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# Farm lease types have different risks and rewards

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## Farm lease types have different risks and rewards

by William Edwards, retired extension economist, [wedwards@iastate.edu](mailto:wedwards@iastate.edu)

The proportion of Iowa farmland operated by the owner has stabilized at about 37 percent, according to the most recent farmland ownership and tenure survey conducted by Iowa State University (see table). What has changed, however, is the popularity of different types of farm leases. From 2007 to 2012, traditional crop-share leases stayed steady at 12 percent of total farmland, but flexible cash leases increased from 5 to 8 percent while fixed cash leases fell by the same amount. To put it another way, 19 percent of Iowa's cash leases now have provisions by which the rent automatically adjusts up or down each year, compared to only 12 percent in 2007.

### Rent values by type of lease

How have fixed, flexible and crop-share leases compared in recent years? Figure 1 shows estimated rents per acre for the past 10 years for a corn-soybean rotation. Of course, actual rents will differ for each farm. The fixed rent value is the average cash rent paid in Iowa based on Iowa State University Extension and Outreach's annual survey. The flexible cash rent values are estimated at 25 percent of the gross revenue per acre from corn and 35 percent of the gross revenue per acre from soybeans. Gross revenue is calculated by multiplying the state average yields for each year by the state average cash prices in October, November and December of the same year. The USDA direct payments and multiple peril crop insurance payments received each year are also included. The value of the crop-share rent is estimated as one-half of the gross revenue minus one-half of the costs typically shared by the landowner, based on ISU Extension and Outreach typical budgets.

From 2004 to 2006, all rents were very stable. However, in 2007 a period of higher and more volatile crop prices began. Crop-share and flexible rents rose immediately because they were directly tied to current prices. Fixed cash rents lagged behind for about two years, then caught up. In the most recent years, all three rents have been very close. Crop-share and flexible rents have been slightly higher than fixed cash rents, which is justified by the increased risk borne by the landowner in each case. In 2013 the crop-share and flexible cash rents both nosedived in response to the lower corn and soybean prices for the 2013 crop, whereas most cash rents were negotiated before the price decline was apparent.

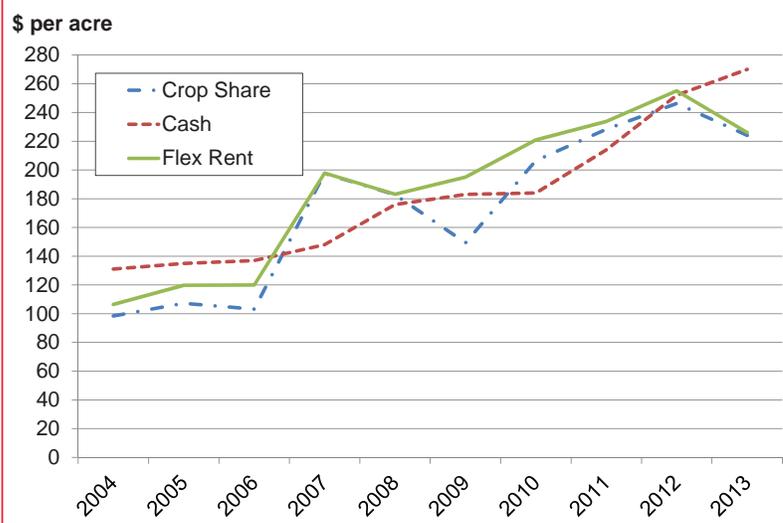
### Sharing financial risk

Another recent ISU study examined the amount of variation in net returns to the landowner and tenant under different lease arrangements, based on yield, price and production cost patterns in Iowa over the past several decades. Because cash rents are based on expectations of yields and prices for the coming year, rather than actual results, they change more slowly than flexible cash or crop-share leases. Many fixed cash rents are not renegotiated each year. This results in a more stable, albeit slightly lower, average rent over time. The landowner knows with certainty at the beginning of the year how much the rent will be. Any variation in net returns caused by unexpected changes in yields, prices and production costs is borne by the tenant, as shown in the first bar in Figure 2.

Land Tenure Arrangements, % of All Iowa Farmland		
Land Tenure	2007	2012
Owner-operator	37%	37%
In government programs	7%	5%
Custom farmed	2%	3%
Fixed cash rented	37%	34%
Flexible cash rented	5%	8%
Crop-share rented	12%	12%
Rented, other types	0%	1%

Source: ISU Extension Ag Decision Maker file C2-15

Figure 1. Rent for 50-50 Corn/Soybeans Rotation



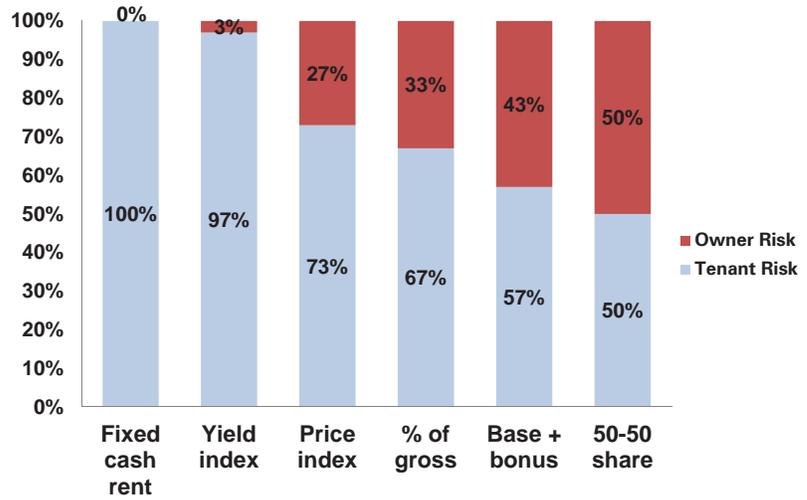
Farm lease types have different risks and rewards, continued from page 5

## Flexible leases share risk differently

At the other extreme, under a 50-50 crop-share lease the tenant and landowner share financial risks equally, as shown in the bar on the far right in Figure 2. The other bars show how financial risk is shared under several types of flexible cash leases. The “yield index” bar represents a lease for which the rent paid each year depends on the actual yield attained, only. The “price index” bar represents a lease for which the rent varies with year-to-year prices, only. The yield index lease transfers very little risk to the owner because in Iowa, at least, yields have been more stable than prices in recent years.

Some flexible leases set the rent each year as a fixed percent of the gross crop income each year. As shown by the “% of gross” bar, this reduces the tenant’s net income variability even more because the rent automatically adjusts up or down with both prices and yields. The “base plus bonus” bar represents a flexible lease in which rent is equal to a fixed base rent plus a percent of the tenant’s return over production costs. By incorporating costs into the rent equation, the tenant’s net return varies even less, and the sharing of risk approaches that of a 50-50 crop-share lease.

Figure 2. Relative Financial Risk Born by Tenant and Owner



It is important to note that as landowners take on additional financial risk, their returns will increase in years of higher than expected profits as well as decrease when overall returns decline. Both owners and tenants should select a lease type that reflects their individual abilities and desires to bear risk and reap rewards, versus their needs for more stable income.

### Updates, continued from page 1

#### Internet Updates

The following information file and decision tools have been added on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).

Net Present Value of Beef Replacement Females – B1-74 (1 page)

Net Present Value of Beef Replacement Females – B1-74 (Decision Tool)

ACRE Payment Estimator (Average Crop Revenue Election) 2013 – A1-45 (Decision Tool)

#### Current Profitability

The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://www.extension.iastate.edu/agdm/info/outlook.html).

Corn Profitability – A1-85

Season Average Price Calculator – A2-15

Soybean Profitability – A1-86

Ethanol Profitability – D1-10

Iowa Cash Corn and Soybean Prices – A2-11

Biodiesel Profitability – D1-15

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