

Fluctuating markets and uncertain yields make it difficult to arrive at a fair cash rental rate in advance of each crop year. Some owners 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.

Flexible leases have the following advantages:

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

### Share of Gross Revenue

The most common type of flexible lease calls for the owner to receive cash rent equal to a specified share of the gross value 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 owner, 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 35 to 45 percent of the gross revenue. The share received for very productive land should be higher than for less productive land. The table below shows the average cash rent paid for corn and soybean land in Iowa during the past 10 years as a percent of estimated gross revenue each year, not including USDA direct and counter cyclical payments or crop insurance proceeds.

#### Example 1 - Corn

- Cash rent is equal to 40 percent of the gross crop value.
- The actual yield of corn is 170 bushels per acre, and the actual price is \$2.10 per bushel.
- The gross income is equal to  $(170 \times \$2.10) = \$357$ .
- The cash rent is equal to  $(40\% \times \$357)$ , or \$142.80 per acre.

Table 1	Average Cash	Average Gross Revenue,		Average Cash Rent	
	Rent Paid/acre*	\$/acre**		as % of Gross Revenue	
Year	Iowa	Corn	Soybeans	Corn	Soybeans
1996	\$ 110	\$359	\$299	31%	37%
1997	\$ 119	\$322	\$291	37%	41%
1998	\$ 119	\$274	\$252	43%	47%
1999	\$ 117	\$282	\$252	42%	46%
2000	\$ 120	\$272	\$229	44%	52%
2001	\$ 122	\$307	\$231	40%	53%
2002	\$ 124	\$371	\$259	33%	48%
2003	\$ 128	\$372	\$250	34%	51%
2004	\$ 131	\$353	\$247	37%	53%
<u>2005</u>	<u>\$ 135</u>	<u>\$337</u>	<u>\$289</u>	<u>40%</u>	<u>47%</u>
Average	\$ 123	\$325	\$260	38%	47%

\* Source: Ag Decision Maker File C2-10 or FM-1857, Farmland Cash Rental Rate Survey.

\*\* Source: National Agricultural Statistics Service, USDA. Average Iowa yield x December cash price.

### Base Rent plus Bonus

Another type of flexible lease specifies a base or minimum rent, plus the owner receives a share of the gross revenue in excess of a certain base value. The base value may be the gross revenue that would be received under typical yield and price conditions. 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, whether other payments are included in the calculation, 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 specified as the minimum rent, it should probably be set lower than a typical fixed cash rent for the same land; otherwise, the landowner would not share in any of the downside risk.

#### Example 2 - Soybeans

- Base rent is \$100 per acre. Expected gross revenue is \$225 per acre. Bonus is 50% of the gross revenue in excess of \$250.
- Actual yield is 52 bushels of soybeans per acre and actual price is \$6.50 per bushel.
- Gross Revenue is equal to  $(52 \text{ bu.} \times \$6.50) = \$338$  per acre.
- Revenue in excess of the base of  $\$250 = \$338 - \$250 = \$88$
- Rent is equal to  $\$100$  plus 50% of  $\$88$ , or  $\$100 + \$44 = \$144$ .
- However, if the market price of soybeans was only \$5.00 per bushel, the gross revenue would be only \$260, and the bonus would be  $(\$260 - \$250) \times 50\% = \$5$ , and the rent would be \$105 per acre.

### Sharing Risk

Owners 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. Owners who wish to receive a fixed income

from their farm investments may have to accept a lower 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 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 percent moisture for corn.

### Determining Price

The price used to calculate the final rent payment can be the cash price at a local elevator or processor on a specified date, or an average of 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, unless the landowner is providing storage facilities. Forward contract prices available before harvest can be included, too.

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An alternative to using a local price is to use a futures contract price minus a normal basis value for the location of the farm. If the price chosen is lower than the USDA county loan rate for that commodity, the loan rate can be used instead. This would represent the tenant's potential selling price including loan deficiency payments or gains from USDA marketing loans.

### Minimum and Maximum Rents

Some tenants and landlords 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. 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 so as 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.

### Government Payments

The Farm Service Agency (FSA) specifies that under a lease arrangement in which yield risk is shared

between the tenant and the landowner, any direct payments and counter cyclical payments for which the farm may qualify must be shared in the same proportion as the risk. This is similar to the sharing of payments under a crop share lease. In such cases, these payments should not be included in the gross revenue estimates used to determine the amount of rent due, such as in examples 1 and 2 in this publication.

Tenants and landlords who agree on a flexible cash lease should provide a copy of it to their county FSA office, and request approval for the proposed sharing of the direct and counter cyclical payments. Flexible leases in which the rent is based on the actual market price and a fixed yield, or a yield such as the county average yield each year, do not require a division of USDA payments.

### Other Resources

ISU Extension publication FM 1538 or Ag Decision Maker File C2-12 contains a standard farm lease form. ISU Extension publication FM 1801 or Ag Decision Maker File C2-20 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 web site at: [www.extension.iastate.edu/agdm/wholefarm/xls/c2-21flexiblerentanalysis.xls](http://www.extension.iastate.edu/agdm/wholefarm/xls/c2-21flexiblerentanalysis.xls).

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

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## Flexible Cash Rent Agreement

The amount of cash rent to be paid by the operator 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	Soybeans	
Area of cropland	_____	_____	acres
Base rent per acre (if applicable)	\$ _____	\$ _____	per acre
Base gross revenue (if applicable)	\$ _____	\$ _____	per acre
Percent of revenue to share (in excess of base)	_____%	_____%	
Minimum rent per acre (if applicable)	\$ _____	\$ _____	per acre
Maximum rent per acre (if applicable)	\$ _____	\$ _____	per acre

The actual **yield** use to calculate the rent shall be determined as follows: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

The value of any payments received as the result of participation in programs of the United States Department of Agriculture for the crop year for which the variable cash rent applies shall be divided as follows: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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## Flexible Rent to Pay

The tables below can be used to record the rent that would be due under various combinations of prices and yields, based on the approaches described in this publication.

### Flexible Rent to Pay - Corn (\$ per acre)

Actual Yield, Bu. per Acre	Actual Price, \$ per bushel						
	Under \$1.50	\$1.50 to \$1.99	\$2.00 to \$2.49	\$2.50 to \$2.99	\$3.00 to \$3.49	\$3.50 to \$3.99	\$4.00 or more
Under 50							
50-74							
75-99							
100-124							
125-149							
150-174							
175-199							
200-224							
225-249							
250+							

### Flexible Rent to Pay - Soybeans (\$ per acre)

Actual Yield, Bu. per Acre	Actual Price, \$ per bushel						
	Under \$4.00	\$4.00 to \$4.99	\$5.00 to \$5.99	\$6.00 to \$6.99	\$7.00 to \$7.99	\$8.00 to \$8.99	\$9.00 or more
Under 25							
25-29							
30-34							
35-39							
40-44							
45-49							
50-54							
55-59							
60-64							
65+							