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Weekly Farm Economics: Trends in Farmland Leasing

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Over time, more Illinois farmland is being cash rented rather than share rented. Cash rental arrangements adjust more slowly to changes in farmland returns than share rental agreements. As more farmland is cash rented, a farm's financial position will become more closely tied to the level of cash rents relative to farmland returns. That situation could concern farmers when cash rents are set based on returns at a given time, knowing farmland returns could decline in the future.

Types of Lease Arrangements

Owners of farmland have several standard arrangements for working with a farmer:

Fixed Cash Rent: A fixed cash rental arrangement involves a fixed payment from the farmer tenant to the landowner. A cash rent agreement is relatively straightforward, with a significant difficulty setting the rent level during periods when expected returns to farming are changing and highly uncertain. Likely due to their relative simplicity for both the landowner and farmer tenant, cash rental arrangements are the most used lease type, with the USDA estimating that cash rental arrangements are used on 72 percent of the non-owner operated farmland in the Midwest (see the link here for data).

Share Rent: A share rental arrangement involves sharing revenue and direct costs. The most common split in northern and central Illinois is 50% to the farmer and 50% to the landowner, or a 50%-50% agreement. Share rent arrangements are more varied in southern Illinois, with two-thirds (farmer) — one-third (landowner), 60% (farmer) — 40% (landowner), and 50% (farmer) — 50% (landowner) being used. The USDA estimates that share rental arrangements are used on about 18% of the farmland in the Midwest (see the link here for data).

Custom Farming: In a custom farming arrangement, landowners pay farmers for performing field operations, receiving all production revenue, and paying all direct costs. Landowners could pay farmers

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per field operation performed or pay a set fee for all field operations, including harvest. In Iowa, the current rate for performing all field operations is \$127 per acre for corn and \$115 per acre for soybeans (see 2021 Iowa Farm Custom Rate Survey). Overall, relatively few acres are controlled by custom farming.

By far, share and cash rents are the two most used leasing arrangements, representing extremes in risksharing during a production year. Share rents automatically adjust up or down with farmland returns. As a result, returns to the landowner are highly correlated with farmland returns. Panel A of Figure 1 shows a scatter graph of operator and land returns — a return to the farm operator before accounting for land costs — and returns to share rent landowners. This data is for high productivity farmland in central Illinois from 2000 to 2020. As can be seen, there is a high correlation between operator and land return and return to share rent landowners in Panel A.



On the other hand, there is less of a relationship between farmland return and average cash rents, as shown in Panel C. Average cash rents have not followed operator and land returns as closely as returns to share rental arrangements. Cash rents are set before the cropping year begins. Often, negotiations lag returns in both situations: when returns are increasing and when decreasing. This lag is likely due to inertia in changing returns and difficulty in anticipating returns for the coming year. (see *farmdoc daily*, August 17, 2021).

Flexible Cash Rental Arrangements: To partially overcome the difficulty in setting cash rents and remedying the lagged nature of cash rents, flexible cash rents have arisen. A flexible cash rental arrangement modifies a cash rental arrangement by having the final rent payment vary in some way based on economic conditions for the crop year. For example, the rental payment often equals a percentage of crop revenue, with a fixed minimum or base rent level set when revenues are below a defined level. In northern and central Illinois, a typical arrangement is a minimum rent of \$200, with a higher rent possible if revenues are high enough for the share to exceed the minimum base level. For corn and soybeans, 32% and 43% revenue shares are typical. USDA estimates that less than 10% of rented farmland in the Midwest uses flexible leasing arrangements (see the link here for data).

Flexible cash rents more closely match the returns of farmland than cash rents but are not as responsive as share rents. Panel B of Figure 2 shows a scatter graph of flexible cash rents generated by a lease specified in an August 10, 2021, farmdoc Daily article. Cash rents for this flexible cash lease are less correlated with operator and farmland returns than from a share rent lease: .77 correlation for the flexible cash lease results

because 1) government payments are shared in a share rent lease but not in typical flexible cash rents, and 2) direct costs are shared in a share lease while they are not shared in a flexible cash lease. Rents from the flexible cash lease have a higher correlation with returns than under a fixed cash rent: a .77 correlation coefficient for a flexible cash lease compared to a .55 correlation coefficient for cash rent.

Trends in Farmland Leasing

Over time, leasing arrangements have shifted from share rent arrangements to cash rental arrangements. Figure 2 shows the percent of farmland cash rented by grain farms enrolled In Illinois Farm Business Farm Management (FBFM). Illinois FBFM classifies leases as cash rents or share rents, with flexible cash rents falling in the cash rent category. As a result, the percent of leases not classified as cash rents in Figure 2 are classified as share rents. For example, 49% of the leases were classified as cash rent in northern Illinois in 1994, meaning that the remaining 51% of leases were share leases.



Cash rents have historically been used more in northern Illinois than in central and southern Illinois. A plausible explanation for this situation is that northern Illinois farms have more livestock than in central and southern Illinois. Livestock could make accounting for grain and other items more complex within a share rent arrangement, leading to a higher proportion of leases as cash rent.

In all regions, cash rents have increased by about a percentage point per year. In northern Illinois, use of cash rents increased from 49% in 1995 to 77% in 2020, a total increase of 28 percentage points, or an average increase of 1.1 percentage points per year. Similar increases happened in other regions: Central Illinois had a 32 percentage point shift from 21% in 1995 to 53% in 2020 while Southern Illinois had a 28 percentage point shift from 26% in 1995 to 54% in 2020.

Most of the switch to cash rents likely are to fixed cash rents, as other surveys suggest that flexible cash rents represent a small portion of the total. According to the USDA, 2014 data provides the following breakdown of the use of the various rental arrangements in the Midwest (see the link here for data):

- 72% are fixed cash rents,
- 19% are share rents,
- 8% are flexible cash rents, and
- 1% are free rental arrangements in which terms are not set.

Implications

Over time, more farmland in Illinois is being cash rented rather than share rented. Several reasons can be given for this trend, with the simplicity of the agreement being a major cause of the switch. For the landowner, an advantage of a cash rental arrangement is that the rent is known at the time of negotiations, and there is not a risk of lower cash rent because of lower farmland returns. For the farmer, there is freedom in input and management decisions with a cash rent agreement that would have to be made in conjunction with a landowner in a share lease agreement.

While more straightforward, cash rents do not match returns to farmland as closely as those from a share rental arrangement. Over time, average cash rents have lagged farmland returns both when farmland returns increase and when they decline. At the least, this situation results in difficulties setting cash rents when farmland returns are changing. Rents adjusted relatively slowly to lower returns from 2014-2019 compared with the previous 5 years. Furthermore, uncertainty over whether the higher returns experienced in 2020 and expected for 2021 will continue, and for how long, also makes current rental rate adjustment decisions difficult.

Because of this lagged relationship, farmers may be reluctant to increase cash rents during periods of higher incomes. Rising rents may still result in adequate returns to the farmer during periods of higher incomes but may result in losses during declining farmland returns, particularly if cash rents do not adjust to the lower levels of returns. As cash rental arrangements control a higher percentage of farmland, the lagged relationship during periods of changing farmland returns can result in larger financial impacts and overall net return volatility for farmers.

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