	325.2	6.65	7.43	1.27	1.35
Kansas	118.1	118.8	2.55	2.56	0.59	0.55
Appalachia:						
Virginia	55.3	60.6	6.48	7.19	0.49	0.47
West Virginia	3.5	3.9	1.06	1.18	0.15	0.19
North Carolina	52.0	53.8	5.82	6.09	0.44	0.48
Kentucky	32.2	37.7	2.34	2.74	0.26	0.28
Tennessee	46.2	48.6	3.98	4.18	0.40	0.42
Southeast:						
South Carolina	15.1	15.6	3.20	3.38	0.34	0.37
Georgia	54.8	55.4	5.31	5.54	0.53	0.55
Florida	113.7	119.9	10.94	11.97	0.58	0.57
Alabama	11.4	11.5	1.27	1.32	0.16	0.16
Delta States:						
Mississippi	21.3	21.1	2.10	2.12	0.30	0.29
Arkansas	40.6	41.0	2.88	2.92	0.37	0.40
Louisiana	19.6	19.5	2.52	2.54	0.26	0.28
Southern Plains:						
Oklahoma	55.4	56.2	1.83	1.86	0.35	0.37
Texas	320.3	328.7	2.51	2.60	0.49	0.52
Mountain:						
Montana	88.3	103.2	1.25	1.47	0.60	0.62
Idaho	41.7	37.3	3.70	3.36	0.62	0.51
Wyoming	16.2	16.5	0.69	0.70	0.48	0.47
Colorado	67.1	69.0	2.29	2.38	0.62	0.66
New Mexico	12.9	12.3	0.42	0.40	0.22	0.21
Arizona	45.5	46.5	5.41	5.53	1.97	2.10
Utah	11.7	11.4	1.67	1.62	0.40	0.42
Nevada	3.6	2.8	0.68	0.53	0.29	0.27
Pacific:						
Washington	60.8	64.5	4.73	5.02	0.62	0.64
Oregon	82.3	95.9	5.11	5.96	0.96	1.04
California	240.0	268.6	9.36	10.65	0.57	0.63
Hawaii	25.0	30.0	14.65	17.51	0.63	0.59
United States 1/	4,422.4	4,584.6	5.06	5.27	0.76	0.78

1/ Excludes Alaska.

Figure 10

Farm Real Estate Taxes, Average Per Acre, 1990

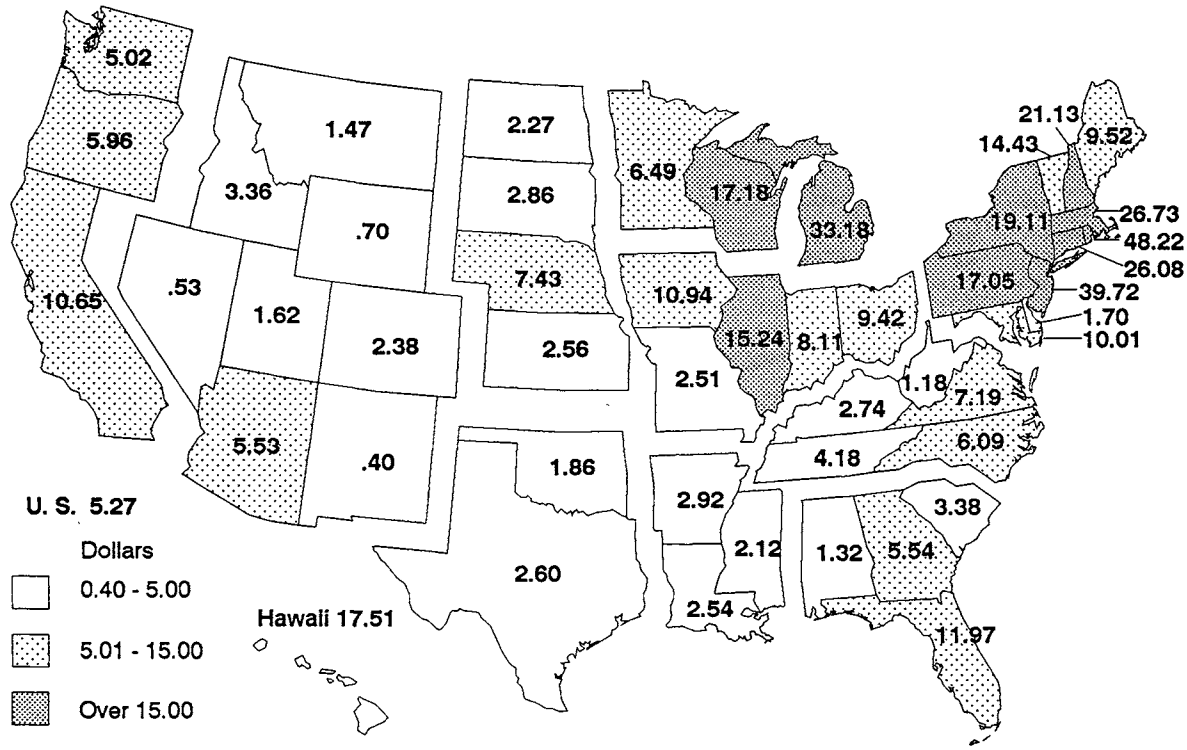
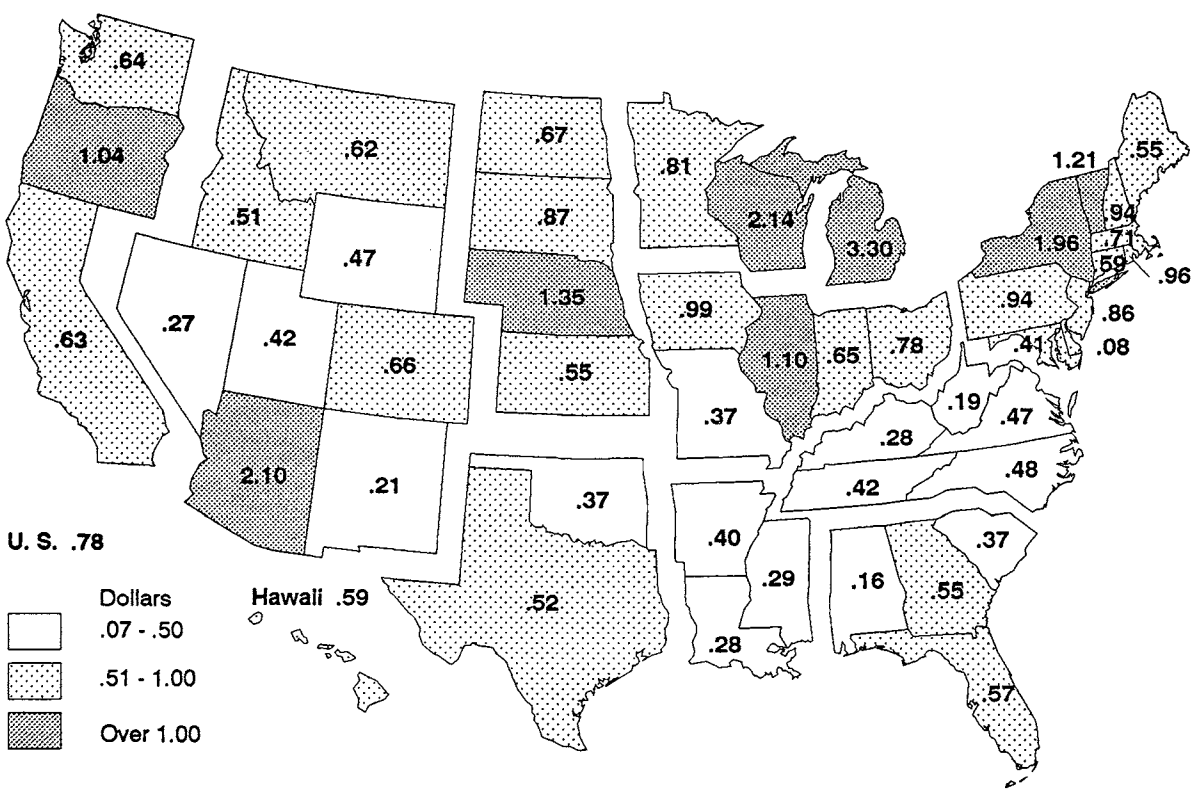


Figure 11

Farm Real Estate Taxes Per $100 of Full Market Value, 1990



List of Tables

Appendix table 1.--Average per acre real (inflation-adjusted) value of farm real estate, by State, 1985-92 1/

State	April 1	As of February 1				As of January 1			Percent change
	1985	1986	1987	1988	1989	1990	1991	1992	1991-92
	Dollars								Percent
Northeast:	1,240	1,190	1,290	1,329	1,422	1,331	1,264	1,226	-3
Maine	713	759	766	806	822	788	726	667	-8
New Hampshire	1,325	1,494	1,597	1,770	1,804	1,729	1,595	1,465	-8
Vermont	872	941	964	942	960	920	848	779	-8
Massachusetts	2,189	2,452	2,605	2,978	3,035	2,909	2,682	2,463	-8
Rhode Island	2,753	2,916	2,932	3,980	4,055	3,887	3,584	3,292	-8
Connecticut	2,767	2,995	3,077	3,496	3,563	3,415	3,148	2,891	-8
New York	755	749	830	832	826	753	765	753	-2
New Jersey	2,718	2,662	3,226	3,327	3,664	3,583	3,647	3,420	-6
Pennsylvania	1,314	1,183	1,333	1,324	1,512	1,397	1,304	1,304	0
Delaware	1,469	1,495	1,451	1,479	1,660	1,746	1,669	1,523	-9
Maryland	2,023	1,796	1,737	1,895	1,986	1,871	1,630	1,615	-1
Lake States:	877	708	612	661	661	650	673	655	-3
Michigan	1,020	898	799	814	793	777	805	792	-2
Wisconsin	870	743	673	692	682	621	633	623	-2
Minnesota	827	616	508	587	601	622	648	625	-4
Corn Belt:	1,020	863	779	841	887	847	838	830	-1
Ohio	1,119	1,009	949	1,005	1,018	931	903	895	-1
Indiana	1,238	1,037	918	971	1,003	962	947	933	-1
Illinois	1,272	1,094	994	1,058	1,116	1,074	1,064	1,074	1
Iowa	1,005	775	680	794	888	852	859	844	-2
Missouri	635	576	522	536	543	525	512	494	-4
Northern Plains:	379	320	286	308	321	328	327	322	-2
North Dakota	343	297	262	267	263	263	273	256	-6
South Dakota	266	237	206	225	234	254	261	261	0
Nebraska	447	369	346	383	422	425	413	408	-1
Kansas	450	368	323	346	351	357	347	347	0
Appalachia:	953	910	869	869	869	859	786	782	-1
Virginia	1,024	1,047	998	1,004	1,075	1,172	961	976	2
West Virginia	559	547	548	572	567	474	464	515	11
North Carolina	1,226	1,114	1,089	1,059	1,062	976	923	905	-2
Kentucky	880	836	760	751	735	758	714	711	0
Tennessee	869	831	809	839	808	770	733	706	-4
Southeast:	984	922	913	947	963	970	931	868	-7
South Carolina	827	773	685	730	757	703	704	667	-5
Georgia	816	758	769	771	805	782	739	646	-13
Florida	1,472	1,365	1,388	1,500	1,522	1,612	1,584	1,477	-7
Alabama	734	713	680	671	663	649	587	596	1
Delta States:	932	782	655	655	643	605	592	552	-7
Mississippi	787	691	592	584	575	563	560	529	-6
Arkansas	835	691	626	638	628	580	572	519	-9
Louisiana	1,296	1,058	797	788	769	707	672	648	-4
Southern Plains:	622	514	460	445	416	383	358	338	-6
Oklahoma	549	462	411	402	420	384	361	354	-2
Texas	639	527	472	456	415	383	357	334	-7
Mountain:	276	237	222	215	210	206	212	206	-3
Montana	223	207	173	172	169	184	180	181	0
Idaho	680	560	477	479	480	511	489	492	1
Wyoming	166	141	136	123	115	115	114	99	-13
Colorado	403	320	318	309	296	277	304	263	-14
New Mexico	170	143	135	151	154	152	171	171	0
Arizona	272	241	259	234	221	203	212	216	2
Utah	472	423	391	356	340	301	299	304	2
Nevada	225	195	208	190	189	150	163	165	2
Pacific:	1,191	1,067	938	913	911	899	895	859	-4
Washington	869	746	654	619	611	602	592	567	-4
Oregon	567	507	468	454	432	441	433	432	0
California	1,695	1,537	1,344	1,320	1,337	1,317	1,327	1,264	-5
48 States	657	568	518	530	533	517	506	491	-3

1/ Nominal values for farmland and buildings adjusted by the Gross Domestic Product implicit price deflator indexed to 1982=100.

Appendix table 2.--Total value of farmland and buildings, by State, 1984-92 1/

State	As of April 1		As of February 1				As of January 1		
	1984	1985	1986	1987	1988	1989	1990	1991	1992
	Million dollars								
Northeast:	38,193	36,184	35,221	38,408	40,271	44,105	42,719	42,034	42,235
Maine	1,091	1,153	1,273	1,284	1,395	1,478	1,478	1,389	1,322
New Hampshire	677	777	875	923	1,077	1,119	1,096	1,031	982
Vermont	1,465	1,515	1,695	1,704	1,708	1,797	1,797	1,724	1,642
Massachusetts	1,437	1,616	1,905	2,078	2,416	2,559	2,559	2,456	2,338
Rhode Island	202	218	240	247	347	367	352	319	303
Connecticut	1,307	1,442	1,518	1,565	1,835	1,943	1,855	1,781	1,695
New York	7,975	7,464	7,503	8,350	8,540	8,602	8,182	8,557	8,723
New Jersey	2,900	2,833	2,758	3,356	3,493	3,998	4,032	4,323	4,201
Pennsylvania	13,887	12,416	11,322	12,939	13,106	15,367	14,637	14,232	14,744
Delaware	1,214	1,037	1,078	1,040	1,041	1,214	1,288	1,281	1,212
Maryland	6,038	5,711	5,057	4,921	5,313	5,663	5,445	4,941	5,073
Lake States:	68,448	56,733	46,939	41,530	46,204	47,856	49,137	52,836	53,361
Michigan	14,183	12,517	11,230	10,164	10,584	10,616	10,854	11,718	11,937
Wisconsin	19,876	16,905	14,889	13,761	14,620	14,890	14,133	14,928	15,221
Minnesota	34,389	27,311	20,821	17,605	21,000	22,350	24,150	26,190	26,203
Corn Belt:	181,813	138,786	121,672	111,988	125,033	136,973	136,325	140,053	143,649
Ohio	23,701	19,203	17,944	17,115	18,704	19,813	18,903	19,107	19,616
Indiana	27,012	22,049	19,144	17,194	18,991	20,402	20,277	20,400	20,843
Illinois	52,965	39,647	35,354	32,865	36,093	39,416	39,587	40,841	42,760
Iowa	50,996	36,653	29,330	26,334	31,725	36,884	36,917	38,760	39,473
Missouri	27,139	21,234	19,901	18,479	19,520	20,459	20,642	20,946	20,958
Northern Plains:	93,578	74,464	65,034	59,613	66,176	71,543	76,348	78,938	80,559
North Dakota	18,320	15,253	13,638	12,319	12,951	13,203	13,770	14,867	14,477
South Dakota	16,176	12,856	11,900	10,548	11,917	12,870	14,543	15,514	16,113
Nebraska	30,445	22,911	19,629	18,886	21,525	24,633	25,905	26,188	26,790
Kansas	28,637	23,443	19,866	17,861	19,783	20,837	22,130	22,369	23,179
Appalachia:	57,984	53,624	52,591	50,500	51,860	53,328	54,194	51,457	53,010
Virginia	10,908	10,566	10,963	10,497	10,902	11,997	13,492	11,396	11,998
West Virginia	2,654	2,186	2,281	2,343	2,523	2,599	2,268	2,313	2,659
North Carolina	15,715	14,373	13,542	13,220	13,009	13,170	12,251	11,933	12,136
Kentucky	14,989	13,849	13,646	12,649	12,813	12,936	13,832	13,564	13,998
Tennessee	13,718	12,650	12,160	11,790	12,613	12,625	12,350	12,251	12,219
Southeast:	47,417	45,182	43,173	42,933	45,641	47,399	48,577	47,023	45,466
South Carolina	5,188	4,939	4,699	4,197	4,616	4,977	4,727	4,835	4,747
Georgia	12,437	11,968	11,345	11,554	11,960	12,575	12,650	12,040	10,917
Florida	20,402	19,346	18,293	18,775	20,585	21,134	22,727	22,397	21,648
Alabama	9,390	8,929	8,837	8,407	8,480	8,713	8,474	7,752	8,153
Delta States:	43,073	40,270	34,755	29,448	29,987	30,379	29,233	29,550	28,621
Mississippi	13,488	12,054	10,898	9,451	9,410	9,483	9,464	9,651	9,441
Arkansas	15,430	14,425	12,301	11,434	12,024	12,215	11,625	11,935	11,219
Louisiana	14,155	13,791	11,556	8,564	8,554	8,681	8,144	7,964	7,961
Southern Plains:	107,353	113,715	96,721	88,351	87,648	85,173	81,741	79,049	77,362
Oklahoma	23,680	19,691	17,173	15,686	15,840	17,193	16,401	16,038	16,296
Texas	83,673	94,025	79,548	72,664	71,808	67,980	65,340	63,011	61,066
Mountain:	81,508	74,344	65,643	63,010	62,847	63,256	64,802	69,274	69,656
Montana	16,867	14,800	14,203	12,138	12,444	12,665	14,399	14,653	15,202
Idaho	11,884	10,711	8,958	7,612	7,836	8,152	9,056	8,897	9,272
Wyoming	6,923	6,287	5,518	5,464	5,116	4,942	5,185	5,324	4,819
Colorado	16,237	15,042	12,310	12,512	12,435	12,295	11,850	13,448	12,043
New Mexico	8,869	8,324	7,199	6,974	8,010	8,500	8,722	10,189	10,582
Arizona	11,665	11,062	10,076	11,071	10,184	9,864	9,468	10,260	10,879
Utah	6,728	5,947	5,426	5,101	4,803	4,757	4,396	4,554	4,801
Nevada	2,335	2,171	1,952	2,138	2,020	2,083	1,727	1,949	2,057
Pacific:	93,562	86,094	79,355	71,329	71,242	73,499	75,111	77,292	76,878
Washington	15,645	15,187	13,433	12,095	11,824	12,112	12,464	12,768	12,672
Oregon	12,949	11,077	10,211	9,676	9,648	9,523	10,164	10,377	10,737
California	64,967	59,829	55,711	49,559	49,770	51,864	52,483	54,146	53,469
48 States	812,929	719,398	641,104	597,110	626,909	653,511	658,187	667,504	670,798

1/ Total values are estimated by multiplying per acre values times acres of land in farms and ranches.

Appendix table 3.--Average per farm value of farmland and buildings, by State, 1984-92 1/

State	As of April 1		As of February 1				As of January 1		
	1984	1985	1986	1987	1988	1989	1990	1991	1992
	Dollars								
Northeast:	230,676	223,955	222,822	247,365	263,953	296,069	291,916	288,099	289,482
Maine	141,740	153,756	167,500	175,872	191,082	202,404	205,215	198,394	188,871
New Hampshire	199,010	228,599	273,341	288,539	336,600	360,806	377,976	355,531	338,466
Vermont	200,626	210,440	238,765	240,054	240,631	256,700	256,700	249,916	237,920
Massachusetts	221,143	248,690	280,147	305,618	350,151	370,846	370,846	355,965	338,879
Rhode Island	262,647	283,454	311,334	321,290	450,135	476,681	475,622	455,117	433,272
Connecticut	311,227	351,767	370,145	391,322	458,810	485,870	475,677	456,615	434,698
New York	169,684	169,635	174,479	198,798	208,288	220,554	212,509	225,192	229,558
New Jersey	311,814	311,349	313,366	394,880	420,810	481,667	497,726	520,790	506,197
Pennsylvania	239,428	214,075	200,386	231,057	238,285	284,570	276,164	268,523	278,186
Delaware	337,272	296,344	336,731	335,380	347,117	404,740	444,010	441,848	417,856
Maryland	339,190	326,348	297,446	298,238	332,084	362,987	358,224	320,844	329,411
Lake States:	278,243	236,388	200,595	180,566	200,887	211,752	220,344	239,075	241,453
Michigan	225,122	205,202	190,331	178,311	188,998	193,025	201,000	217,000	221,058
Wisconsin	231,118	203,675	181,576	169,892	178,295	183,822	176,660	188,956	192,671
Minnesota	354,526	284,486	223,877	191,360	228,261	248,333	271,348	297,614	297,762
Corn Belt:	365,822	284,398	254,013	240,317	269,468	299,723	304,978	321,221	329,471
Ohio	263,349	215,764	203,907	203,748	220,052	230,388	225,033	238,836	245,197
Indiana	329,420	272,213	245,430	232,358	256,638	287,346	298,194	313,846	320,657
Illinois	551,719	426,311	388,500	369,274	410,150	458,320	476,946	498,055	521,463
Iowa	451,289	330,210	269,082	246,111	296,491	351,271	354,971	379,995	386,987
Missouri	233,956	186,262	176,118	164,995	177,455	187,699	191,126	195,753	195,871
Northern Plains:	450,977	367,723	327,625	301,075	338,494	367,829	391,528	409,007	417,406
North Dakota	516,062	448,628	407,117	367,727	386,609	394,119	405,000	450,521	438,707
South Dakota	437,177	352,220	330,554	297,115	340,477	367,715	415,518	443,263	460,375
Nebraska	499,096	381,855	332,700	320,098	371,116	432,163	454,474	467,636	478,391
Kansas	386,989	325,601	283,798	255,152	286,706	301,978	320,722	324,193	335,929
Appalachia:	164,262	154,983	156,521	153,029	159,568	167,171	174,538	169,824	174,950
Virginia	194,783	195,663	214,953	214,234	227,121	255,255	293,313	253,244	266,613
West Virginia	120,627	104,096	108,599	111,589	120,162	123,767	110,639	115,625	132,943
North Carolina	198,930	189,125	185,501	188,853	191,307	202,615	197,598	198,880	202,267
Kentucky	148,407	138,488	137,843	127,765	132,091	136,171	148,732	149,057	153,827
Tennessee	144,402	133,159	132,174	129,563	138,600	138,738	138,769	140,818	140,451
Southeast:	275,683	268,144	260,081	263,391	278,301	293,493	301,722	303,372	293,329
South Carolina	185,273	179,606	174,041	161,409	177,550	195,165	189,072	201,450	197,782
Georgia	243,871	239,352	231,521	240,708	244,082	261,975	263,542	261,728	237,335
Florida	510,049	496,054	469,058	469,378	502,073	515,473	554,305	559,913	541,211
Alabama	177,179	171,717	173,265	171,571	176,667	185,387	180,296	172,262	181,185
Delta States:	308,769	298,297	267,344	232,794	241,833	246,983	245,651	259,212	251,057
Mississippi	269,765	251,129	236,915	214,788	224,036	231,290	236,600	253,979	248,442
Arkansas	280,546	272,164	246,020	233,351	245,384	254,471	247,340	259,457	243,889
Louisiana	410,289	405,624	339,872	255,629	259,212	255,335	254,484	265,467	265,360
Southern Plains:	402,070	430,740	369,163	341,123	341,043	332,707	319,301	309,996	303,381
Oklahoma	324,384	273,481	238,507	220,936	226,286	245,614	234,300	229,114	232,806
Texas	431,302	489,713	418,674	386,513	384,000	365,484	351,290	340,600	330,085
Mountain:	657,323	601,004	533,679	516,898	518,113	525,822	545,013	584,589	587,811
Montana	696,966	609,069	582,108	495,430	505,833	512,769	582,955	590,843	612,999
Idaho	483,083	435,386	373,257	330,974	348,284	368,846	415,399	415,724	433,268
Wyoming	760,750	698,574	613,156	620,905	574,787	555,236	582,607	591,600	535,456
Colorado	601,372	563,369	462,773	463,401	455,505	455,352	447,162	517,231	463,180
New Mexico	633,503	594,602	514,198	498,110	572,143	607,107	646,074	754,741	783,880
Arizona	1,405,443	1,301,455	1,171,577	1,317,923	1,257,222	1,217,778	1,213,846	1,282,500	1,359,835
Utah	480,595	427,811	396,077	375,104	361,090	365,946	333,008	342,398	360,988
Nevada	833,987	803,999	723,037	822,383	777,038	833,040	690,640	779,640	822,910
Pacific:	595,934	544,898	502,248	451,451	449,474	462,258	473,886	489,187	486,571
Washington	411,717	399,668	353,503	318,279	311,158	318,737	336,865	345,081	342,474
Oregon	349,985	299,377	275,967	261,504	264,318	257,378	278,460	280,470	290,203
California	792,280	720,837	671,220	597,097	592,500	617,430	617,449	644,596	636,539
48 States	349,111	314,522	285,624	270,471	286,016	301,815	308,250	317,950	319,519

1/ Average per farm value is estimated by dividing total value of farmland by the number of farms.

Appendix table 4.--Total value of farm buildings, by State, 1981-92

State	Feb. 1	As of April 1				As of February 1				As of January 1		
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
						Million dollars						
Northeast:	10,319	9,991	9,452	9,756	10,163	10,959	12,390	12,916	13,462	12,296	11,750	11,931
Maine	326	322	311	292	329	387	390	409	397	397	373	356
New Hampshire	186	184	176	181	222	266	281	316	301	295	277	264
Vermont	442	416	398	393	432	515	518	501	483	483	465	442
Massachusetts	389	388	371	385	461	579	632	708	688	689	662	630
Rhode Island	67	61	58	54	62	73	75	102	99	95	86	82
Connecticut	399	384	369	350	411	461	476	538	523	499	480	457
New York	2,354	2,402	2,305	2,377	2,448	2,731	3,148	3,220	3,097	2,738	2,747	2,831
New Jersey	683	675	609	545	569	593	725	730	772	779	834	811
Pennsylvania	3,796	3,595	3,478	3,694	3,675	3,748	4,490	4,587	5,194	4,585	4,285	4,485
Delaware	233	224	226	240	234	281	292	304	351	345	330	316
Maryland	1,445	1,339	1,151	1,244	1,319	1,325	1,363	1,504	1,557	1,391	1,211	1,258
Lake States:	14,965	14,454	13,774	14,467	14,222	13,792	13,144	14,808	14,834	13,826	14,126	14,477
Michigan	3,189	3,060	2,942	3,163	3,267	3,358	3,222	3,408	3,291	3,089	3,186	3,281
Wisconsin	5,935	5,672	5,449	5,665	5,629	5,688	5,573	6,024	5,911	5,157	5,180	5,354
Minnesota	5,841	5,723	5,383	5,640	5,326	4,747	4,348	5,376	5,632	5,580	5,760	5,842
Corn Belt:	25,742	23,393	21,450	22,725	21,122	22,234	22,358	25,849	27,540	24,708	23,964	24,879
Ohio	4,658	4,092	3,850	4,148	4,090	4,576	4,792	5,480	5,706	4,930	4,726	4,917
Indiana	4,538	4,001	3,608	3,998	3,947	4,116	4,041	4,672	4,937	4,450	4,240	4,385
Illinois	5,041	4,587	4,270	4,661	4,203	4,490	4,568	5,234	5,597	5,073	4,959	5,273
Iowa	7,073	6,557	5,902	5,712	4,912	4,634	4,503	5,584	6,307	5,695	5,662	5,858
Missouri	4,431	4,157	3,819	4,207	3,971	4,418	4,454	4,880	4,992	4,560	4,378	4,446
Northern Plains:	9,072	9,056	8,813	9,189	8,783	9,087	9,001	10,301	10,743	10,374	10,120	10,490
North Dakota	1,747	1,735	1,656	1,759	1,724	1,787	1,712	1,813	1,756	1,661	1,697	1,661
South Dakota	1,574	1,631	1,642	1,828	1,748	1,928	1,856	2,157	2,252	2,304	2,298	2,442
Nebraska	2,851	2,809	2,758	2,710	2,474	2,532	2,682	3,186	3,547	3,344	3,203	3,331
Kansas	2,900	2,882	2,758	2,892	2,837	2,841	2,751	3,145	3,188	3,066	2,922	3,056
Appalachia:	12,469	11,866	11,781	12,673	13,686	15,456	15,771	16,516	16,396	15,318	13,874	14,463
Virginia	2,312	2,202	2,271	2,389	2,715	3,245	3,307	3,510	3,743	3,854	3,106	3,306
West Virginia	726	715	633	645	616	739	804	878	871	696	677	787
North Carolina	3,101	2,836	2,833	3,237	3,450	3,710	3,834	3,812	3,701	3,162	2,938	3,021
Kentucky	3,152	3,145	3,164	3,343	3,628	4,162	4,136	4,318	4,243	4,160	3,892	4,064
Tennessee	3,178	2,968	2,881	3,059	3,276	3,599	3,690	3,998	3,838	3,447	3,261	3,286
Southeast:	7,359	6,980	6,706	6,942	7,764	8,734	9,313	10,127	10,287	9,453	8,633	8,469
South Carolina	1,090	1,041	966	949	1,057	1,175	1,129	1,274	1,334	1,154	1,122	1,116
Georgia	2,267	2,113	2,100	2,189	2,501	2,825	3,154	3,421	3,559	3,250	2,940	2,704
Florida	1,880	1,790	1,781	1,897	2,089	2,287	2,516	2,820	2,790	2,736	2,562	2,513
Alabama	2,122	2,036	1,859	1,906	2,116	2,448	2,514	2,612	2,605	2,313	2,009	2,137
Delta States:	6,285	6,204	5,622	6,114	6,743	6,886	6,398	6,759	6,681	5,858	5,638	5,516
Mississippi	2,189	2,063	1,866	2,091	2,206	2,354	2,221	2,296	2,257	2,054	1,984	1,965
Arkansas	2,393	2,468	2,175	2,268	2,510	2,522	2,550	2,777	2,748	2,372	2,325	2,207
Louisiana	1,704	1,673	1,581	1,755	2,027	2,011	1,627	1,685	1,676	1,433	1,329	1,344
Southern Plains:	8,528	9,546	9,690	11,278	14,280	14,621	14,759	15,405	14,880	12,837	11,747	11,703
Oklahoma	2,732	2,890	2,833	3,078	3,091	3,246	3,278	3,485	3,731	3,201	2,970	3,055
Texas	5,796	6,656	6,857	8,200	11,189	11,375	11,481	11,920	11,149	9,636	8,777	8,649
Mountain:	8,021	8,240	8,013	8,869	9,703	10,182	10,530	10,878	10,631	9,838	9,883	10,009
Montana	1,316	1,417	1,397	1,636	1,776	2,088	1,978	2,153	2,178	2,239	2,171	2,265
Idaho	1,521	1,600	1,565	1,628	1,757	1,747	1,606	1,700	1,704	1,713	1,580	1,675
Wyoming	586	621	635	706	780	822	896	880	820	800	766	700
Colorado	1,710	1,746	1,770	1,965	2,196	2,154	2,402	2,487	2,397	2,085	2,230	2,026
New Mexico	836	798	704	798	866	864	879	1,009	1,003	935	1,019	1,075
Arizona	824	815	759	840	929	977	1,118	1,029	937	792	828	891
Utah	941	941	894	955	1,005	1,091	1,107	1,071	1,023	848	836	890
Nevada	287	301	290	341	395	439	543	550	569	427	454	485
Pacific:	10,521	10,939	11,120	12,308	13,643	14,921	14,560	14,908	14,775	13,682	13,297	13,440
Washington	2,272	2,283	2,296	2,519	2,916	3,022	2,903	2,885	2,810	2,608	2,528	2,538
Oregon	2,080	2,119	2,157	2,383	2,470	2,706	2,787	2,865	2,733	2,634	2,528	2,660
California	6,169	6,536	6,666	7,406	8,256	9,192	8,871	9,158	9,232	8,439	8,242	8,242
48 States	113,281	110,668	106,421	114,321	120,109	126,873	128,223	138,467	140,229	128,189	123,032	125,378

Appendix table 5.--Average per acre value of farmland, by State, 1981-92 1/

State	Feb. 1	As of April 1				As of February 1				As of January 1			Percent change
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1991-92
	Dollars												Percent
Northeast:	1,000	1,005	1,001	1,036	968	923	1,010	1,077	1,225	1,236	1,227	1,228	0
Maine	438	476	511	522	553	595	616	680	745	764	715	680	-5
New Hampshire	736	795	848	917	1,029	1,171	1,285	1,493	1,635	1,678	1,570	1,494	-5
Vermont	529	571	608	631	677	737	775	795	870	893	834	794	-5
Massachusetts	1,197	1,312	1,417	1,525	1,700	1,922	2,096	2,512	2,751	2,822	2,639	2,513	-5
Rhode Island	1,807	1,910	1,993	2,028	2,138	2,286	2,359	3,357	3,675	3,771	3,527	3,358	-5
Connecticut	1,719	1,827	1,917	1,993	2,148	2,347	2,476	2,949	3,229	3,313	3,098	2,950	-5
New York	530	568	574	596	551	536	598	619	655	649	700	710	1
New Jersey	2,377	2,519	2,531	2,403	2,358	2,353	2,924	3,139	3,666	3,805	3,964	3,852	-3
Pennsylvania	1,142	1,104	1,120	1,172	1,005	891	1,006	1,026	1,241	1,241	1,228	1,267	3
Delaware	1,569	1,447	1,481	1,475	1,235	1,244	1,206	1,250	1,463	1,654	1,669	1,572	-6
Maryland	2,014	1,889	1,695	1,775	1,689	1,493	1,452	1,621	1,785	1,803	1,658	1,696	2
Lake States:	995	994	931	904	713	563	484	536	565	605	664	667	0
Michigan	1,009	1,010	965	975	819	709	631	658	678	719	790	801	1
Wisconsin	833	837	814	790	630	517	463	486	510	511	557	564	1
Minnesota	1,089	1,084	988	946	723	536	442	521	557	619	681	679	-0
Corn Belt:	1,572	1,457	1,311	1,268	939	794	720	796	879	897	935	957	2
Ohio	1,542	1,373	1,262	1,238	957	846	790	848	899	890	916	936	2
Indiana	1,761	1,566	1,393	1,403	1,104	916	812	873	943	972	1,010	1,029	2
Illinois	2,013	1,863	1,688	1,683	1,235	1,075	989	1,079	1,187	1,211	1,259	1,315	4
Iowa	1,789	1,694	1,509	1,348	945	735	652	780	913	931	988	1,003	2
Missouri	848	812	734	740	560	504	458	480	509	529	545	543	-0
Northern Plains:	485	497	480	467	364	310	281	311	338	367	383	390	2
North Dakota	394	413	399	404	331	290	261	274	283	299	326	317	-3
South Dakota	294	312	311	322	250	224	196	220	240	276	299	309	3
Nebraska	669	671	643	588	433	362	343	389	448	479	488	498	2
Kansas	559	568	544	536	429	355	315	347	368	398	406	420	3
Appalachia:	862	860	859	865	771	724	690	707	746	796	773	793	3
Virginia	882	871	893	878	826	830	790	812	917	1,082	942	988	5
West Virginia	520	557	530	529	436	417	416	445	467	425	442	506	14
North Carolina	1,068	1,041	1,056	1,134	1,011	910	894	893	947	937	937	949	1
Kentucky	817	841	831	803	705	654	591	594	612	686	686	705	3
Tennessee	835	818	799	795	700	659	643	684	697	718	725	720	-1
Southeast:	966	940	938	943	885	828	826	879	935	1,009	1,024	987	-4
South Carolina	799	807	780	757	706	653	579	631	687	687	728	712	-2
Georgia	815	775	776	759	701	641	646	657	716	752	752	679	-10
Florida	1,423	1,381	1,436	1,492	1,426	1,345	1,390	1,545	1,638	1,833	1,889	1,822	-4
Alabama	732	712	666	657	608	581	551	554	576	611	586	614	5
Delta States:	993	983	899	922	842	706	593	605	622	625	645	623	-3
Mississippi	884	839	763	803	698	610	524	527	543	571	599	584	-2
Arkansas	909	944	837	823	749	619	562	585	603	596	620	581	-6
Louisiana	1,285	1,250	1,193	1,253	1,200	984	746	755	770	754	754	752	-0
Southern Plains:	461	520	518	566	590	492	443	438	426	417	410	400	-2
Oklahoma	601	639	614	624	503	422	376	374	408	400	396	401	1
Texas	426	490	494	552	611	509	459	454	431	422	414	400	-3
Mountain:	276	292	282	291	261	225	214	213	216	226	246	247	0
Montana	230	248	236	249	214	199	167	170	173	201	207	215	4
Idaho	673	732	709	698	618	508	435	448	471	537	542	563	4
Wyoming	163	175	175	179	158	135	131	122	118	126	131	118	-10
Colorado	386	401	403	412	373	297	297	295	295	295	342	305	-11
New Mexico	174	178	163	176	166	142	137	157	168	175	207	215	4
Arizona	265	280	269	289	270	245	269	251	248	240	262	277	6
Utah	490	511	486	489	426	380	353	330	330	314	329	346	5
Nevada	230	234	216	224	200	170	179	165	170	146	168	177	5
Pacific:	1,089	1,185	1,191	1,215	1,088	975	863	861	902	951	998	990	-1
Washington	738	783	792	815	762	651	574	559	581	616	640	633	-1
Oregon	553	587	585	587	478	419	385	381	381	423	441	454	3
California	1,548	1,704	1,717	1,755	1,587	1,445	1,275	1,285	1,362	1,430	1,515	1,493	-1
48 States	709	715	684	689	594	513	471	492	519	538	556	557	0

1/ Nominal dollars.

Appendix table 6.--U.S. agricultural landholdings by country of foreign owner, December 31, 1991

Country	Acres	Country	Acres
Argentina	13,394	Liechtenstein	144,371
Australia	3,449	Luxembourg	3,976
Austria	55,889	Malaysia	7,948
Bahamas	33,746	Mexico	174,555
Bahrain	553	Morocco	1,035
Barbados	117	Namibia	197
Belgium	63,368	Netherlands	113,651
Belize	549	Netherlands Antilles	366,730
Bermuda	73,732	New Zealand	463
Bolivia	11	Nicaragua	1,378
Brazil	5,262	Norway	5,547
British Virgin Islands	69,961	Oman	454
Canada	1,970,717	Pakistan	2,171
Cayman Islands	23,224	Panama	168,015
Chile	1,556	Peru	278
China	496	Philippines	3,863
Colombia	11,480	Poland	147
Costa Rica	13,419	Portugal	1,306
Cuba	20	St. Vincent	2,637
Czechoslovakia	485	Saudi Arabia	38,651
Denmark	9,682	Singapore	528
Dominican Republic	2,128	Somalia	11
Ecuador	976	South Africa	1,940
Egypt	2,134	Southern Rhodesia	230
El Salvador	309	Spain	2,626
France	87,125	Sweden	32,334
Gambia	294	Switzerland	300,273
Germany	756,747	Syria	4,706
Greece	57,423	Taiwan	11,929
Guatemala	1,022	Tanzania	10,143
Guyana	35	Thailand	252
Honduras	892	Trinidad & Tobago	131
Hong Kong	14,763	Turkey	558
Hungary	110	Turks Islands	3,192
India	1,687	United Arab Emirates	3,810
Indonesia	804	United Kingdom	1,803,214
Iran	2,623	Uruguay	10,807
Ireland	10,705	U.S.S.R.	841
Israel	1,067	Venezuela	19,543
Italy	83,919	Vietnam	152
		Yugoslavia	1,023
Ivory Coast	119		
Jamaica	1,631		
Japan	181,692	Multiple[1/]	55,344
Jordan	2,380		
Kampuchea	31	Third tier[2/]	80,863
Korea (South)	1,536		
Kuwait	1,635	Subtotal[3/]	6,989,717
Laos	31		
Lebanon	13,282		
Liberia	29,684		

Appendix table 6.--U.S. agricultural landholdings by country of foreign owner, December 31, 1991 continued

Country	Acres	Country	Acres
US/Andorra	3,741	US/Liechtenstein	52,250
US/Argentina	4,255	US/Luxembourg	233,590
US/Australia	1,565	US/Malaysia	300
US/Austria	19,886	US/Mexico	322,583
US/Bahamas	72,085	US/Netherlands	315,556
US/Barbados	41	US/Netherlands Antilles	223,469
US/Belgium	73,904		
US/Bermuda	38,633	US/New Hebrides	2,991
US/Brazil	12,198	US/New Zealand	47,010
US/Brit. Virgin Islands	3,490	US/Nicaragua	282
		US/Norway	8,333
US/Canada	1,690,906		
US/Cayman Islands	10,748	US/Panama	146,244
US/Chile	9,929	US/Peru	100
		US/Philippines	7,793
US/China	15,589	US/Portugal	1,683
US/Colombia	10,154	US/Qatar	219
US/Costa Rica	407	US/Saudi Arabia	21,117
US/Denmark	6,998		
US/Ecuador	1,632	US/South Africa	4,404
US/Egypt	1,963	US/Spain	4,574
US/El Salvador	533	US/Sweden	6,172
		US/Switzerland	333,409
US/Finland	2,369	US/Taiwan	10,995
US/France	1,019,520	US/Thailand	252
US/Germany	444,852	US/Trinidad & Tobago	20
US/Greece	5,249	US/Turkey	443
US/Guatemala	412	US/United Arab Emirates	2,107
US/Guyana	334	US/United Kingdom	1,326,892
		US/Uruguay	618
US/Honduras	37	US/Venezuela	38,069
US/Hong Kong	131,379		
US/Indonesia	544	US/Multiple	180,278
US/Iran	1,967		
US/Iraq	800	US/Third tier	610,896
US/Ireland	4,608		
US/Italy	21,646	Subtotal[4/]	7,818,784
US/Japan	268,367		
US/Kenya	32	Total all landholdings	14,808,501
US/Korea (South)	85		
US/Kuwait	7,561		
US/Lebanon	703		
US/Liberia	26,733		
US/Libyan Arab Republic	280		

[1/]A report is processed as "multiple" when no single country predominates--for example, an equal partnership between a Canadian and a German. [2/]A report is processed as "third tier" if three or more levels of ownership are reported with no foreign interests indicated. [3/]Total interests excluding U.S. corporations with foreign shareholders. [4/]Total interest of U.S. corporations with foreign shareholders.

Farmland Prices, Past And Prospective

By Karl Gertel, John T Scott, Jr., and John Jones[1]

Abstract: From 1910-1914 to 1992, the average price per acre of farm real estate, adjusted for inflation, has increased 14 percent. However, most of the increase appears to be associated with demand for space by a population growing in size and income. Little or no increase occurred over most of the Corn Belt and Northern Plains. As in the past, periodic upswings and downturns in farmland prices may be triggered by sharp but temporary changes in commodity prices. The long term prospects are for continued moderate growth in real value per acre coming mostly from non-farm demand for farmland.

Keywords: Demand for farmland, farmland values, farm production technology, future farmland values.

This article examines the trend of real (inflation-adjusted) farmland prices from the 1910-1914 average to 1992. Over that period, there has been a moderate 14-percent increase in the real U.S. average price per acre. But this average is a composite of States where the increase has been much greater, and other States in which farmland prices have had no increase.

Past Trends

Table A-1 compares average prices per acre by State for the 1910-1914 average and 1992. The comparison is in 1992 dollars. For example, the $26 average price per acre from 1910-1914 for Maine is equivalent in purchasing power to $373 per acre in 1992 dollars.[2] For the three westernmost Corn Belt States, Illinois, Iowa, and Missouri, for all the Northern Plains States, and for most of the Mountain States, price per acre in 1992 is less than the 1910-1914 average expressed in 1992 dollars. These 13 States contain 38 percent of the land area of the contiguous United States and 47 percent of the land in farms, but only 15 percent of the population (13).

Except for Illinois, population density in each of these States is below the average for the 48 States. While Illinois is high in population, over half of the population is located in one county in the Chicago metro area. Farmland prices outside the Chicago metro area are affected much less by population pressure. These data indicate that past increases in farmland values were in large measure due to demand for space by population on the available land area, and the associated transportation services and other infrastructure.

Table A-1 should be interpreted with care. It compares 1910-1914, when farmland prices appear to have been near a peak, to 1992, when real farmland values were near the bottom of the recent decline. Therefore, a finding of lower real prices in 1992 than 1910-1914 does not show that farmland values have been declining over most of this century. What it does show is that average farmland prices in the 13 States have lagged behind the U.S. average. Other research has confirmed the significance of population density and non-farm influences in explaining farmland value.

In a study of farmland prices in 24 States from 1960 to 1981, Robison, Lins and Ven Kataraman concluded that non-agricultural demand, measured as population density, appeared to play an important part in determining farmland prices (7). Using Census data from 1949 to 1978, Peterson found that population density accounted for nearly two-thirds of the variation in the price of farmland (5). From these studies, one can conclude that variation of farmland prices among States is largely due to variation in non-farm demand for farmland. Table A-1 suggests that variation of the growth of farmland prices over a long period of time is also due primarily to non-farm factors. However, periodic sharp upturns and downturns in farmland prices for most States are due to agricultural factors because population growth and population density over a large area change slowly, while farm prices can undergo rapid changes.

Land in farms has not remained constant over time. Acres in farms increased from 879 million in 1910 to 1,206 million in 1954, falling back to 980 million in 1992. Moreover, the value of the land remaining in farms was augmented by investment in drainage, irrigation, and other improvements and withdrawal of poorer quality land from farming. Calculating the net effect of land investments and shifts into and out of farmland is beyond the scope of this paper. However, if prices for the same land could be traced from 1910 to 1992, the difference between the coastal and the inland regions probably would persist.

---

[1] Gertel is an economist with the Resources and Technology Division, Economic Research Service, USDA, Scott is a professor of Agricultural Economics at the University of Illinois, and Jones is a statistical assistant with the Resources and Technology Division, Economic Research Service, USDA.

[2] 1992 purchasing power was calculated from the Consumer Price Index (CPI-U). For 1910-1912, indices were obtained from the 1973 Handbook of Labor Statistics (19).

Table A-1--Average value per acre of farm real estate, 1910-14 and 1992

State	Land in farms 1/	1910-14 Nominal	1910-14 1992 dollars	1992	Change in real value
	1,000 acres	Dollars			Percent
Maine	1,420	26	373	931	150
New Hampshire	480	27	393	2,045	421
Vermont	1,510	24	352	1,087	209
Massachusetts	680	70	1017	3,439	238
Rhode Island	66	63	913	4,595	404
Connecticut	420	67	967	4,036	317
New York	8,300	55	788	1,051	33
New Jersey	880	87	1256	4,774	280
Pennsylvania	8,100	57	820	1,820	122
Delaware	570	52	751	2,126	183
Maryland	2,250	50	722	2,255	212
Northeast	24,676	51	739	1,712	132
Michigan	10,800	50	719	1,105	54
Wisconsin	17,500	59	858	870	1
Minnesota	30,000	50	728	873	20
Lake States	58,300	53	764	915	20
Ohio	15,700	71	1028	1,249	21
Indiana	16,000	79	1138	1,303	15
Illinois	28,500	115	1666	1,500	-10
Iowa	33,500	104	1505	1,178	-22
Missouri	30,400	53	762	689	-10
Corn Belt	124,100	85	1227	1,158	-6
North Dakota	40,400	30	433	358	-17
South Dakota	44,200	41	595	365	-39
Nebraska	47,100	49	708	569	-20
Kansas	47,900	41	595	484	-19
Northern Plains	179,600	41	592	449	-24
Virginia	8,800	29	416	1,363	228
West Virginia	3,700	28	401	719	79
North Carolina	9,600	22	318	1,264	298
Kentucky	14,100	30	436	993	128
Tennessee	12,400	26	375	985	162
Appalachia	48,600	27	390	1,091	180
South Carolina	5,100	26	378	931	146
Georgia	12,100	19	274	902	229
Florida	10,500	25	358	2,062	476
Alabama	9,800	15	214	832	289
Southeast	37,500	20	282	1,212	330
Mississippi	12,800	19	277	738	166
Arkansas	15,500	18	266	724	172
Louisiana	8,800	24	349	905	159
Delta	37,100	20	289	771	167
Oklahoma	33,000	26	381	494	30
Texas	131,000	18	260	466	79
Southern Plains	164,000	20	286	472	65
Montana	60,300	19	277	252	-9
Idaho	13,500	46	658	687	4
Wyoming	34,800	12	170	138	-19
Colorado	32,800	30	427	367	-14
New Mexico	44,300	9	133	239	80
Arizona	36,000	35	508	302	-41
Utah	11,300	34	488	425	-13
Nevada	8,900	17	245	231	-6
Mountain	241,900	22	317	288	-9
Washington	16,000	51	736	792	8
Oregon	17,800	41	586	603	3
California	30,300	61	881	1,765	100
Pacific	64,100	54	780	1,199	54
48 States	979,876	42	601	685	14

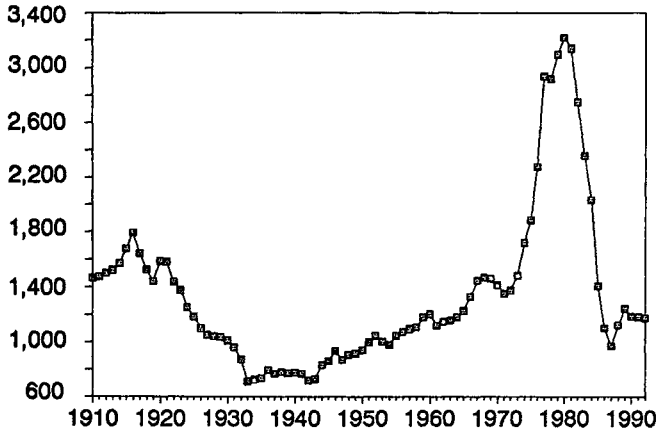
1/ Farm Numbers. July 1991, NASS, USDA.

Figure A-1

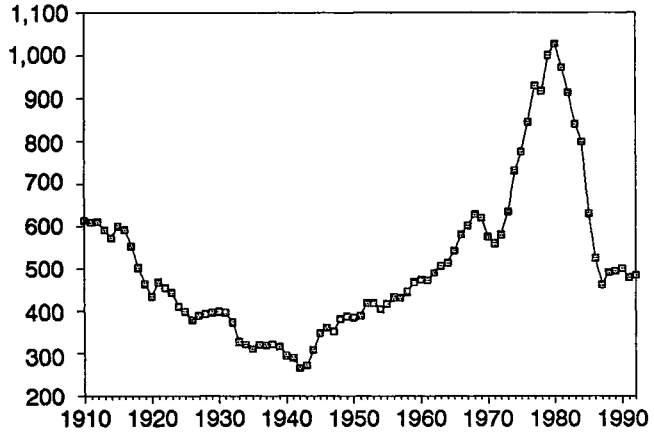
Value of Land and Buildings per Acre

1992 Dollars

Iowa



Kansas



Montana

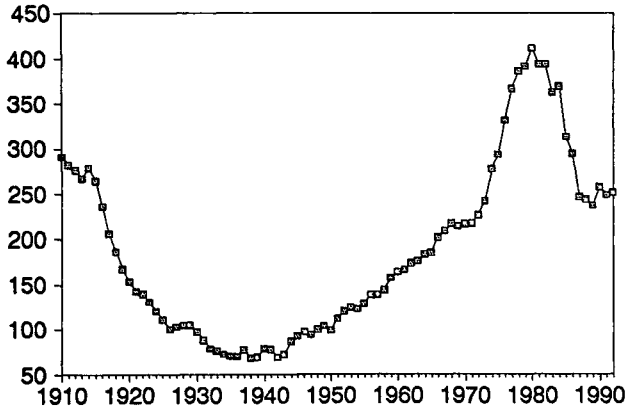
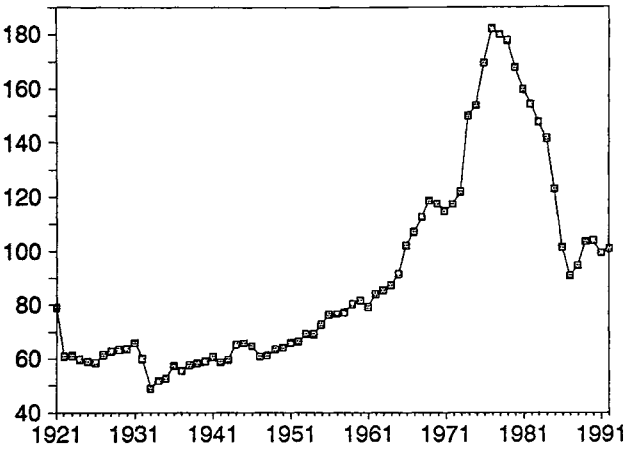


Figure A-2

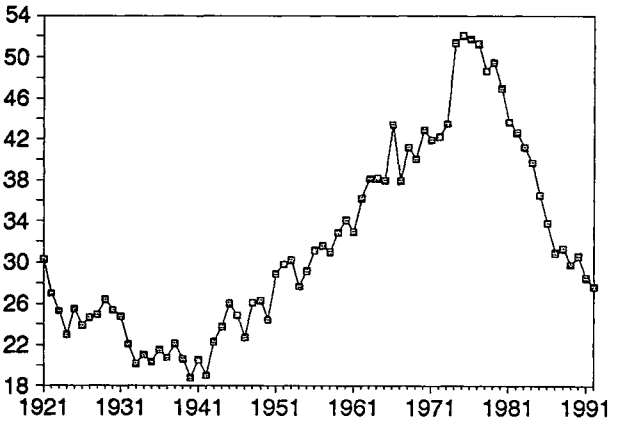
Cash Rents per Acre

1992 Dollars

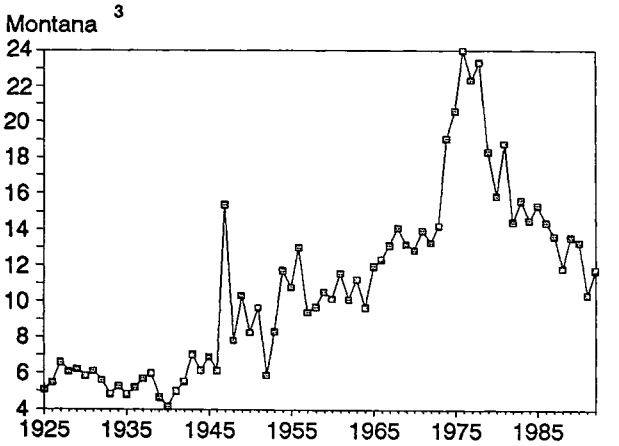
Iowa [1]



Kansas [2,3]



Montana [3]



[1] Whole famrs rented for cash. [2] Whole farms rented for cash until 1975. [3] Weighted average of cash rent per acre of irrigated cropland, dry cropland, and grazing land.

From the three regions in which average real value per acre in 1992 was lower than the 1910-1914 average, three States were selected for more detailed analysis: Iowa from the Corn Belt, Kansas from the Northern Plains, and Montana from the Mountain States. Farmland values were dominated by a long downtrend in the 20's and 30's, followed by a steady uptrend and a boom and bust in the 70's and 80's (figure A-1).

These extended cycles appear to be triggered by sharp changes in returns leading to changed expectations of the future and augmented by high levels of indebtedness (2). This pattern makes analysis of long term trends difficult. Examination of the 1910-1992 period showed an uptrend for all three States, but the uptrend was significant for Montana only.[3]

This conclusion was confirmed by examination of cash rents available from 1921 for Iowa and Kansas and from 1925 for Montana (figure A-2). Again, rents for all three States showed an uptrend, but the uptrend was significant for Montana only. Thus, a definite upward movement for Iowa and Kansas could not be established.

The absence of a definite trend in the real price of farmland in the wheat and corn-soybean producing areas of mid-America, where non-farm influences are relatively minor, indicates a balance of the agricultural factors that affect income and value per acre.

The factors affecting income and price per acre of farmland can be grouped under demand and supply. Demand can be divided into domestic demand for food and fiber and demand for non-farm uses such as urban and recreational uses and foreign demand for food and fiber. Likewise, supply can be divided into foreign and domestic supply of food and fiber (10, 11).

Demand

Domestic Demand Driven by Population, Income, and Consumer Preferences

From 1910 to 1990, the U.S. population grew an average compound rate of 1.24 percent per year. Growth from 1990 to 2000 is projected by the Bureau of the Census at 1.05 percent (17).[4]

Real Gross National Product per capita from 1910 to 1990 is estimated to have grown at 1.6 percent per year (18). Combining the projections of GNP in the President's budget message of 1992 with the Bureau of the Census population projections, gives an estimated growth rate of real per capita GNP of approximately 1 percent from 1990 to 1997 (4).

Food consumption per capita, calculated as weight at the retail level, rose 8 percent from 1970 to 1990, but consumption of crop products soared 16 percent, while consumption of animal products rose less than 1 percent. American meals feature relatively less meat and more grain products such as breakfast cereals and pasta (6). With the projected growth in population and per capita income and diets with less emphasis on grain-fed animal products, domestic food demand can not be looked to as a source of high prices for feed and food grains and strongly rising real farmland prices. However, growth of population and per capita income can be expected to continue the upward trend in farmland values in areas with a potential for residential, commercial, or recreational use and for hobby farming and ranching.

Foreign Demand To Grow Moderately

The upward trend of farmland values in the Corn Belt and Northern Great Plains that began in the mid-forties coincided with increased exports (8). Prior to the mid-forties, less than 10 percent of the U.S. cropland acreage produced crops for export. This proportion peaked in 1980 at 39 percent and fell to 24 percent by 1985; there was a concurrent decline in farmland prices (16). During this period, exports of grain and soybeans, the main crops of the Corn Belt and Plains States, followed a similar pattern. The value of these exports (in 1992 dollars) was $38.8 billion in 1980 and $21.6 billion in 1985 (14,15).

Analysis by USDA and the Food and Agricultural Policy Institute (of Iowa State University and the University of Missouri) indicates moderate growth in world exports of feed crops, wheat, and soybeans for the rest of this century (1,3,9). The U.S. share of this growth depends on international trade policies and the development of agriculture and infrastructure in a number of countries, especially the former Soviet Union, China, Argentina, and Brazil. Moderate growth of U.S. exports of grains and oilseeds appears likely. Such growth may maintain or moderately raise the level of real farmland prices in the Corn Belt and Northern Great Plains, but is unlikely to cause a strong long term upward trend.

Supply

Increased Domestic Supply Lowers Real Prices

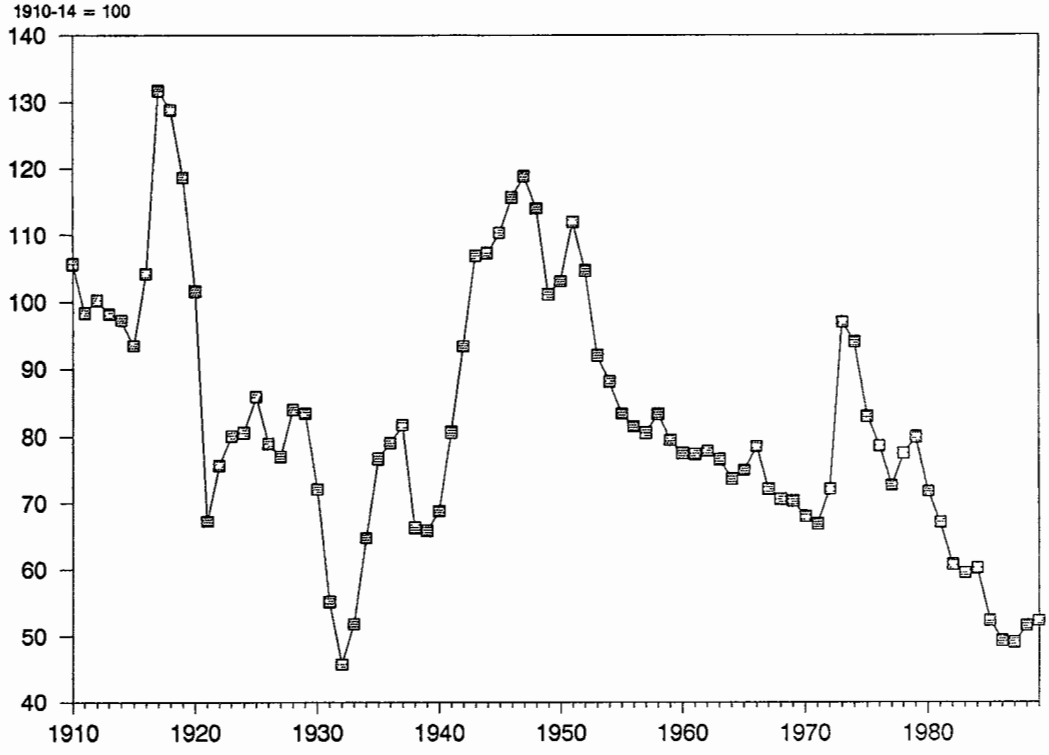
Over the long term, the supply of food and fiber depends mainly on the cost of production, which depends on the technology of production. Technological development can be di-

3 Except for Montana, a log linear trend fitted from 1910-1991 with correction for first order autocorrelation of the residuals was not significant. For Montana, the upward trend remained significant after correcting for first and second order correlation of residuals.

4 High fertility assumption, currently recommended for use to the year 2000 by the U.S. Census of Population.

Figure A-3

Real Prices Received by Farmers for All Commodities



Deflated by CPI.

vided into mechanical and biological-chemical development. The principal mechanical development in American agriculture has been the substitution of fossil fuels and machinery for human and animal labor. Efficient use of machinery has required the enlargement of farm size which, on balance, has increased the demand for land and raised farmland prices.

Biological-chemical development, such as use of improved seeds, fertilizers, and pesticides, has resulted in higher yields and lower costs per unit of output. Over time, these technologies have caused agricultural supplies to increase faster than growth in demand. As a result, inflation-adjusted market prices of farm products have declined to absorb the increased production. Government programs have moderated but not prevented the long term decline in the real price of principal agricultural commodities (figure A-3).

The consequences of chemical-biological technology for farm returns and prices of farmland depend on whether production costs are lowered sufficiently to offset the lower commodity prices.

It is extremely difficult to separate out from other effects, the effect of production technology on farmland returns and farmland prices. The decline in farm numbers is evidence of the effects of technology on some farm operators. Other operators have adjusted to the new technology, but the overall effect is not known. The effect of mechanized and biological technology on farmland prices and farmland values in the future is difficult to quantify, but if the pace of yield increase and production-increasing technology is greater than the pace of population growth, real income growth, and export demand, the real price of commodities is likely to continue to decline with downward pressure on land prices.

Foreign Supply Outstrips Population Growth

Over the past four decades, world food production increased 2.4 percent per year, while population rose 1.9 percent per year. Increases in production came about mainly through improved technology rather than expansion of world cropland (12). Sharply higher prices for agricultural commodities in the 1970's led to increasing food production, demonstrating the responsiveness of world agriculture to changes in agricultural commodity prices. The main problem has been one of distribution: Some countries have experienced declining per capita food production and are too poor to pay for sufficient imports to offset the decline. World demand is expected to be sufficient to support increasing exports with a moderate growth of U.S. exports.

Summary and Conclusions

Real farmland values in 1992 are 14 percent higher than the average for 1910-1914, but most of the increase has been as-

sociated with increasing population density rather than increasing returns from agriculture. In areas of the Corn Belt and Northern Plains where non-farm demand for farmland is relatively minor, the real price of farmland has not increased significantly. As in the past, sharp but temporary changes in farm commodity prices may trigger periodic upswings and downturns in farmland prices, but the long term outlook points to moderately rising real farmland prices with most of the increase coming from non-farm demand for farmland.

References

1. Food and Agricultural Policy Institute. "FAPRI 1992 U.S. Agricultural Outlook." Staff Report No. 1-92. Iowa State University, University of Missouri-Columbia, February 1992, Draft.

2. Gertel, Karl. "Returns to Cash Rented Farmland and Common Stock." in *Agricultural Resources, Situation and Outlook Report.* U.S. Dept. Agr., Econ. Res. Serv., AR-22, June 1991.

3. Mielke, J. Miles and Peter A. Riley. "Foreign Coarse Grains: Prospects and Issues for the 1990's." *Feed Situation and Outlook Report.* U.S. Dept. Agr., Econ. Res. Serv., FDS-315. August 1990.

4. Office of Management and Budget. "The Budget Message of the President." *The Budget of the United States Government for Fiscal Year 1993.* January 29, 1992, Part One, p. 32.

5. Peterson, Willis. "Land Quality and Prices." *Amer. J. Agr. Econ.* Vol. 68, No. 4, November 1986.

6. Putnam, Judith Jones. "Food Consumption 1970-1990," *Food Review.* U.S. Dept. Agr., Econ. Res. Serv., Vol. 14, Issue 3. July-September 1991.

7. Robison, Lindon J., David A. Lins and Ravi Ven Kataraman. "Cash Rent and U.S. Agriculture. "*Amer. J. Agr. Economics.* Vol. 67, No. 4, November 1985.

8. Runge, Ford and Halbach, Daniel. "Export Demand, U.S. Farm Income and Land Prices: 1949-1985." *Land Economics.* Vol. 66, No. 2, May 1990.

9. Schwartz, Sarah and Frederic Surls. "World Wheat Trade, Prospects and Issues for the 1990's." *Wheat Situation and Outlook Report.* U.S. Dept. Agr., Econ. Res. Serv., WS-290, August 1990.

10. Scott, John T. "Farmland Prices in 2000." *Choices.* First Quarter, 1992.

11. Scott, John T. Jr. "Land and Competing Investments." Paper presented at Meeting of the North Central Regional Committee on Farmland Values. October 10, 1991.

12. Trostle, Ronald G. Statement in "Overview of the Global Food and Population Situation". Hearings before the Subcommittee on Natural Resources, Agricultural Resources, and Environment. Committee of Science, Space, and Technology. Feb. 23-28, 1989. U.S. Congress, House, 101st Congress, 1st Session. No. 31. U.S. Government Printing Office, 1989.

13. U.S. Bureau of the Census. *Statistical Abstract of the United States.* (111th edition), 1991.

14. U.S. Department of Agriculture. *Agricultural Outlook.* Econ. Res. Serv., March 1992, AO-183.

15. U.S. Department of Agriculture. *Agricultural Statistics.* Nat. Agr. Stat. Serv., 1982.

16. U. S. Department of Agriculture. *Economic Indicators of the Farm* Sector, Production and Efficiency Statistics. U.S. Dept. Agr., Econ. Res. Serv., ECIFS 4-4 February 1986, and ECIFS 9-4 April 1991.

17. U.S. Department of Commerce. "Projections of the Population of the United States by Age, Sex, and Race, 1988-2080." U.S. Census of Population, P-25-1018, January, 1989.

18. U.S. Department of Commerce. "The National Income and Product Accounts of the United States, 1929-1976." Bureau of Economic Analysis, September 1981.

19. U.S. Department of Labor. "Handbook of Labor Statistics-1973." Bureau of Labor Statistics. 1973.

Characteristics of Farmland Owners and Their Participation in the Farmland Market, 1970-1988

By Denise M. Rogers[1]

Abstract: Many owners did not participate in the farmland market during the volatile years from 1970 to 1988. Landowners whose acquisitions and dispositions may have allowed them to take advantage of potentially profitable farmland price changes own more farmland, are younger, and are more likely to be farm operators than are owners who were passive in the face of price changes.

Keywords: AELOS, acquisitions, dispositions, farmland.

The last 20 years were volatile for the farmland market. U.S. nominal per acre farmland values (including buildings) increased an average of 14.1 percent per year during the 1970s. After peaking in 1982, values fell almost one-third by 1987. Values in 1987 were about the same as in 1972 (1). These rapid price changes suggest that landowners could profit by correctly timing their farmland purchases and sales.

Data from a follow-on survey to the 1987 Census of Agriculture, the 1988 Agricultural Economics and Land Ownership Survey (AELOS), provide detailed information on individuals who owned farmland in 1988, and their farmland acquisitions and dispositions from 1970 through 1988. The investment behavior of the landowners who owned land at the end of a long and volatile period can be examined using data from AELOS. However, the behavior of landowners who participated in the ups and downs of the 1970s and 1980s, but no longer owned farmland in 1988 can not be examined.

The AELOS data provide a sense of whether 1988 farmland owners correctly timed their farmland market transactions in order to profit from price changes. AELOS allows us to examine how these landowners may have responded to the dramatic changes in the farmland market.

Data on acquisitions and dispositions during 1970-1988, reveal differences between those owners who were passive in the face of farmland price changes and those who correctly timed their market transactions. Specifically, the age, land ownership patterns, method of land acquisition, and operating status of farmland owners will be discussed.

Data

AELOS provides information on a unique period in agricultural history, a period of rapid farmland price increases and rapid price decreases. AELOS used two similar questionnaires. One was completed by farm operators and the other by landlords who had been identified by their tenants.[2] The total number of survey observations of farmland owners, excluding public landowners, (Federal, State, and Indian tribes, railroad, and institutional), was 70,286.

This study excludes respondents who were not 21 years of age in 1970 (12,833) and all landowners who inherited any land (20,737). The exclusions were intended to focus attention on only those landowners who were capable of choosing when to buy or sell farmland during 1970 to 1988. The inheritance exclusion was necessary because acquiring land through inheritance does not imply a conscious choice to acquire land.[3]

The age exclusion limits the study to those landowners who were old enough to buy and/or sell farmland at the beginning of the study period. The 36,716 observations remaining after exclusions will be referred to as "all owners" for the remainder of this article.

Market Activity

The largest group of 1988 farmland owners (43 percent) owned the same land in 1970 and in 1988. They did not participate in the farmland market during the 19-year study period. Thirty-three percent owned no farmland in 1970, while the remaining 24 percent bought and/or sold land during the study period.

The percent of farmland owners who exchange farmland is fairly constant over time. Between 18 and 22 percent of farmland owners acquired land during each of the time periods specified by AELOS (1970-1974, 1975-1978, 1979-

[1] Rogers is an agricultural economist with the Resources and Technology Division, Economic Research Service, USDA.

[2] AELOS excluded both horticultural specialty farms and those farmers who began farm operations in 1988.

[3] Those landowners who inherited at least some of their land are approximately the same age as those landowners who have not inherited any land. Those who inherited land own somewhat less land, an average of 542 acres compared with 681 acres for noninheritors. Inheritors are less likely to be farm operators. Seventy-seven percent are landlords, compared to 52 percent for noninheritors.

Table B-1.--Net buyers and sellers of farmland

	Net buyers	Net sellers
1970-78	10,319 (33%)	1,103 (4%)
1979-82	5,845 (17%)	1,050 (3%)
1983-88	7,306 (20%)	2,184 (6%)

Numbers in parentheses show the percent of owners in the study who were net buyers and net sellers in each time period.

1982 and 1983-1987). From 3 to 6 percent of farmland owners disposed of land during these periods. The average size of land acquisition did not vary much, neither did the average size of land disposition.

To investigate the effect of market price on farmland owners' acquisitions and dispositions, the study period is divided into three periods that coincide with national changes in farmland prices. While participants in farmland markets respond to local price changes, not national price changes, the time periods correctly characterize price movements in most regions. The time periods are: 1) 1970-1978 when farmland prices rose rapidly; 2) 1979-1982 when farmland prices reached their nominal and inflation-adjusted peak; and 3) 1983-1988 when farmland prices fell almost a third from their nominal peak. Assuming a constant transfer rate over time, the average land buyer would have realized capital gains selling in the peak years and buying during the weaker market periods.

There were more net buyers than net sellers in all three time periods (table B-1). This is largely because those landowners who sold all of their land prior to 1988 are not included in AELOS.

In each time period there were more net buyers among those landowners who became farmland owners between 1970 and 1988 ("entering" owners) than those landowners who owned land in 1970 ("original" owners). Also, in each time period there are more net sellers among "original" landowners than among "entering" owners. For example, 60 percent of net buyers in 1970-1978 were entering owners and 76 percent of net sellers in 1983-1988 were original owners. The difference may be accounted for partly by age. Original landowners are, on average, older than entering landowners.

The Nature of Participation in the Farmland Market

To characterize farmland owners' apparent investment strategies and to examine the degree to which owners attempted to earn capital gains from farmland transactions, six classes are developed. This classification scheme is one way to examine differences between farmland owners whose behavior suggests they were or were not influenced by farmland price changes. Not all farmland owners fit into one of the classes. For the purpose of the classes, acquisitions and dispositions refer to *net* acquisitions and dispositions.

The first two classes include farmland owners whose apparent goals were owning farmland rather than earning capital gains.

Class 1: Some landowners did not participate in the farmland market. They owned the same land at the beginning and at the end of the study period, and they did not acquire or dispose of any land during this period.

Class 2: Short run fluctuations in price matter to some landowners only to the extent that price decreases create buying opportunities. They do not attempt to realize capital gains on short-run price increases. Included in this group are farmland owners who bought land during both rising market (1970-1978) and weak market (1983-1988) periods and who did not dispose of any land during the study period.

The next three classes include landowners whose acquisitions or dispositions may have coincided favorably with changes in the farmland market. These landowners had at least limited success forecasting changes in land prices or simply may have had the good fortune to profitably time their land market transactions. The average land buyer in these classes may have realized capital gains by selling in the peak period and buying during the weaker periods. It should be noted that the classes are not mutually exclusive. For example, farmland owners who pursued aggressive market timing (class 5) would also be counted as moderate aggressive market timers (class 4).

Class 3: This class includes those landowners who engaged in limited market timing. These landowners either disposed of land at the market peak (1979-1982) *or* purchased land during a weak market (1983-1988). The former group probably realized capital gains.

Class 4: Landowners who engaged in moderately aggressive market timing were included in this class. These landowners both purchased in a rising market (1970-1978) and disposed of land at the peak (1979-1982).

Class 5: Landowners in this class purchased in a rising market, disposed of land at the peak, and acquired land during a weak land market (1983-1988). On average these landowners probably earned capital gains. Their market behavior can be characterized as aggressive market timing.

Table B-2.--Number of owners in each class

Class 1	15,713
Class 2	2,684
Class 3	8,292
Class 4	410
Class 5	80
Class 6	559

The final class consists of farmland owners whose market activity implies either incorrect forecasting or disregard for market price changes.

Class 6: On average landowners in this group probably realized capital losses by buying during the peak period (1979-1982) and selling during a weak market (1983-1988).

The largest number of owners (15,713) did not participate in the farmland market from 1970 to 1988 and are found in class 1 (table B-2). There are more landowners in classes 1 and 2 (those whose goals appeared to be owning farmland rather than earning capital gains), than in classes 3 through 5 (those landowners who successfully timed at least some of their market transactions). Among those landowners in classes 3, 4, and 5, the largest group is class 3 (8,292). Only 80 landowners engaged in aggressive market timing (class 5), correctly buying or selling land in each of the three time periods. Only 559 landowners forecast incorrectly (class 6).[4]

Operating Status

Sixty-seven percent of 1988 farmland owners owned farmland in 1970. These "original" landowners are older and less likely to be farm operators than those who became owners during the study period. Landowners in classes 1 and 2 have owned land for longer than landowners in classes 3 through 5. They are older and are more likely to be nonoperators than are landowners in classes 3 through 5.

Farm operators and nonoperators are very different. Operators have larger average landholdings (1,073 acres) than nonoperators (313 acres). Operators were more active in acquiring land between 1970 and 1988. A larger number of operators purchased land during each time period, and their average acquisition was larger than for nonoperating owners. A smaller number of operators than nonoperators sold or disposed of land in each time period.

[4] This number may be low because many of the landowners who forecast price changes incorrectly may have no longer been landowners in 1988.

For all classes, the percentage of landowners who were operators exceeded the percentage who were nonoperators, with the exception of class 1 (those landowners whose landholdings in 1970 equaled those in 1988). In class 1, 64 percent of landowners are nonoperators.

Acres Owned

Landowners who appear to have correctly timed their farmland transactions have larger average landholdings. Landowners in class 5 owned the highest average number of acres (2,575). Landowners in class 1 owned the smallest average number (495). Like class 1, owners in classes 2 and 6 had smaller average landholdings.

Method of Acquisition

AELOS respondents were asked to indicate whether their landholdings were acquired through purchase from a relative, purchase from a nonrelative, or "other" method. Seventy-nine percent of all owners acquired some or all of their land through purchase from a nonrelative and 30 percent acquired some or all of their land through purchase from a relative.[5] The distinction between purchase from a relative and purchase from a nonrelative is important. Purchases from relatives may be harder to time because they are likely to coincide with life cycle changes such as retirement or death, and are also less likely to be arms-length transactions.

Although the largest percentage of owners in each class acquired land through purchase from a nonrelative, the percentage of owners using this method varied. Class 1 had the lowest percentage of landowners (74 percent) acquiring land through purchase from a nonrelative, while class 5 had the highest share (94 percent) of landowners acquiring at least some land through purchase from a nonrelative and the lowest percentage purchasing land from a relative.

Financing

In the 1980s, many highly leveraged farmland owners lost their land. Wise (4) has suggested that the experiences of the 1980s made farmland owners more cautious about incurring heavy debt loads. Evidence of this is found in the drop in the percent of transfers on which debt was incurred--from 91 percent in 1980 to 64 percent in 1991 (5).

Among farmland owners who purchased land in 1988, there is little difference between classes in terms of the percentage of owners who financed any part of their land acquisition. The only exception is those landowners who were the most successful at market timing (class 5). In classes 1 through 4 and 6, between 4 and 13 percent financed 1988 land acquisi-

[5] These numbers sum to more than 100 percent because some landowners acquire land using more than one method.

Table B-3.--Average age of landowners

	All owners	Operators	Nonoperators
All owners	61.6	56.7	66.4
Class 1	65.3	60.3	68.1
Class 2	55.6	53.6	62.5
Class 3	58.5	54.9	63.8
Class 4	60.0	56.6	63.9
Class 5	57.0	54.6	63.4
Class 6	58.0	55.1	66.4

tions. In class 5 however, 25 percent of landowners used financing. Financing of the total acquisition price varied among classes from 30 to 48 percent.

Age

Fifty-two percent of all owners are over 60 years of age, and 25 percent are 70 years or older. This aging population means that a great deal of farmland will change hands in the next 25 years. Younger farmland owners are more likely to be operators.

As owners age, the average percentage of land leased to others increases. The average 41-50 year old owner leases out 28 percent of his or her land, compared with 75 percent for the average 70+ year old. The average ages for nonoperating owners and operators are 66.4 years and 56.7 years, respectively. Nonoperators are older than operators in each of the six classes. The oldest average age for both nonoperators (68.1 years) and operators (60.3 years) is found in class 1 (table B-3).

The owners were divided into age groups based on their age in 1988. This allows examination of whether patterns of land acquisition are related to age. The owners are fairly evenly distributed in 10-year age groups: 41-50, 51-60, 61-70, and over 70 years of age.

Each of the age groups had a fairly constant percentage of owners acquiring land in each 4-year time period from 1970 through 1987. Though older landowners were still acquiring farmland, the older groups had a smaller percentage of owners acquiring land in each period than did the younger groups. From 9 to 12 percent of owners acquired land in the 70+ year age group, compared with 27 to 37 percent in the 41-50 year age group. Disposition patterns were also fairly constant over time within each group. Interestingly, disposition patterns were almost identical between groups, with 3 to 6 percent of owners disposing of land in each period.

Conclusions

The 1988 farmland owners were largely passive in their response to changes in prices between 1970 and 1988. This implies that farmland acquisitions are only partially, if at all, driven by price fluctuations. This behavior is consistent with an emphasis on land ownership for agricultural production or the generation of income through rent, rather than for earning capital gains.

Though farmland markets are typically characterized as "thin", with little activity, one would expect that if the behavior of farmland owners is at all price- driven, these farmland owners would have been active in the farmland market during 1970-1988. Though the market may have been more active, many 1988 farmland owners simply did not participate in it during that period. The largest group of landowners owned the same amount of land in 1970 as in 1988. This group was passive as farmland prices rose and fell and the value of their land changed substantially.

This result is consistent with the fact that only a small percentage of agricultural land is transferred each year. A 1988 Survey of Land Transfers, conducted by the U.S. Department of Agriculture's Economic Research Service and National Agricultural Statistics Service, indicated that only about 3.5 percent of rural land in the United States is transferred to a new owner each year (2).

Those landowners who participated more actively in the market and whose acquisitions and/or dispositions may have coincided favorably with changes in the farmland market (classes 3, 4, and 5) are more closely tied to agriculture. These landowners own more farmland, are younger, and are more likely to be farm operators. Class 5, those farmland owners who were most successful in timing their market transactions, had one of the highest percentages of operators of all classes and the highest average landholdings. Class 1, those farmland owners who did not participate in the farmland market at all, were the oldest, had the highest percentage of nonoperators, and had the smallest average acres owned.

If current trends continue, and the number of older, nonoperating farmland owners increases, there may be a growing group of farmland owners that will not be active participants in farmland markets. The future may bring increasingly thin farmland markets, with fewer market transactions. Farm operators who wish to expand operations may be less able to freely purchase land and may become increasingly dependent on leasing land.

Sources

1. *Agricultural Outlook*, U.S. Department of Agriculture, Economic Research Service, November 1990.

2. Paul W. Barkley and Gene Wunderlich, *Rural Land Transfers in the United States*, U.S. Department of Agriculture, Economic Research Service, Agriculture Information Bulletin, Number 574, October 1989.

3. Bureau of the Census, Agricultural Economics and Land Ownership Survey, (Washington D.C. 1989).

4. Murray R. Wise, *Investing in Farmland*, (Chicago: Probus Publishing, 1989).

5. *Agricultural Resources, Agricultural Land Values and Markets: Situation and Outlook Report*, U.S. Department of Agriculture, Economic Research Service, AR-22, June 1991.

United States
Department of Agriculture
1301 New York Avenue, NW
Washington, DC 20005-4789

OFFICIAL BUSINESS
Penalty for Private Use, $300

MOVING? To change your address, send this sheet with label intact, showing new address to: EMS Information, Rm 228, 1301 New York Ave., NW, Washington, DC 20005-4789

FIRST CLASS
POSTAGE & FEES PAID
USDA
PERMIT NO. G-145

Rj Gn 824

✓ Want to Subscribe? ✓ Time to Renew?

Subscribe to *Agricultural Resources Situation and Outlook* today! If you already subscribe to this timely periodical, note that your subscription expires in the month and year shown on the top line of your mailing label. **The expiration date will appear in one of two formats:** FEB93 (for February 1993) or 930430 (for April 30, 1993). Disregard this notice if no renewal date appears. **Call toll free, 1-800-999-6779,** and tell us whether you want to subscribe or renew, or return this form to: **ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608.**

Agricultural Resources Situation and Outlook

❑ Yes! I want to **start** my subscription.

❑ Yes! I want to **renew** my subscription.

Rates:	*1 Year*	*2 Years*	*3 Years*
	❑ $12.00	❑ $23.00	❑ $33.00

Please add 10% for shipment to domestic addresses; add 35% for shipment to foreign addresses (includes Canada). **Rates good through 12/92.**

New subscribers:

Name: _____

Address: _____

City, State, Zip: _____

Daytime phone: (_____)_____

Renewals:

ATTACH MAILING LABEL HERE

Payment method:

❑ Bill me.

❑ Enclosed is $_____.

Use purchase orders, checks drawn on U.S. banks (and in U.S. funds), cashier's checks, or international money orders. **Make payable to ERS-NASS.** Please do not send cash.

Credit card orders: ❑ MasterCard ❑ Visa Total charges $_____.

Credit card number: | | | | | | | | | | | | | | | | |

Card expiration date: | | | (Month/Year)

For *fastest* service, call our toll-free order desk 1-800-999-6779, in the U.S. and Canada; other areas please call 301-725-7937