

Flexible Farm Lease Agreements

Fluctuating markets and uncertain yields make it difficult to arrive at a fair cash rental rate in advance of each crop year. To address this problem, some landowners and tenants use flexible lease agreements in which the rent is not determined until after the crop is harvested. The final rental rate is based on actual prices and/or yields attained each year. The [2017 Iowa Farmland Ownership and Tenure Survey](https://store.extension.iastate.edu/Product/6492.pdf) (<https://store.extension.iastate.edu/Product/6492.pdf>) showed that flexible leases accounted for 18% of all cash rent leases in Iowa.

Flexible leases have the following advantages:

- The actual rent paid adjusts automatically as yields or prices fluctuate.
- Risks are shared between the landowner and the tenant, as are profit opportunities.
- Landowners are paid in cash – they do not have to be involved in decisions about crop inputs or grain marketing.

Option A: Share of Gross Revenue

The most common type of flexible lease calls for the landowner to receive cash rent equal to a specified share of the gross revenue of the crop. The value of the crop is determined by multiplying the actual

harvested yield by the market price available, usually at harvest time. Under this type of lease both price and yield risks are shared between tenant and landowner, in the same proportion as the gross revenue. In this respect, it is similar to a crop share lease.

Most of the flexible leases in Iowa specify that the rent will be equal to anywhere from 25%-40% of the gross crop value or gross crop revenue. Table 1 below shows average cash rents in Iowa as a percent of the gross crop value and revenue for the past 10 years. Gross crop value is the state average yield times the state average price from October through December. Gross crop revenue includes gross crop value plus all United States Department of Agriculture commodity program payments and crop insurance indemnity payments.

Example 1 – Corn

- Cash rent will be equal to 30% of the gross crop revenue.
- The actual yield of corn is 174 bushels per acre, and the actual price is \$3.50 per bushel.
- The gross value is equal to $(174 \times \$3.50) = \609 .
- Other crop income is equal to \$10 per acre
- The cash rent is equal to $(30\% \times \$619)$, or \$185.70 per acre.

Table 1. Average Iowa cash rent as a percent of gross crop value and gross crop revenue (\$/acre)

| Year | Average Cash Rent ^{1/} | Average Gross Crop Value ^{2/} | | Cash Rent as % of Gross Crop Value | | Average Gross Crop Revenue ^{3/} | | Cash Rent as % of Gross Crop Revenue | |
|-------------------|---------------------------------|--|----------|------------------------------------|----------|--|----------|--------------------------------------|----------|
| | Iowa | Corn | Soybeans | Corn | Soybeans | Corn | Soybeans | Corn | Soybeans |
| 2010 | \$184 | \$756 | \$552 | 24% | 33% | \$819 | \$577 | 22% | 32% |
| 2011 | \$214 | \$985 | \$596 | 22% | 36% | \$1,037 | \$626 | 21% | 34% |
| 2012 | \$252 | \$948 | \$641 | 27% | 39% | \$1,111 | \$687 | 23% | 37% |
| 2013 | \$270 | \$732 | \$579 | 37% | 47% | \$905 | \$625 | 30% | 43% |
| 2014 | \$260 | \$655 | \$513 | 40% | 51% | \$780 | \$558 | 33% | 47% |
| 2015 | \$246 | \$681 | \$484 | 36% | 51% | \$741 | \$509 | 33% | 48% |
| 2016 | \$230 | \$661 | \$563 | 35% | 41% | \$699 | \$582 | 33% | 39% |
| 2017 | \$219 | \$644 | \$524 | 34% | 42% | \$667 | \$532 | 33% | 41% |
| 2018 | \$222 | \$674 | \$478 | 33% | 46% | \$691 | \$588 | 32% | 38% |
| 2019 | \$219 | \$735 | \$471 | 30% | 46% | \$799 | \$530 | 27% | 41% |
| Average 2010-2019 | \$232 | \$747 | \$540 | 32% | 43% | \$825 | \$581 | 29% | 40% |

^{1/} Cash Rental Rates for Iowa Survey, AgDM File C2-10.

^{2/} USDA NASS Iowa average yield x Iowa average cash price in Oct.-Dec.

^{3/} USDA NASS Iowa average yield x Iowa average cash price in Oct.-Dec., plus USDA payments and crop insurance indemnity payments.

Option B: Base Rent Plus Bonus

Another type of flexible lease formula specifies a base or minimum rent, plus the landowner receives a share of the gross revenue in excess of a certain base value.

The base rent may be the amount that was being paid several years ago, before or after the spike in grain prices (Table 1).

The base value for gross revenue can be the amount that would be received under typical yield and price conditions corresponding to the base rent (Table 1). It can also be equal to the tenant's cost of production per acre, including the base rent. This, in essence, becomes a profit-sharing plan.

The bonus may vary from one-third to one-half of the amount over the base revenue. Both parties must agree on how to calculate gross revenue and whether a gross revenue below the base level will cause the actual rent to be less than the base rent value. If the base rent is also specified as the minimum rent, it should probably be set lower than a typical fixed cash rent for the same land; otherwise, the landowner does not share in any of the downside risk.

Example 2 – Soybean

- Base rent is \$150 per acre.
- Tenant's cost of production is \$252 per acre, excluding land.
- Base gross value is \$402 per acre (\$150 + \$252).
- Bonus is 35% of the gross value in excess of \$402 per acre.
- Actual yield is 52 bushels of soybean per acre and actual price is \$9.50 per bushel.
- Gross value is equal to $(52 \text{ bu.} \times \$9.50) = \494 per acre.
- Value in excess of the base = $\$494 - \$402 = \$92$.
- Rent is equal to \$150 plus 35% of \$92, or $\$150 + \$32.20 = \$182.20$.
- However, if the market price of soybean is \$11 per bushel, the gross value would be \$572, the bonus would be $(\$572 - \$402) \times 35\% = \$59.50$, and the rent would be \$209.50 per acre.

Sharing Risk

Landowners and tenants should carefully consider the type and degree of risk they want to assume. Taking on risk means greater losses when prices or yields are low, but can result in larger profits in better years. Landowners who wish to receive a fixed income from their farm investments may have to accept a lower long-term rent than those who are willing to share risk.

Tenants with substantial financial obligations should consider adopting other means of reducing risk as well, such as purchasing crop revenue insurance.

Leases that base the rent on price only or yield only may actually increase the tenant's risk in some years. This is because prices may be high when yields are low, or prices may be low when yields are high. Thus, adjusting the rent based on only one factor does not always reflect the actual profits received in that year. Adjusting the rent for changes in both price and yield ensures that the actual rent will be closely tied to the tenant's income each year.

Determining Yield

It is important to agree ahead of time and in writing on the procedure for determining the factors that will be used to calculate the final rent. These factors should be based on information that is available to both parties. Actual yields can be determined by:

- Weight tickets, if all the crop is sold or put into commercial storage.
- Combine yield monitors or weigh wagons.
- Storage bin capacity.

When crops stored on the farm are ultimately sold, any variation from the estimated yield can be used to adjust the rent paid for that crop. Estimated yields should be corrected to a standard moisture level, for example, 15% moisture for corn.

Some flexible leases use the county average yield as estimated by USDA. This avoids the question of how to measure the actual production and removes the influence that above or below average management ability has on yields. However, USDA National Agricultural Statistics Service (NASS) [county average yields](http://www.extension.iastate.edu/agdm/crops/pdf/a1-14.pdf), www.extension.iastate.edu/agdm/crops/pdf/a1-14.pdf, are not generally announced until March each year. A secondary yield should be discussed in case a given county's yield isn't reported.

Determining Price

The price used to calculate the final rent payment should represent the potential income that could be received from selling the crop. This can be the cash price at a local elevator or processor on a specified date, or an average of nearby prices on several dates. Prices on dates near or before the time the final rent is paid should be used even though the crop may actually be sold later. Only if the landowner is providing storage facilities should prices after harvest be used.

Forward contract prices available before harvest can be included, too. Many farm producers begin pricing their crop in the spring or summer months. In that case, using the price offered for harvest delivery on one day per month from March through December, for example, may best reflect the overall value of the crop.

Another alternative to using a local price is to use a futures contract price minus a normal basis value for the location of the farm.

Other options include using the posted county prices calculated by USDA Farm Service Agency (FSA) each day or the monthly average cash prices reported by the USDA NASS, Iowa office.

Example 3 – Determining Price

| Local elevator prices on: | | |
|---------------------------|--------------------|--------|
| April 1 | (October delivery) | \$3.27 |
| June 1 | (October delivery) | 3.85 |
| October 1 | (cash) | 3.03 |
| November 1 | (cash) | 3.04 |
| December 1 | (cash) | 2.96 |
| Average | | \$3.23 |

Government Payments

The FSA no longer specifies that, under a lease arrangement in which yield risk is shared between the tenant and the landowner, any USDA payments for which the farm may qualify must be shared in the same proportion as the risk. All payments are now paid to the tenant. In such cases, any such payments can be included in the gross revenue estimates used to determine the amount of rent due.

Crop Insurance Payments

Over 90% of Iowa's corn and soybean acres are insured with multiple peril crop insurance. In years of low production and/or low prices, insurance indemnity payments can add significantly to a producer's revenue. Including crop insurance payments in the gross revenue used to calculate the flexible rent allows the landowner to share indirectly in the benefits of this risk management tool. Of course, the landowner should share the cost, as well, meaning that crop insurance premiums should be deducted from the gross revenue used to calculate the rent, even in years when no indemnity payments are received.

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Other Considerations

Crop insurance and government payments typically are received 3-13 months after final rent payments are due. To avoid the additional transaction costs of managing rental payments a year after the end of the season, these "other sources of revenue" often are not included. Note that percentages associated with "Cash Rent as % of Gross Crop Value" are typically higher than percentages associated with "Cash Rent as % of Gross Crop Revenue" in Table 1.

Some tenants and landowners may want to avoid the possibility of a very high or very low rent in a given year by setting a maximum and/or minimum rent. This keeps the actual rent paid each year within a desirable range.

Many leases ask for a portion of the rent to be paid in advance, possibly by March 1. Under a flexible lease, the advance payment may be for a fixed amount while the final payment depends on actual prices and yields.

The flexible lease formula to be followed should be tested by using several different price and yield possibilities to illustrate the range of potential cash rents. Regardless of what type of agreement is adopted, it should be described in writing (with an example) and made a part of the written lease contract. The following page can be used as a lease supplement to specify flexible lease terms.

Other Resources

Iowa State University Extension and Outreach publication [Iowa Farm Lease Form](https://store.extension.iastate.edu/Product/1786) (FM 1538/AgDM C2-12, <https://store.extension.iastate.edu/Product/1786.pdf>) contains a standard farm lease form. ISU Extension and Outreach publication [Computing a Cropland Cash Rental Rate](https://store.extension.iastate.edu/Product/1818.pdf) (FM 1801/AgDM C2-20, <https://store.extension.iastate.edu/Product/1818.pdf>) contains information on how to determine a fair cash rent.

An interactive spreadsheet to [analyze flexible farm lease agreements](#) is available on the Ag Decision Maker website, www.extension.iastate.edu/agdm/wholefarm/xls/c2-21flexiblerentanalysis.xlsx.

See the [Ag Decision Maker Leasing webpage](#) for more on farmland leasing, www.extension.iastate.edu/agdm/wdleasing.html.

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Flexible Farm Lease Agreement Worksheet

The amount of rent to be paid by the tenant to the owner for the portion of the real estate designated as cropland shall be determined as follows (fill in the blanks where needed):

| | Corn | Soybean | |
|---|----------|----------|----------|
| Area of cropland | _____ | _____ | acres |
| Option A. | | | |
| Percent of gross revenue to share | _____ % | _____ % | |
| Option B. | | | |
| Base rent per acre (if applicable) | \$ _____ | \$ _____ | per acre |
| Base gross revenue (if applicable) | \$ _____ | \$ _____ | per acre |
| Percent of gross revenue to share in excess of base | _____ % | _____ % | |
| Minimum rent per acre (if applicable) | \$ _____ | \$ _____ | per acre |
| Maximum rent per acre (if applicable) | \$ _____ | \$ _____ | per acre |

Yield: The actual **yield** used to calculate the rent shall be determined as follows: (check)

farm yield, determined by: yield monitor bin measurements delivery receipt other
 county average yield as reported by USDA NASS
 other methods (describe): _____

Price: The actual **price** used to calculate the rent shall be determined as follows:

Source of price information to use: _____

Dates of prices to use: _____

Other Payments: The value of any payments received as the result of participation in programs of the USDA, including net indemnities from crop insurance, for the crop year for which the flexible cash rent applies shall be divided as follows:

- a) _____ Owner _____ % Tenant _____ %
- b) _____ Owner _____ % Tenant _____ %
- c) _____ Owner _____ % Tenant _____ %

Payment Dates: The cash rent as determined by the above procedure shall be paid as follows:

| Date | Amount (fixed \$ amount or flexible rent as calculated) | Date | Amount (fixed \$ amount or flexible rent as calculated) |
|-------|---|-------|---|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

Examples or Actual Rent to Pay (fill in blanks to show how the rent will be calculated)

| Option A. Percent of Gross Income | | | Option B. Base Rent Plus Bonus | | |
|------------------------------------|-------------|----------------|------------------------------------|-------------|----------------|
| | Corn bu. | Soybean bu. | | Corn bu. | Soybean bu. |
| Yield | _____ | _____ | Yield | _____ | _____ |
| x Price | \$ _____ | \$ _____ | x Price | \$ _____ | \$ _____ |
| = Gross crop value | \$ _____ | \$ _____ | = Gross crop value | \$ _____ | \$ _____ |
| + Other payments (USDA, insurance) | \$ _____ | \$ _____ | + Other payments (USDA, insurance) | \$ _____ | \$ _____ |
| = Gross revenue | \$ _____ | \$ _____ | = Gross revenue | \$ _____ | \$ _____ |
| x % shared | _____ % | _____ % | - Base revenue | \$ _____ | \$ _____ |
| = Total rent per acre | \$ _____ | \$ _____ | = Gross rev. shared | \$ _____ | \$ _____ |
| | | | x % shared | _____ % | _____ % |
| | | | = Bonus | \$ _____ | \$ _____ |
| | | | + Base rent | \$ _____ | \$ _____ |
| | | | = Total rent per acre | \$ _____ | \$ _____ |