Evaluating Your Farmland Rental “Options”

By Michael Langemeier*, Gary Schnitkey**, Mike Boehlje* & James Mintert*

*Michael Langemeier, Mike Boehlje & James Mintert are all with the Purdue Center for Commercial Agriculture, **Gary Schnitkey is a Professor and Farm Management Specialist in the Department of Agricultural & Consumer Economics, University of Illinois.

Gross revenues for most Indiana corn and soybean farms reached unprecedented levels during 2006 through 2013, but declined sharply in 2014 and 2015. The revenue decline, which will be exacerbated on many Indiana farms by yield reductions caused by this spring and summer’s excessive rainfall, is putting tremendous pressure on operating margins. To see the picture more clearly, let’s examine a typical west central Indiana farm following a corn-soybean crop rotation.

Gross revenue per corn acre on our representative farm in 2005 was just $350 per acre. Revenues increased sharply over the next six years, peaking in 2011 at over $1,000 per acre before declining in 2014-2015 by approximately $300 per acre compared to the peak. Looking ahead, per acre corn revenues on this same representative farm are expected to average less than $750 per acre during 2016-2018.

Unfortunately, the decline in revenues has not been matched by a decline in costs. Variable production costs on our representative farm climbed sharply from 2005, when they totaled approximately $260 per corn acre, to reach $440 per acre in 2011 the same year revenues peaked. Although variable production costs did moderate in 2015, the decline was much smaller than the fall in revenue with variable costs declining just $30 to $40 per acre compared to peak production costs. Current forecasts suggest further reductions in variable production costs will be modest over the next several years, implying that farmers will have to look elsewhere for significant cost reductions.

The combination of declining revenues and stubbornly high variable production costs has squeezed the “contribution margin” on corn and soybean farms. The contribution margin equals the gross revenue minus the variable production costs on a per acre basis. In essence, the contribution margin is the combined return to labor and management, machinery services, land resources, and risk. In 2005 the contribution margin on our representative west central Indiana farm was just over $100 per acre. By 2011 the contribution margin climbed to over $600 per acre. The sharp climb in the contribution margin was a key factor in driving cash rental rates up to unprecedented levels as farmers competed to expand their crop operations in this profitable environment.

But times have changed dramatically. Contribution margins in west central Indiana the next several years could fall in a range of $325 to about $350 per acre. This means that, if cash rental rates remain at their 2015 level ($281 per acre on the 2015 Purdue Land Values Survey), most farms will fail to cover their costs. Given this more difficult business climate, crop producers will face tough decisions concerning their land rental
arrangements. Farm operators will be attempting to reduce all costs, and land costs are one of the largest expenditures. But many landowners will be reluctant to accept sizable reductions to their rental payments. Past history suggests land rental rates will adjust downward in response to reductions in contribution margins, but continued strong competition for land resources means the adjustment will be slow and take place over a period of several years.

What should farmers do in this challenging operating environment? Should a farmer continue to rent the land if he or she fully expects to lose money? One reason farmers continue to rent land, even if they expect it to be unprofitable in a given year, is to retain control of the land in the expectation that profitability will return in the future. But how much of a premium should a farmer pay to hold on to a property until profit prospects improve? Alternatively, should farmers possibly try to "reposition" their operation by giving up a rental property that doesn't fit the business very well (for example, a farm that is 20 miles from the base unit or has rocks, obstructions, etc... and is difficult to farm) and pursue rental property that better fits the operation? Importantly, what happens to the financial resiliency and staying capacity of the farm business if you choose to continue renting farmland that has a high potential of a loss for one or more years?

One way to analyze these questions is to use options thinking--to determine how much you must pay to maintain control of the land--and then assess the implications of farming this property at a loss on the working capital, defined as current assets minus current liabilities, of the business. The process is relatively straightforward.

1) First, determine an economic or "breakeven" rent based on the profit potential given expected future commodity prices, costs and yields.

2) Second, calculate the "option" premium as the difference between the expected market rent minus the economic "breakeven" rent. This premium will depend on the willingness of the landowner to adjust rents, the competitiveness of the local rental market, and the length of the downturn or speed of recovery in profit prospects for the grain sector. Think of this option premium as being similar to paying someone for an option to purchase a farm or other real estate except, in this case, you are effectively making a payment for the right to continue renting the property.

3) Thirdly, determine the "burn rate" in working capital that will occur if the property continues to be farmed at a loss. Burn rate, defined as working capital/net income loss, is the length of time in which a firm's working capital will be exhausted by ongoing losses.

4) Fourth, assess whether the premium (the losses incurred) being paid to maintain control of the property will be recovered in future years when margins improve, and whether or not the working capital burn rate is too high for the business to absorb the expected losses without threatening the viability of the business.

To make this process more clear, let's examine some sample calculations and results for our west central Indiana case farm. Since this is a multi-year analysis, our crop budget
includes expected costs and revenues for both corn and soybeans over the next five years (2016 through 2020) based upon the 2015 Purdue Crop Cost and Return Guide. Gross revenue estimates were obtained using trend adjusted yields and crop price forecasts from the University of Missouri's Food and Agricultural Policy Research Institute (FAPRI). The budgeted costs and revenue estimates were used to calculate an expected “breakeven” cash rent, which provided a net return of $0 per acre to the farm operation, after depreciation and operator labor charges were covered. If the actual cash rental rate is above this amount, it means that the farm is effectively paying an “option premium” to the landowner for the right to keep renting the farm in the future.

The goal of this analysis is to 1) identify the size of the option premium being paid (if any) to continue renting farmland, and 2) assess the impact paying an option premium to continue renting land over a period of several years will have on a farm’s working capital and, ultimately, the farm’s long-run viability. Addressing the impact on a farm’s long-run viability requires that we make an assumption about the farm’s financial position at the beginning of 2016. We assume that our representative farm, like many Indiana farm operations, was able to build up its working capital over the last several years and entered the downturn in crop agriculture with a healthy working capital that, on January 1, 2016, will be $400 per acre.

Table 1 summarizes results from our analysis, based in part on long-range corn and soybean prices from FAPRI and estimated payments from the ARC-County government program. Based on our assumptions, the breakeven cash rent on our representative farm ranges from $225 per acre in 2016 to a high of $243 per acre in 2020. The difference between the market cash rent and breakeven cash rent is, effectively, the premium paid for the opportunity to continue farming the land. If we hold the market cash rental rate constant at $281 per acre (the 2015 level), the option premium to retain the land in 2016 would be $56 per acre. But notice that keeping the cash rent at this level starts to draw down the farm’s working capital position.

Like many Indiana farms, our representative farm will enter 2016 with a very strong working capital position, in this case equal to $400 per acre (e.g., on a 3,000 acre farm, this implies working capital of $1.2 million). But the loss incurred during 2016 draws the farms working capital down to $344 per acre at the end of 2016. And if the cash rental rate remains at $281 per acre, the farm’s working capital per acre drops from $400 at the beginning of 2016 to $146 per acre by the end of 2020, a decline of nearly 60 percent.

What happens on this farm if corn and soybean prices are significantly weaker than currently projected? Table 2 examines what happens to this farm’s financial situation under a bearish price scenario where corn prices average just $3.75 per bushel, and soybean prices average $9.50 per bushel, from 2016 through 2020. Revenue estimates in this analysis also include estimated payments from the ARC-County program. Under this low-price scenario, the farm’s strong working capital position declines precipitously and the farm ceases to be viable by 2020.
In this article, we just examined two scenarios for a representative west central Indiana corn and soybean farm. But we encourage you to do the analysis for your farm using your own financial information and price scenarios. To make this easier, we've built a spreadsheet decision tool that you can download from either the University of Illinois farmdoc website (www.farmdoc.illinois.edu/fasttools/) or the Purdue Center for Commercial Agriculture website (www.ag.purdue.edu/commercialag). Using the spreadsheet, you can estimate potential option premiums you might be paying to retain control of farmland and the impact it will have on your working capital and financial position.

Table 1. Working Capital Analysis with Current Cash Rent for West Central Indiana Under FAPRI Price Projections.

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Price</td>
<td>3.97</td>
<td>4.02</td>
<td>4.15</td>
<td>4.20</td>
<td>4.20</td>
</tr>
<tr>
<td>Soybean Price</td>
<td>9.58</td>
<td>10.00</td>
<td>10.36</td>
<td>10.50</td>
<td>10.50</td>
</tr>
<tr>
<td>Cash Rent</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
</tr>
<tr>
<td>Farmer Net Return</td>
<td>-56</td>
<td>-67</td>
<td>-51</td>
<td>-42</td>
<td>-38</td>
</tr>
<tr>
<td>Working Capital per Acre - All Costs Included</td>
<td>344</td>
<td>277</td>
<td>226</td>
<td>184</td>
<td>146</td>
</tr>
<tr>
<td>Working Capital to Total Expense Ratio</td>
<td>49%</td>
<td>40%</td>
<td>32%</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>Rent Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Cash Rent</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
</tr>
<tr>
<td>Breakeven Cash Rent</td>
<td>225</td>
<td>214</td>
<td>230</td>
<td>239</td>
<td>243</td>
</tr>
<tr>
<td>&quot;Option&quot; Premium</td>
<td>56</td>
<td>67</td>
<td>51</td>
<td>42</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 2. Working Capital Analysis with Current Cash Rent for West Central Indiana Under Low Price Scenario.

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Price</td>
<td>3.75</td>
<td>3.75</td>
<td>3.75</td>
<td>3.75</td>
<td>3.75</td>
</tr>
<tr>
<td>Soybean Price</td>
<td>9.50</td>
<td>9.50</td>
<td>9.50</td>
<td>9.50</td>
<td>9.50</td>
</tr>
<tr>
<td>Cash Rent</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
</tr>
<tr>
<td>Farmer Net Return</td>
<td>-57</td>
<td>-94</td>
<td>-90</td>
<td>-87</td>
<td>-83</td>
</tr>
<tr>
<td>Working Capital per Acre - All Costs Included</td>
<td>343</td>
<td>249</td>
<td>159</td>
<td>72</td>
<td>-11</td>
</tr>
<tr>
<td>Working Capital to Total Expense Ratio</td>
<td>49%</td>
<td>36%</td>
<td>23%</td>
<td>10%</td>
<td>-2%</td>
</tr>
<tr>
<td>Rent Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Cash Rent</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
<td>281</td>
</tr>
<tr>
<td>Breakeven Cash Rent</td>
<td>224</td>
<td>187</td>
<td>191</td>
<td>194</td>
<td>198</td>
</tr>
<tr>
<td>&quot;Option&quot; Premium</td>
<td>57</td>
<td>94</td>
<td>90</td>
<td>87</td>
<td>83</td>
</tr>
</tbody>
</table>
Improving Your Farm Lease Contract

Ag Decision Maker

A guide to help you better understand the business of farmland leases

Importance of Leasing
More than half of Iowa's farmland is rented to tenant operators. In parts of central and northern Iowa half to two-thirds of the land is tenant-operated. On the other hand, in south central and southeast Iowa, slightly less than one-half of the land is farmed by a tenant.

The trend over the past several decades has been for more of Iowa's farmland to be leased rather than operated by its owners. In many cases, retired farmers or their heirs wish to continue to own farms, but do not want to operate them. Farmers with limited capital also find that they can more easily reach an efficient scale of operation by renting rather than owning.

Leasing farmland involves a business agreement between the owner and the operator. A farm lease is a legal instrument that describes that agreement. The lease provides the basis for combining the landlord's and the tenant's resources of land, labor, capital, and management to efficiently produce farm commodities.

Variations in leasing arrangements occur because of the differences in the productive capacity of the land and improvements, the contributions made by each party, and the personal goals of the tenant and owner. Rental terms need to be revised periodically to keep them up to date. The lease agreement also protects the legal rights of all parties involved.

Reasons for Farm Leases
Land is an expensive resource. A large capital investment is required to purchase enough land to provide the farm family an opportunity to earn a satisfactory living. A typical full-time farmer in Iowa today operates more than 800 acres. The average value of Iowa farmland is over $8,000 per acre. Therefore, the land investment for a commercial farm today can easily exceed $6 million.

Many young farm families cannot afford to purchase farmland because they do not have enough capital for a down payment, or the income will not be sufficient to meet the financing payments. Young families often have labor, some operating capital, machinery and management ability that they wish to use in a farm business to produce income for living expenses and future investment or debt reduction. If they are not in a position to purchase land, they can rent land and build equity for a future purchase. A common trend is to operate a combination of owned and rented land. This allows the operator to have a home base with machinery and grain storage while leasing additional acres.

Many individuals or institutions that own land are looking for someone to farm it to provide a return on their investment as well as maintain its productivity. Land ownership can also provide a hedge against inflation through appreciation in land values over time. Many landowners are former farm operators who have retired and who wish to retain their investment in the land for security, retirement income, income tax deferral, and sentimental reasons.

Common Types of Leases
The four most common types of leases used in Iowa are the fixed cash lease, the flexible cash lease, the crop-share lease, and the custom farming contract. The common terms of these leases are described below.

Fixed Cash Lease
Under a fixed cash lease the tenant pays a given amount of cash rent per acre per year for the use of the farm resources. The landlord may put some restrictions on what crops can be grown, or what tillage, conservation and pest control practices can be used. Other than this, the tenant has a free rein in planning the crop and livestock production program.
on the farm unit, and receives all the crop and USDA commodity program payments.

**Flexible Cash Lease**
A variation of the fixed cash lease is a flexible lease, in which the actual rent to be paid depends on the actual yields attained and the selling prices available during the lease period. This ensures that the rent paid is in line with the profitability of the crops grown that year. Sometimes government payments and crop insurance benefits are also included in calculating the gross revenue. The landowner shares some of the risk of low yields or declining prices, but also shares in the extra profits when prices and/or production exceed expectations. Some flexible leases also take into account crop input costs when determining the final rent or bonus. Publication FM 1724 (AgDM C2-21), *Flexible Farm Lease Agreements* has more details.

**Crop-share Lease**
The distinguishing characteristic of a crop-share lease is that the owner receives a share of the crop and USDA payments as a return for the land resources used, but no cash payment. In Iowa, a typical division for corn and soybeans is for the landlord to receive one-half of the grain. A recent variation is a 50-50 crop-share lease with a small cash payment to offset some of the seed technology fees or reduced tillage. In other regions where farmland values are lower, the owner may receive only 25 or 30 percent of the crop. The owner's share of a hay crop varies, depending on how the costs for establishing the seeding were shared. In some cases, the tenant pays a cash rent for land in pasture or hay. There may be a separate rental charge for a good set of buildings or grain storage facilities.

The owner normally furnishes land and buildings and pays half of the costs of inputs such as fertilizer, seed, and pesticides when the crop is divided 50-50. Owners are usually responsible for drying, storing and marketing their share of the crop, as well. The tenant usually furnishes all the labor, fuel, equipment, and the other half of the shared expenses. Many variations on sharing of expenses exist, however. Publication FM 1811 (AgDM C2-15), *Survey of Iowa Farm Leasing Practices*, provides more details about the sharing of expenses under a crop-share lease.

**Custom Farming Contract**
Under a custom farming contract the operator supplies all the labor and equipment needed to perform tillage, planting, pest control, harvesting and storing of crops. The landowner pays all other expenses, and receives all the crop and USDA payments. The custom operator receives a fixed payment per acre from the owner, or a fixed payment for each operation performed.

Some agreements pay the custom operator a bonus for meeting certain planting date or yield goals. Others provide for the operator to receive a percentage of the crop instead of a cash payment, generally from 20 to 25 percent. This is sometimes referred to as a "net share lease." If the custom operator takes responsibility for purchasing and delivering crop inputs, the cash payment or share of the crop is generally higher. Publication FM 1823 (AgDM A3-15) *Custom Farming: an Alternative to Leasing* has more details.

**Advantages and Disadvantages of Different Types of Leases**
All types of leases have advantages and disadvantages to each party. The tenant and owner should consider them before choosing the type of lease and the terms that should be incorporated in it.

**Fixed Cash Lease**

*Advantages of a fixed cash lease are:*

- The lease is simple with relatively few chances for misunderstanding.
- The owner is relieved of making day-to-day operating decisions.
- The owner has very little financial risk.
- The tenant has maximum freedom in planning and developing the cropping and livestock programs.
- The tenant has fewer records to keep when multiple landlords are involved.
Disadvantages and potential problems of the fixed cash lease are:

- A fair cash rental rate may have to be renegotiated each year.
- Cash rents are likely to be too low in times of rising prices and increasing yields, and too high in times of low prices or low yields.
- Selling prices and production costs may be higher or lower than anticipated when the rental rate is set.
- Tenants are required to supply more operating capital.
- Tenants bear all the risk of production shortfalls.

Flexible Cash Lease
Advantages of a flexible cash lease are:

- The amount of rent to pay increases or decreases automatically from year-to-year as prices and yields change.
- The need for the owner and tenant to renegotiate the rental rate each year is significantly reduced.

Disadvantages and potential problems of the flexible cash lease are:

- Both parties must agree on a formula for setting the cash rent each year.
- Both parties must agree on how to determine the prices and yields to include in the formula.
- There is uncertainty about how much the tenant will pay and the owner will receive each year.

Crop-share Lease
Advantages of a crop-share lease are:

- Risks associated with price and yield variations are shared.
- The owner is more involved in making decisions and marketing the grain during the year.
- Both parties share the benefits from adoption of yield-increasing technology or unexpected high yields or prices.
- The owner receives more information about yields and inputs used each year.
- A second USDA payment limit is created.

Disadvantages or potential problem areas of a crop-share lease include:

- The landlord and tenant must agree on how production expenses will be shared.
- Adjustments for sharing costs for storage and drying facilities, herbicides that reduce field work, or fertilizer and pesticide application may have to be made.
- The cropping plan to be followed and whether or not the farm participates in government programs must be agreed on.
- Added cash rent for the use of buildings and storage facilities may have to be negotiated.
- If the owner's and tenant's grain is stored in the same bin, marketing decisions have to be made jointly.
- The landowner may be considered a material participant, and farm income will be subject to self-employment taxation.

Custom Farming Contract
Advantages of a custom farming contract are:

- There is very little financial risk for the operator.
- The owner benefits from any unexpected high prices, yields or government program payments.
- Only one party is responsible for marketing grain and making production decisions.
- Agreements are usually fairly simple to negotiate.

Disadvantages and potential problems of custom farming contracts are:

- The owner bears all the risk of low yields or prices, or high input costs.
- The number and timing of field operations to be done each year may have to be modified, depending on weather conditions.
- The operator has to set priorities among the custom farmed land and other rented or owned land.
- The owner must communicate to the custom operator the cropping system, fertility program, and type of pest control to be used.
- Crop inputs such as seed, fertilizer and pesticides must be purchased and delivered in a timely manner.
- The landowner may be considered a material participant, and farm income could be subject to self-employment taxation.
Key Areas of Decision Making
There are certain key areas in developing a farm lease that should be given very careful consideration by both parties. The answers to these questions will depend on the intent of the parties in the leasing arrangement and the bargaining position of each.

Sharing Costs
A question that frequently comes up is the landlord’s responsibility in sharing herbicide costs for weed control that may be a partial or complete substitute for cultivation or other tillage methods. Most landlords agree to furnish half of the cost of these materials under a crop-share lease. Some feel that where no-till or minimum tillage practices are used they should not have to pay a full 50 percent of the cost of herbicides. See publication FM 1811 (AgDM C2-15), Survey of Iowa Farm Leasing Practices for more information.

There are many variations in how the costs for custom application of fertilizer and pesticides are divided. Therefore, it is advisable to discuss these items in advance and state in the lease whether or not the landlord will share in any of these costs.

Harvesting
How will costs associated with combining, drying, transporting, and storing crops be shared under a share lease? When the corn drying facilities are part of the rental unit, the landlord often furnishes the dryer and storage facilities. If the corn drying unit is portable it may be jointly owned, or either party may own it and charge the other party an established amount for its use. The fuel and power costs for drying are normally shared in the same proportion as the crop is divided. In some cases the tenant is paid extra for delivering the owner’s share of the crop from farm storage to an elevator or processor.

Removing Corn Stover
Under Iowa law a farm tenant has the right to remove stover (stalks, leaves, cobs) left in a field after harvesting unless the lease states otherwise. Stover can be used as feed or bedding, or sold off the farm. Tenants and landowners can specify a different arrangement in a written lease, or limit the amount of stover removed.

Maintaining Fertility
Farm owners often worry about whether a tenant will maintain or improve the level of fertility on the farm. Regular soil testing can establish whether additional nutrients are needed. While tenants should be discouraged from “mining the soil,” applying additional fertilizer (especially phosphorus and potassium) when levels are already testing high or very high not only wastes money, it contributes to nutrient run off and downstream pollution.

Applying lime to soils contributes to productivity by controlling the acidity of the soil. Since lime applications usually last for several years, their cost is usually the responsibility of the landowner, and is reflected in the rental rate of the land. Tenants may pay for the lime and pro-rate the cost of the lime over future years with the landlord agreeing to reimburse the tenant if the tenant doesn’t rent the land in future years. Some long-term crop-share tenants may divide the cost of lime.

Controlling Weeds and Maintaining Buildings
Weed control in crops has improved considerably in recent years with the introduction of herbicide resistant seeds. However, many landowners also place a high value on controlling weeds along fence rows, in ditches and around building sites. Indeed, cutting or spraying weeds classified as noxious is required by law. Iowa Code Section 314.17 (amended 2010) prohibits mowing ditches before July 15, except within 200 yards of dwellings and in certain other situations.

Maintaining the appearance and functionality of farm buildings and fences is often a high priority for landowners, as well. Even if some buildings provide no substantial benefits to the tenant, he/she may be able to provide labor and machinery for carrying out repairs at a considerable savings to the landlord. Owners should generally pay for materials and supplies, especially if the tenant is providing labor.

While such practices may have little economic payoff for a tenant, they can contribute to a longer and more harmonious leasing agreement, and often require a minimal amount of time and cost.
Financing Improvements
There are three ways to handle the costs of making permanent improvements to a farm property such as buildings, storage structures, conservation structures, fences, waterways, and drainage tile.

Option 1. The landlord provides the improvement as part of the rental agreement with an understanding that the rental rate will be increased as a result.

Option 2. The cost of the improvements is shared by the landlord and tenant in some form. If the improvement is constructed on the farm, the tenant may furnish labor and machinery for the job, and the owner may pay for materials. It is useful to negotiate a provision in the lease for the tenant to be reimbursed by the landlord for the undepreciated value of the improvements if the lease period ends before the useful life of the improvement is over.

Option 3. The entire cost of the improvements is paid by the tenant. As in Option 2, a provision for reimbursing the tenant for the undepreciated value of the investment is important.

For more information see:
- AgDM C2-07 - Lease Supplement for Investing in Improvements on a Rented Farm
- AgDM C2-08 - Lease Supplement for Obtaining Conservation Practices & Controlling Soil Loss
- AgDM C2-29 - Lease Supplement for Drainage

Participating in Government Programs
Most crop producers in Iowa participate in some of the commodity programs offered by the U.S. Department of Agriculture. They are usually designed to reduce price or production risk for major grain crops. Every few years new farm legislation is passed which requires landowners and tenants to make decisions about program participation.

Under a cash rent lease the farm program benefits usually are paid to the operator, because that is the person bearing the risk. With a flexible cash lease, the commodity program payment can be included in the gross revenue used to determine the rental rate each year. Under a crop-share lease the owner and tenant usually share in the program benefits in the same proportion as they share the crop. If there is a cost to participate in the program, the owner and tenant must carefully analyze the potential benefits to each party. Government program decisions can affect the rental value of a farm for several years.

Conservation programs may offer short-term payments for following certain practices, as well as long-term benefits in the form of reduced erosion, increased fertility, and cleaner water. If the incentive payments do not completely offset any extra costs or reduced income to the tenant for following the conservation practices, he or she may be reluctant to participate. If the lease has only a short duration, such as one year, the long-term benefits of the practices do not offer much incentive to the tenant. The landowner may have to reduce the cash rent to offset the tenant's short-term loss of net income.

Setting the Length of Lease
Many farm leases are in effect for only one year at a time. In fact, in Iowa oral leases cannot be valid for more than one year. However, a recent survey showed that 43 percent of cash rent leases and 66 percent of crop-share agreements had been in effect between the same parties for more than 10 years. The maximum fixed term for a lease contract in Iowa is 20 years, but leases can be routinely renewed if both parties agree.

Multi-year leases provide owners and operators with an incentive to invest in long-term improvements to the land and maintain soil fertility and conservation structures. They also avoid the uncertainty of building new relationships frequently. In Iowa, significant "beginning farmer" income tax credits are available to owners who rent to qualified tenants under a 2- to 5-year lease contract.

In determining whether or not a lease is fair and equitable to both parties, it is necessary to consider the lease in total rather than looking only at individual provisions or sections of the lease. One
provision in the lease may be favorable to one party, while another provision may be more favorable to the other party, and the two factors may balance out.

**Factors that Influence Leasing Terms**

Many factors influence the terms of an individual farm lease.

- The *productivity* of the land as measured by historical yields, its corn suitability rating (CSR2) index, satellite photos, drainage maps and soil type.
- The value of the *contributions* made by each party in the leasing arrangement, such as labor, land, crop inputs, machinery or management.
- The *bargaining position* and bargaining ability of each party, and the *competition* for rented land in the immediate area.
- What has been *customary* in the community in the past.
- *Family considerations* that cause lease terms to be highly favorable to a relative when compared with other leases, because the owners do not need as much income, want to help a child get started, or desire to keep the farm in the family.
- *Improvements* and *facilities* on the farm, and the condition and usefulness.
- *Location* relative to paved roads, grain processing plants, and grain buyers.
- The *USDA farm program* crop acreage bases and proven yields assigned to a particular farm. These will affect the size of some commodity program payments that are paid to the operator and owner. Incentive payments for following certain conservation practices may also be attached to the land unit.
- Income *tax credits* that may be available if the land is leased to a beginning farmer. This allows a lower rental rate to be negotiated without reducing the net return to the owner.
- *Contracts* for producing seed or other specialty crops, or to receive livestock nutrients. Access to such contracts can enhance the value of a particular property.

**Economic Considerations**

There are several important economic factors to consider when developing a farm lease agreement. Some of the key economic questions are:

- Does the lease provide a business framework for the most profitable long-term operation of the farm?
- Does the agreement encourage the use of the most profitable levels of capital, labor, and management in the farm business, as well as adoption of new technology?
- Are the returns shared between the landlord and tenant in an equitable manner when the value of the contributions made by each party is considered?
- Is the level of cash rent to be paid consistent with the current land market and the productivity of this particular tract of land?
- Is the farming unit large enough to achieve an efficient level of operation and provide a satisfactory return to both landlord and tenant? A larger tract of land may be more attractive to potential renters than a small tract.

**Legal Considerations**

Several federal and state laws affect lease terms. Such legal considerations promote an efficient business, ensure that lease provisions are carried out as intended, and protect the interests of each party.

**Self-employment Income**

A materially participating landowner must report farm income as self-employment income rather than as passive investment income. As such, it is subject to the normal self-employment tax rate. On the other hand, paying some self-employment tax will boost Social Security benefits in the future. A cash rent lease rarely qualifies a landowner as a material participant, but a crop-share lease may do so. An owner must be in the trade or business of farming in order to deduct certain expenses such as interest on operating capital or applications of fertilizer and lime.
Social Security Benefits
Landowners under age 66 or 67 may have their Social Security benefits reduced if they are actively involved. This depends on the amount and timing of the income received. When landowners reach full retirement age there is no limit on the amount of active income that can be earned with respect to Social Security benefits. See AgDM C2-41, Leasing Arrangements and Self-employment (Social Security) Tax, for more details.

Estate Tax Valuation
Many farm properties can qualify for “special use valuation” when the estate goes through probate, which often results in a valuation below current market value. This can be advantageous for estates large enough to trigger federal estate taxes. However, one requirement for special use valuation is that the decedent or a family member must have materially participated in the business five out of eight years prior to death, and a qualified heir must materially participate for 10 years after the death of the decedent.

Landlord’s Liens
In Iowa, a statutory (created by state law) landlord’s lien exists. The lien is applicable whether the lease is for cash rent or crop-share. The statutory lien is a lien “upon all crops grown upon the leased premises, and upon all other personal property of the tenant which has been used or kept thereon during the term and which is not exempt from execution,” and gives the landlord preference over other security interests such as those of lenders.

The UCC1 form must be filed with the Iowa Secretary of State’s office within 20 days of when the lease goes into effect to perfect the landlord’s lien.

More details on legal issues affecting farm lease agreements can be found in AgDM C2-06, Lease Termination and Other Legal Considerations for Lease Contracts.

Communication
Good communication between tenants and landowners is essential for building a successful leasing relationship. Landowners are concerned about the use and care of their farm. Nonresident owners cannot observe conditions first hand. Some spouses or children who have not been heavily involved in the management of the property may feel unsure about how to proceed with decisions.

Provide Reports
Tenants can borrow a technique from professional farm managers who provide their clients with written reports on a regular basis. Obviously, a report is more important with a crop-share lease than a cash lease. It may be beneficial for a tenant with a cash lease to develop an abbreviated form of reporting, especially for landowners who have a strong interest in the productivity of the farm. Sending photos to a landowner who is not close enough to observe crop conditions regularly is a very effective communication tool. Digital camera photos or video files can be easily transmitted by email, or pictures can be printed and sent by regular mail. Some tenants are setting up password protected websites for individual landowners to provide information such as soil maps, fertilizer tests, and yield data.

For a crop-share lease keep the accounting of expenses current. Most input suppliers will invoice each party individually. However, informing the owner beforehand that he or she will be receiving a bill, and its purpose, is recommended. Tenants renting from several owners may purchase supplies in volume and prorate the bill to each of the owners. In this situation a copy of the original invoice should be included. Explain each item on the bill, as names of farm inputs change frequently. The owner may not be familiar with commercial product terms for seed, herbicides, and insecticides, but nonetheless may have to categorize the expenses for income tax reporting.
Crop insurance policies and some USDA programs require information about historical crop yields before a farm can be enrolled. Landowners need to have this information each year for making future decisions about participation in such programs.

**Have a Written Lease**
Written leases make the lease terms more definite and leave less chance for disagreement and misunderstanding. People tend to selectively recall only those portions of conversations that reinforce their point-of-view. It protects not only the original parties, but also assignees and heirs in case either party should die, or the farm is sold.

A written lease encourages both parties to consider all aspects of the lease before the lease period begins. Decisions are made before the problems occur. In subsequent years, it provides a basis for changing provisions when conditions change. Written leases also provide documentation in case of a tax audit or for settling an estate. Lease agreements that cover more than one crop year are required to be in writing, and leases written for five years or more must be notarized and recorded at the county recorder’s office by the tenant.

The document should meet at least the following minimum requirements:

- It should contain an accurate description of the property.
- It should specify a definite period for which the lease is to run.
- It should state the kind and amount of rent, and time and method of payment (cash lease).
- It should specify how production, USDA payments, and input costs are to be shared (crop-share lease).

Sample lease forms are available. See publications *FM 1538 (AgDM C2-12) Iowa Farm Lease Form* or *FM 1874 (AgDM C2-16) Iowa Cash Rent Farm Lease (short form).*

**Termination of a Farm Lease**
A farm lease automatically continues from year to year unless either party gives a notice of termination. In Iowa, a lease termination notice must be properly served by September 1, prior to the end of the lease year. This applies to both cash and crop-share leases, but not to custom farming agreements. A written lease may state a date earlier than September 1 for serving a termination notice. The requirement to terminate a farm lease by September 1 does not apply to tracts under 40 acres in size (in Iowa). However, even an oral lease is automatically renewed if it is not properly terminated in time.

The termination notice must fix the termination of the tenancy to take place on the following March 1. If notice is not served, the lease continues for another crop year under the same conditions and terms. However, if mutually acceptable to all parties concerned, a lease can be terminated or modified at any time, and can have a different stated expiration date.

Iowa law specifies three methods of serving a farm lease termination notice to terminate the tenancy on the following March 1. The following is quoted from the Code of Iowa, Section 562.7:

"Notice—How and when served. Written notice shall be served upon either party or a successor of the party by using one of the following methods:

1. By delivery of the notice, on or before September 1, with acceptance of service to be signed by the party to the lease or a successor of the party, receiving the notice.

2. By serving the notice, on or before September 1, personally, or if personal service has been tried and cannot be achieved, by publication, on the same conditions, and in the same manner as is provided for the service of original notices, except that when the notice is served by publication no affidavit is required. Service by publication is completed on the day of the last publication."
3. By mailing the notice before September 1 by certified mail. Notice served by certified mail is made and completed when the notice is enclosed in a sealed envelope, with the proper postage on the envelope, addressed to the party or a successor of the party at the last known mailing address and deposited in a mail receptacle provided by the United States postal service.

A form titled “Notice of Termination of Farm Tenancy” is available as AgDM C2-19. Other forms are available from attorneys.

Summary
A good lease is the first step toward a satisfactory operating relationship between a landlord and a tenant. Although it is difficult to develop a lease that will provide for all possible situations, the parties should try to anticipate areas where problems could arise and include provisions in the lease to handle them. Only the parties involved can determine what is fair to each and what the final agreement should be. Many factors influence a leasing agreement, and each contract should be modified to fit the individual situation.

Additional References
Publications from Iowa State University Extension and Outreach
Available at: store.extension.iastate.edu or 515-294-5247. Ag Decision Maker files are available at www.extension.iastate.edu/agdm under Whole Farm, Leasing.

Rental Rate and Land Value Surveys
- FM 1728/AgDM C2-09, Iowa Farmland Rental Rates (USDA)
- FM 1851/AgDM C2-10, Cash Rental Rates for Iowa Survey (Iowa State University)
- FM 1811/AgDM C2-15, Survey of Iowa Farm Leasing Practices
- FM 1825/AgDM C2-70, Iowa Farmland Value Survey

Leasing Forms
- FM 1538/AgDM C2-12, Iowa Farm Lease Form
- FM 1874/AgDM C2-16, Iowa Cash Rent Farm Lease (short form)

Lease Agreement
- FM 1801/AgDM C2-20, Computing a Cropland Cash Rent
- FM 1724/AgDM C2-21, Flexible Farm Lease Agreements
- FM 1823/AgDM A3-15, Custom Farming: An Alternative to Leasing
- AgDM C2-03, Do I need a Written Lease?

Other Resources
- AgDM C2-05, Leasing and Land Ownership Terms
- AgDM C2-06, Lease Termination and Other Legal Considerations for Lease Contracts
- AgDM C2-41, Leasing Arrangements and Self-employment (Social Security) Tax
- PM 1947/AgDM C2-33, Considering Sustainable Agriculture on Your Rented Land
- PM 1982/AgDM C2-31, Adapting Crop Share Agreements for Sustainable and Organic Agriculture
- Iowa Farm Leases—Legal, Economic, and Tax Considerations. ISU Center for Agricultural Law and Taxation at www.calt.iastate.edu.
- Farm Leasing Arrangements. A home study course on the Internet, is available at: www.extension.iastate.edu/ames.
- A series of farm lease forms and publications are available from Midwest Plan Service at: www.mwps.sws.iastate.edu or 800-562-3618. Lease forms for crop land, pasture land, farm buildings and farm equipment can be downloaded at no charge.
- Ag Lease 101 (aglease101.org) helps both land owners and land operators learn about alternative lease arrangements and includes sample written lease agreements for several alternatives. Ag Lease 101 was created by and is maintained by the North Central Farm Management Extension Committee.
... and justice for all
The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-9644.


Revised by Kelvin Leibold
kleibold@iastate.edu

Originally prepared by E.G. Stoneberg,
former extension economist

www.extension.iastate.edu/agdm
store.extension.iastate.edu
NORTH CENTRAL FARM MANAGEMENT EXTENSION COMMITTEE

Fixed and Flexible Cash Rental Arrangements For Your Farm
Acknowledgements
This publication is a product of the North Central Regional (NCR) Cooperative Extension Services of:

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
Oklahoma
South Dakota
Wisconsin
and
The USDA National Institute of Food and Agriculture (NIFA)

Funding
Funding for this project was provided by the North Central Risk Management Education Center (http://NCRME.org) and the USDA National Institute of Food and Agriculture (http://www.csrees.usda.gov)

This material is based upon work supported by USDA/NIFA under Award Number 2010-49200-06200

NCFMEC-01
December 2011

© 2011 by the North Central Farm Management Extension Committee
For more information about this and other leases, visit http://AgLease101.org
Fixed and Flexible
Cash Rental Arrangements
For Your Farm

Rental arrangements for cropland vary widely from one geographic area to another. What is desirable or equitable for one particular landowner/operator relationship is not acceptable for others. The purpose of this publication is to help operators and landowners develop equitable cash-rent arrangements and assist them in making sound decisions based on an equitable evaluation of resources. The first section (Part I) addresses whether a fixed cash-rent lease arrangement should be used. Part II discusses how to develop an equitable fixed cash rental rate. Part III outlines methods for developing a flexible cash rental lease and their advantages and disadvantages. Part IV discusses the importance of putting the agreement in writing. Part V cites other references that may be helpful in setting up your own fixed or flexible cash rental arrangement. A sample lease form is also included.
# Table of Contents

## PART I

Should You Be Using a Fixed Cash-Rent Arrangement?  
- Advantages of Cash Renting – Landowner  
- Disadvantages of Cash Renting – Landowner  
- Advantages of Cash Renting – Operator  
- Disadvantages of Cash Renting – Operator

## PART II

Establishing an Equitable Fixed Cash Rental Rate  
- Factors Affecting Cash Rental Rates  
- Cash-Rent Market Approach  
- Landowner’s Ownership Cost  
- Landowner’s Adjusted Net-Share Rent  
- Operator’s Net Return to Land  
- Percent of Land Value  
- Percent of Gross Revenue  
- Dollars per Bushel of Production  
- Fixed Bushel Rent  
- What is an Equitable Cash Rent? – The Bargaining Process  
- Negotiating Rental Payment Timing  
- USDA Farm Program Participation
Table of Contents

PART III

Putting Flexibility in the Cash-Rent Arrangement 10
  Advantages and Disadvantages of Flexible Cash Renting 10
  Different Methods of Flexing Cash Rent 11
  Flexing for Crop Price Only 11
  Flexing for Yield Only 12
  Flexing for Price and Yield 12
  Flexing Rent on Changes in Cost of Inputs 14
  Incorporating Flexible Provisions in Written Lease 15

PART IV

Putting the Agreement in Writing 15
  Cash Farm Rental Agreement Lease Checklist 16

Worksheets 18

Cash Farm Lease i
PART I

Should You Be Using a Fixed Cash-Rent Arrangement?

Landowners and operators can choose from several types of rental arrangements. In addition to cash rent, the lease agreement can be a crop-share lease, fixed bushel lease or net share lease. Landowners who wish to retain management control but do not have the necessary equipment or labor may hire custom operators to conduct all or specific field operations. This type of custom farming arrangement leaves all risk with the landowner. Similarly, landowners can hire labor to operate their own equipment to conduct field operations. There are both advantages and disadvantages to cash rent arrangements. Some points to consider in deciding whether the fixed cash rental arrangement fits your situation are outlined in the following discussion.

Advantages of Cash Renting – Landowner

1. Less (perhaps no) managerial input is required than with other leasing arrangements.

2. Reduced involvement in management reduces the possibility of friction between the landowner and operator concerning management decisions.

3. Concern over accurate division of crops and expenses is eliminated.

4. The landowner does not have to handle the marketing of crops.

5. Fixed cash rent lessens the landowner’s concern over variations in prices and yields. The operator bears all price, cost, and production risks.

6. Income under the lease does not constitute self-employment income subject to Social Security tax and will not reduce Social Security benefits in retirement.

7. Reduced paperwork requirements stemming from the fact that the landowner no longer is required to fulfill crop insurance and Farm Service Agency (FSA) obligations.

Disadvantages of Cash Renting – Landowner

1. A cash-rent amount acceptable to both parties can be difficult to determine.

2. Once a cash-rent rate is set, a change in the rental rate may be difficult to negotiate when changes in prices and costs take place.

3. In average or below-average years, the landowner may receive less net income than from crop-share rent.

4. The landowner has fewer opportunities for income tax management. Under a crop-share arrangement and cash reporting of taxable income, the amount of taxable income can be shifted from one year to another through timing of crop sales before or after the end of the year. Similarly, purchase of fertilizer, seed, or other inputs for the next growing season can be made in the closing months of the tax year to reduce taxable income.

5. There may be an increased danger that the operator will not maintain the fertility of the land, or keep buildings in good repair, especially if the lease is for only one year. However, competition for land and appropriate requirements in a written lease can minimize this problem.

6. The landowner has little opportunity to build a base for Social Security payments because of the difficulty in establishing acceptable evidence of material participation. This may not be a concern to retired landowners however.

7. To value the farmland in the landowner’s estate at its use value rather than its fair-market value for estate tax purposes, the following two requirements must be met:
a  Before the landowner dies, a cash-rent lease can be used only to a member of the landowner's family as the operator.

b  After death, the heirs must not rent out the use-value land under a cash lease, not even to a family member.

8  Eligibility for paying federal estate tax in installments over 15 years after death could be jeopardized. Land rented under a cash-rent lease does not constitute an interest in a closely held business, which the decedent must have at the time of death to be eligible to pay federal estate tax in installments. Only crop-share or livestock-share leases qualify as an interest in a closely held business.

9.  Owner has financial risk of operator non-payment unless steps are taken to reduce this risk. Steps may include:
   a  Recording the written lease at the proper local government authority.
   b  Require all or a portion of the rent to be paid in advance.

**Disadvantages of Cash Renting — Operator**

1.  Increased risk from price and yield variations. Cash rent is a fixed cash expense that may be very difficult to pay in a poor crop year or with very low crop prices.

2.  Increased risk from losing land base that may be critical to the financial security of the operator's farm business. Owner may choose to rent farmland to another operator.

3.  Cash rental rates tend to trend upward as crop yields increase, even though most of the yield increases may be a result of managerial skills.

4.  The operator must supply all the operating capital needed to purchase crop inputs, as well as to pay any of the cash rent that is due in advance.

5.  No USDA payment limitation is created for the landowner (versus a crop share lease), possibly reducing the overall value of payments that can be received by the operator and landowner combined.

**Advantages of Cash Renting — Operator**

1.  The operator has a relatively freer hand in making management decisions.

2.  Potential for friction between the operator and landowner is minimized because of the landowner's reduced participation in management.

3.  The operator has more incentive to strive for high yields.

4.  The operator can benefit from any windfall profits from unexpected crop price increases or unusually high yields.

5.  The operator does not need to divide crops or income from sale of crops nor keep special records on expenses for the landowner as required under a crop-share lease.

6.  Compared to land ownership, less capital is tied up in the land asset.

**PART II**

**Establishing an Equitable Fixed Cash Rental Rate**

**Factors Affecting Cash Rental Rates**

Ultimately, supply and demand of cropland for rent will determine the cash rental rate for each parcel. The expected return from producing crops on a farm parcel is the overriding factor in determining the demand for a farm and is the primary driver in establishing an equitable rental rate. Local supply and demand of cropland will affect rental rates in any given community. Many of the following factors contribute to the expected crop return and the supply and demand of cropland. Other factors listed affect potential rental negotiations in different ways.

1.  Expected Crop Return — Rent will vary based on expected crop return. The higher the expected return the higher the rent will tend to be.
2. Variability of Crop Return – Land that exhibits highly variable returns may have rents discounted for this quality. For example, land that is poorly drained may exhibit variability of returns due to late plantings from wet springs.

3. Land Quality – Higher quality soils translate into higher rents.

4. Fertility Levels – Higher fertility levels often result in higher cash rents.

5. Drainage Capabilities – Better surface and sub-surface drainage of a farm often results in better yields and higher potential cash rent.

6. Buildings and Grain Storage Availability – Access to machinery and grain storage may enhance the value of the cropland rental rate.

7. Size of Farm – Large farms typically command higher average cash rent per acre due to the efficiencies gained by operators.

8. Location of Farm (Including Road Access) – Proximity to prospects and operators may determine how much operators are willing to bid for cash rents. Good road access will generally enhance cash rent amounts.

9. Shape of Fields – Square fields with fewer “point rows” will generally translate into higher cash rents as operators gain efficiencies from farming fields that are square.

10. Previous Tillage Systems or Crops – Previous crops and tillage systems that allow for an easy transition for new operators may enhance the cash rent value.

11. USDA Farm Program Measurables – Farms that participate in the USDA Farm Program and have higher “program yields” may command higher cash rents than non-program farms.

12. Services Provided by Operator – Operators that “go the extra mile” by providing services such as clearing fence rows, plowing snow in the winter, and other services may be valued by the landowner. This may even be a partial substitute for cash rent increases.

13. Conditions of Lease – Conditions placed on the lease by the landowner may result in fewer prospective operators and a lower average cash rent.

14. Payment Dates – Leases that require part or all of the rent to be paid early in the year (“up-front”) may result in lower rental rates due to higher borrowing or opportunity costs for the operator.

15. Reputation of Landowner/Operator – Reputations of the parties may play a part in the cash rental negotiations. A landowner that has a reputation of being difficult to work with may see cash rents negatively affected by this reputation.

16. Special contracts that are tied to the farm – Farms that have special contracts tied to them may restrict the operator from changing crops based on market conditions. This may negatively impact cash rents. There may also be contracts that positively affect cash rents such as high value crop contracts or contracts for receiving livestock manure.

If the decision is to rent for cash, how is an equitable rental rate determined for the farm or field in question? There are several methods that can be used to establish a fixed cash rent for a particular farm or field: 1) cash-rent market approach, 2) landowner’s ownership cost, 3) landowner’s adjusted net-share rent approach, 4) operator’s net return to land approach or the “the amount an operator can afford to pay”, 5) percent of land value approach, 6) percent of gross revenue approach, 7) dollars per bushel of production, and the 8) fixed bushel rent.

The following discussion and worksheet examples are related to cash renting a farm.

The concepts and approaches outlined in this publication are the same whether
cash renting of a field or total farm is being considered. In some cases, the landowner and operator may only want to consider cash rent for a specific crop.

**Cash-Rent Market Approach**

This method requires knowledge of cash rents being paid for farms in the area. It assumes rents reflect an arm's length negotiation between an informed landowner and a knowledgeable operator. Adjustments should be made for differences in the productivity of the farm and the amount and quality of improvements.

This approach has some disadvantages. It may be difficult to determine actual cash rents being paid for comparable farms as well as any adjustments that need to be made in the rental rates. Other approaches may be more complex, yet better reflect a specific situation. The rates determined by any method cannot deviate greatly from the prevailing market rates if those rates are to be seriously considered in the final bargaining process.

Prevailing rental rates may be available from surveys conducted by state Extension specialists or by the National Agricultural Statistics Service (NASS). Do not assume that informal reports or rumors of rental rates for specific farms are accurate or representative of all rented land in the area.

**Landowner's Ownership Cost**

Under this approach, the landowner calculates the cost of resource ownership from the property. Worksheet 1 provides an example of the required computations. Some points to remember in deriving these ownership costs are:

- **Land:** Land is valued at its current fair-market value for agricultural purposes. The influence of location near cities and other nonagricultural influences on value should be ignored. That is, the value of land as it relates to its productivity in crop production is all that should be included as this is what is offered to the operator as rent.

- **Interest on land:** The land value multiplied by an opportunity interest rate is a method of estimating the annual land charge. A practical starting point for negotiating the return to land is the rent-to-value ratio in the region (cash rent divided by market value), as this reflects the "opportunity cost" of not renting the land on a cash basis. Table 2 reports the rent-to-value ratios for average cropland in the various regions in the U.S. as reported by USDA NASS. It can be seen that the rent-to-value ratios vary considerably from region to region. Additionally, it can be seen that the ratios have been trending downward in some regions and thus using a longer term historical average value may not be appropriate.

**Real estate taxes:** The actual taxes due annually is another contribution of the landowner.

**Land development:** The average dollars spent annually for lime, conservation practices, and other land improvements should be used.

---

**Example Worksheet 1. Landownership Costs as Basis for Fixed Cash Rent**

<table>
<thead>
<tr>
<th>Crops Grown: Corn, soybeans, wheat</th>
<th>Acres: 150</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td><strong>Per Acre Value</strong></td>
</tr>
<tr>
<td>Land</td>
<td>$4,000</td>
</tr>
<tr>
<td>Interest</td>
<td>4%</td>
</tr>
<tr>
<td>Real Estate Tax</td>
<td>0.5%</td>
</tr>
<tr>
<td>Land Improvements</td>
<td></td>
</tr>
<tr>
<td>Tiling</td>
<td>$500</td>
</tr>
<tr>
<td>Surface drainage</td>
<td></td>
</tr>
<tr>
<td>Conservation practices</td>
<td></td>
</tr>
<tr>
<td>Liming</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>$205</td>
</tr>
</tbody>
</table>
Other: If capital has been invested to improve land productivity, such as tile drainage, then include a reasonable depreciation allowance for this investment.

This method may result in a high value, but the method does give the landowner a basis for setting the "asking price" in cash-rent negotiations.

Landowner's Adjusted Net-Share Rent

This method for computing cash rent assumes the rent value should be comparable to the net return a landowner receives under a crop-share lease. Normally, fixed cash rents are expected to be lower than net crop-share rent since the operator incurs all price and weather risk. The difference represents the operator's compensation for carrying the added risk.

Cash rents are not always less than crop-share rents, however. If there is a strong demand for land in an area, cash rents may exceed net crop-share rents. This explains why landowners are sometimes reluctant to change from cash rent to crop-share arrangements.

If this method is utilized, an average net crop share over a period of years should be used to allow for both good and bad yields. Landowners who have rented on a share basis in previous years are likely to know the percentage of crop share received.

Worksheet 2 will help the landowner estimate what the average net-share rent has been. Use yield and cost values that can be realistically expected for the current year and typical share arrangements for the community or area in determining the landowner's share of income and expenses. Other income such as USDA payments should be added if they are a part of total gross income. No USDA income is included in the following example worksheet.

Once the net-share rent value has been determined, the landowner and operator must decide how to adjust this value for price and weather risk assumed by the

Example Worksheet 2. Converting Landowner's Net-Share Rent to Cash Rental Rate

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Yield per Acre</th>
<th>Percent of Crop</th>
<th>Tons or Bushels</th>
<th>Price</th>
<th>Total Value</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>75</td>
<td>170</td>
<td>50 %</td>
<td>6375</td>
<td>4.50</td>
<td>28,687</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>40</td>
<td>50</td>
<td>50 %</td>
<td>1000</td>
<td>11.00</td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>35</td>
<td>65</td>
<td>50 %</td>
<td>1138</td>
<td>6.00</td>
<td>6,825</td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals (A)</td>
<td>150</td>
<td></td>
<td></td>
<td>46,512</td>
<td>310.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Landowner's Share of Shared Expenses

<table>
<thead>
<tr>
<th>Crops</th>
<th>Landowner Share</th>
<th>Seed</th>
<th>Fert. &amp; Lime</th>
<th>Pesticides</th>
<th>Harvest</th>
<th>Drying</th>
<th>Total Cost</th>
<th>Cost/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>50 %</td>
<td>$3,375</td>
<td>$4,125</td>
<td>$1,312</td>
<td>$1,688</td>
<td>$10,500</td>
<td>$203.29</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>50 %</td>
<td>$1,160</td>
<td>$920</td>
<td>$400</td>
<td>$500</td>
<td>$2,800</td>
<td>$56.00</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>50 %</td>
<td>$560</td>
<td>$1,312</td>
<td>$228</td>
<td>$438</td>
<td>$2,538</td>
<td>$42.79</td>
<td></td>
</tr>
<tr>
<td>Totals (B)</td>
<td>%</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$106.79</td>
<td></td>
</tr>
</tbody>
</table>

Landowner's Crop Rent (A-B)  
Less risk shifted to operator  
Net landowner's share rent per acre

1 If whole farm leased on a cash-rent basis, list all crops grown, income and shared expenses from each crop
2 Use average yields, allowing for both good and bad years. Incorporate trend in yields
3 Use current prices and costs.
4 USDA payments, crop stovers, etc.
5 Example risk value is 5% of total crop receipts. This number will vary depending on the production risk in your area.
Operator. Determination of the risk value is a matter for negotiation. In the example, the risk value was set equal to 5 percent of total crop receipts.

**Operator’s Net Return to Land**

In the desire to farm more land, operators may at times bid more for land than they can actually afford. Hence, operators need to carefully budget how much money will be available to pay for the use of land after variable expenses, fixed costs on machinery, and a return to labor and management have been deducted from the gross value of crops.

Worksheet 3 outlines a procedure to estimate how much can be paid for land in the form of cash rent.

The values for labor and management may be the most difficult to determine. The labor value used should reflect the amount of time used only for crop production and general farm maintenance. The hourly rate should equal what could be earned if working for other farmers in the area. Management is sometimes valued at 5 to 10 percent of gross value of crops, or 1.5 to 2.5 percent of the investment in land, equipment, and machinery.

### Example Worksheet 3. Amount of Cash Rent Operator Can Afford to Pay³

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Yield per Acre²</th>
<th>Price³</th>
<th>Total Value</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>75</td>
<td>170</td>
<td>$4.50</td>
<td>$57,375</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>40</td>
<td>50</td>
<td>$11.00</td>
<td>$22,000</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>35</td>
<td>65</td>
<td>$6.00</td>
<td>$13,650</td>
<td></td>
</tr>
<tr>
<td>Other Income⁴</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (A)</td>
<td></td>
<td></td>
<td>$93,025</td>
<td>$620.17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Variable Costs per Acre²</th>
<th>Total Variable Costs</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>75</td>
<td>$340</td>
<td>$25,500</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>40</td>
<td>$190</td>
<td>$7,600</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>35</td>
<td>$180</td>
<td>$6,300</td>
<td></td>
</tr>
<tr>
<td>Total (B)</td>
<td>150</td>
<td>$39,400</td>
<td>$262.87</td>
<td></td>
</tr>
</tbody>
</table>

**Total Fixed Costs, Labor, and Management⁵**

- Crop machinery: machinery value per acre $500.00
- Depreciation for ___ years $50.00
- Interest on average investment at ___ percent $30.00
- Taxes at ___ % $ ___
- Insurance at ___ % $ 1.25
- (C) Total machinery fixed costs $81.25
- (D) Labor charge² (20 hrs/acre @ $18/ht) $26.00
- (E) Management charge (5.0% of total crop values) $31.01
- (F) Total production costs (B+C+D+E) $400.93
- (G) Amount that can be paid for rent per acre (A-F) $219.24

---

³If whole farm leased on a cash-rent basis, list all crops grown, income from each crop, and variable expenses for each crop.

²Use average yields, allowing for both good and bad years. Incorporate trend in yields.

³Use current prices and costs. Variable costs include fuel, oil, repairs, fertilizer, herbicide, insecticide, interest on operating costs, custom hire, drying, insurance, and miscellaneous costs.

⁴USDA payments, crop storage, etc.

⁵Labor expense or charge may be included in variable expenses.
Percent of Land Value

Land ownership may be viewed as just another type of asset in a portfolio of investment alternatives. Owners would likely be looking for a rate of return commensurate with other types of investments, adjusted for differences in risk. Comparable investments would include investments of a similar holding period. In the case of land, longer term investments should be used as comparisons. The landowner and the operator are exposed to different types of risk in this scenario. The landowner’s primary risk is the potential for land values to decline. The operator’s primary risk is the variability of yields, market prices, and cost of inputs. Worksheet 4 provides an example.

Table 2 shows average cash rents as a percent of land value for several states over a decade. In recent years land values have been increasing faster than rents, causing rent as a percent of value to decline. A partial explanation for this trend is a general decrease in interest rates and returns on alternative investments during this time period. The values in Table 2 do not represent a net return on investment—ownership costs such as property taxes and upkeep of fences, terraces, and tile lines must be paid from the cash rent received.

Percent of Gross Revenue

Another method of establishing a cash rental rate is to set it equal to a fixed percent of the expected gross revenue produced from the rented land. This would include income from the sale of grain or forage production as well as any secondary products such as straw or stover. This method would be similar to share renting except the landowner would not have a share of the crop to store and market, nor pay any input costs.

Example Worksheet 4: Percent of Land Value Approach

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Acre Value</th>
<th>Rate</th>
<th>Annual Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$4,000</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>Typical Rent to Value</td>
<td></td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Total Cost of Desired Return</td>
<td></td>
<td></td>
<td>$200</td>
</tr>
</tbody>
</table>

The expected yield can be based on actual yields obtained from the farm in recent years, if such information is available. Expected prices for major commodities can be found by adjusting the relevant harvest time prices for typical basis values, or checking to see what forward contract prices are being offered by local buyers at the time the rent is being determined. Some products such as forages and straw are more difficult to assign a market value to, due to less market data being available.

Table 2. Cropland Cash Rents as a Percent of Land Value in Selected States

<table>
<thead>
<tr>
<th>Year</th>
<th>Iowa</th>
<th>North Dakota</th>
<th>Ohio</th>
<th>Kansas</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>5.9%</td>
<td>8.1%</td>
<td>3.0%</td>
<td>5.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>2002</td>
<td>5.9%</td>
<td>8.1%</td>
<td>2.9%</td>
<td>5.6%</td>
<td>3.3%</td>
</tr>
<tr>
<td>2003</td>
<td>5.8%</td>
<td>7.9%</td>
<td>2.8%</td>
<td>5.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>2004</td>
<td>5.4%</td>
<td>7.7%</td>
<td>2.7%</td>
<td>5.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>2005</td>
<td>4.7%</td>
<td>7.1%</td>
<td>2.5%</td>
<td>5.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2006</td>
<td>4.3%</td>
<td>6.4%</td>
<td>2.5%</td>
<td>4.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2007</td>
<td>4.2%</td>
<td>6.1%</td>
<td>2.4%</td>
<td>4.7%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2008</td>
<td>4.0%</td>
<td>5.2%</td>
<td>2.4%</td>
<td>4.3%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2009</td>
<td>4.3%</td>
<td>5.7%</td>
<td>2.6%</td>
<td>4.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2010</td>
<td>4.3%</td>
<td>5.7%</td>
<td>2.6%</td>
<td>4.1%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: National Agricultural Statistics Service, U.S. Department of Agriculture
Example Worksheet 5. Cash Rent Equal to a Percent of Expected Gross Revenue

<table>
<thead>
<tr>
<th>Crop</th>
<th>Expected Yield</th>
<th>Expected Price</th>
<th>Expected Gross Revenue</th>
<th>Rent as % of Gross Revenue</th>
<th>Cash Rental Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>170 bu.</td>
<td>$4.50</td>
<td>$765</td>
<td>33 %</td>
<td>$252.45</td>
</tr>
<tr>
<td>Soybeans</td>
<td>50 bu.</td>
<td>$11.00</td>
<td>$550</td>
<td>40 %</td>
<td>$220.00</td>
</tr>
<tr>
<td>Wheat</td>
<td>65 bu.</td>
<td>$6.00</td>
<td>$390</td>
<td>45 %</td>
<td>$175.55</td>
</tr>
</tbody>
</table>

Weighted Average: Based on Corn 75 acres, soybeans 40 acres, wheat 35 acres $225.85

The appropriate percentage of the gross income to use to establish the cash rent can be a typical share of the crop received by the landowner under a crop share lease in which the operator pays all the production costs. This share will vary by region. Worksheet 5 shows an example of this approach to setting a cash rent.

Dollars per Bushel of Production

This method calculates rent based on a fixed value per bushel. The rate may be based on the dominant crop and applied to all acres or may be based on all crops produced. If this method uses actual yields, it would become a variable rent from year to year, as discussed in Part IV. If it is based on a constant or expected yield, such as a productivity index, it is a fixed cash rent. This is a reasonable approach when selling prices are relatively stable over time. It is also useful for adjusting the rental rate for differences in productivity among farms in a county or region.

Example Worksheet 6. Dollars per Bushel of Production

<table>
<thead>
<tr>
<th>Crops Grown: Corn</th>
<th>Acres: 150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Average Yield$^1$</td>
</tr>
<tr>
<td>Corn</td>
<td>170</td>
</tr>
</tbody>
</table>

$^1$ Certain states have a productivity rating that may be used
$^2$ Based on a percent of observed historical rents

Fixed Bushel Rent

A fixed bushel rent would pay the landowner a rent based on the value of an agreed upon quantity of production each year. If the expected selling price at the time the rent is negotiated is used, the rental rate is considered a fixed cash rent. If the actual value of the rental payment is based on the current market value of a fixed number of bushels after harvest, this method becomes a variable cash rental agreement, as discussed in Part III. See Worksheet 7 for an example based on the sample farm listed in previous examples.

Example Worksheet 7. Fixed Bushel Rent

<table>
<thead>
<tr>
<th>Item</th>
<th>Bushel Rent$^1$</th>
<th>Price per Bushel</th>
<th>Annual Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>56 bu.</td>
<td>$4.50</td>
<td>$252</td>
</tr>
</tbody>
</table>

Based on historic rent as a percent of revenue. Based on an equitable crop share percentage (landowner paying no expenses except land) with a discount for production risk.

What is an Equitable Cash Rent? – The Bargaining Process

A final cash rent figure acceptable to both operator and landowner can be derived from more than one of the methods outlined in this publication. They should identify areas of agreement and differences based on the values each has independently developed. To aid in this process, Table 2 summarizes the example values derived from the different methods.

Negotiation provides a means of arriving at a rate that is acceptable to both parties and is an opportunity for them to understand each other's point of view. Negotiations should begin only after the contributions of each party are known and information is provided on local leasing arrangements.
Both parties need to recognize that pressuring an advantage too far can result in an inequitable arrangement for one or the other. A lease that is inequitable to either party is unlikely to last. An inequitable,lopsided arrangement tends to discourage good management and cooperation from the disadvantaged party.

In addition to one-on-one negotiation between landowner and operator, landowners have other options for securing an operator farmer and determining a cash rental rate. The landowner should have the fundamental terms of their leases (i.e., the portions that are, from their point of view, non-negotiable) in place so that potential bidders can be aware of those terms and take them into consideration when formulating their bids.

**Bid Process** – A landowner may request bids from targeted farmers or may open the bid process to any and all prospective operators. The landowner should include whatever provisions he/she likes in the request for proposals. The landowner can evaluate each bid on its own merits to determine the best fit for his or her farm. There are even commercial services that allow landowners to offer farms for rent over the Internet.

**Auction Process** – Farms may be offered for rent at a public auction, just like a land sale. Cash rent auctions are not widely used, but are a way to attract very high rents. However, the highest bidder may not be the best operator in the long run when it comes to caring for the property, and it is difficult to negotiate other conditions of the lease after an auction is held.

**Professional Farm Manager** – Many landowners employ a professional farm manager as their agent. The manager will locate an acceptable operator, negotiate the rental rate, and oversee the owner’s interest in the property. Management firms may conduct sealed-bid auctions to attract favorable rental rates. Landowners who live far from their farm and/or who have little knowledge of rental rates and customs will benefit the most from employing a professional manager.

**Negotiating Rental Payment Timing**

The time and method of payment for the rent should be established in advance and recorded in the lease. Local customs for the timing of lease payments vary widely. Some landowners require part or all of the rent to be paid in advance (when the lease begins) in order to reduce the risk that the operator may be financially unable to pay the rent later. Others may allow the rent to be paid in several installments or after the crop is harvested. The payment stream should be adjusted to fit the operator’s income flow as well as the landowner’s need for cash to cover expenses.

The timing of the rental payments should be considered when setting the rental rate. For example, if a $400 rental payment is required to be made 3 months prior to harvest, and the operator is paying a 6% annual interest
rate (0.5% per month) on borrowed operating capital. He or she will incur an extra financing cost of $200 \times 0.5\% \times 8 \text{ months} = $8. In this case the rental rate should be $8 lower than for a lease that allows rent to be paid at harvest.

Examples:

a. 100% paid by May 1
b. 50% paid by February 1 and 50% paid by December 1
c. 100% paid by December 1

**USDA Farm Program Participation**

USDA Farm Program Payment programs contain a multitude of provisions that provide a level of risk protection for producers who enroll in them. Land rental arrangements may impact how program payments are distributed. Under USDA regulations, if the rental agreement is determined to be a cash lease by the Farm Service Agency (FSA), the operator is entitled to receive 100 percent of all program payments. If the lease is interpreted by FSA to be a share lease, then neither the landlord nor the operator may receive 100 percent of the farm program payments. Customarily, payments are divided in the same percentage as the rent.

Beginning in 2009, FSA adjusted the interpretation of flexible or variable cash rental arrangements, such that most of these leases will now be considered cash leases. If a lease provides for the greater of a guaranteed amount or share of the crop or crop proceeds, the lease will be considered a cash lease if the lease provides for both:

a. A guaranteed amount such as a fixed dollar amount or quantity; and

b. A share of the crop proceeds.

**PART III**

**Putting Flexibility in the Cash-Rent Arrangement**

Farm commodity prices, yields, and operating expenses are often uncertain. Therefore, operators and landowners may hesitate to commit to a fixed cash rent, especially for more than one year. Operators fear a fixed cash rent could pose a real hardship if commodity prices decline, if poor growing conditions reduce yields, or if input costs increase substantially. Landowners believe they should share in the benefits from a sharp rise in crop prices or higher than expected yields. At the same time, neither party may desire a crop-share leasing arrangement. Therefore, the operator and landowner may turn to the use of a flexible cash rent of one kind or another. The idea of a flexible cash rent usually pertains only to the rent charged for cropland. Rents for buildings, for other farmstead facilities, or for comparatively minor acreages of pasture, hay, and woodland are usually fixed even when the rent for cropland varies. Both landowner and operator need to agree on the amount of "non-flexible" rent at the beginning of the lease period.

**Advantages and Disadvantages of Flexible Cash Renting**

A flexible cash-rent arrangement for cropland has certain advantages and disadvantages.

**Advantages:**

1. Flexible cash rent enables the landowner to share in the additional income that results from unexpected increases in the prices of crops considered in the rent-adjustment clause. If the cash rent also is flexed for changes in yields, the landowner will benefit from above-normal yields regardless of the cause.
2. For the operator, risk is reduced. Cash-rent expense is lower if crop prices or yields are less than normal.

3. Calculating flexible cash rent requires more communication from both parties.

Disadvantages:

1. For the landowner, flexible cash rent increases risk.

2. Windfall profits that may be realized by the operator from unexpected price increases are reduced.

3. If cash rent is flexed according to yield, the landowner becomes more concerned with the level of crop yields as well as the accuracy of reported yields. Yields must be verifiable and segregated for each land unit in the lease.

4. If cash rent is flexed according to yield, the operator may give up part of the benefits from higher yields resulting from managerial input, thus possibly reducing incentives to maximize profits.

5. Calculating flexible cash rent requires more management from both parties. There must be agreement on how to verify the factors that are used to set the rent each year.

Different Methods of Flexing Cash Rent

Cash rents are flexed primarily by: 1) flexing for changes in crop price only, 2) flexing for changes in crop yields only, or 3) flexing for both crop price changes and yield variations. Few, if any, methods provide for flexing cash rents in response to sharp, unexpected changes in the cost of purchased inputs. Thus, flexible cash rents should be examined periodically to determine if adjustments are needed due to changes in input costs.

Flexing for Crop Price Only

One flexible cash rent approach allows for flexing the cash rent only for changes in the crop price. Several "price only" options are available with four different methods outlined in the following discussion. Rents that flex only on price increases risk substantially for operators. A short crop that leads to higher prices and higher rent may leave the operator with less ability to pay.

Base rent multiplied by ratio of current year's price to base price. The operator and landowner should agree at the beginning of the leasing period on a base rent and a base price if this method is used. For example, the operator and landowner might agree that the base cash rent would be $175.00 per acre and the "base price" of corn is $3.50 a bushel. If the "current year's price," equal to the average closing price at Anytown Elevator during the period September 15 to November 1, is $3.80, the current year's cash rent would be calculated as follows:

\[
\text{base rent} \times (\text{current year's price} - \text{base price}) = \text{current year's rent}
\]

\[
$175.00 \times (3.80 - 3.50) = \text{current year's rent}
\]

Rent equal to the value of a fixed amount of commodity. An example of this method of flexing cash rent is to set the rent equal to the value of a given quantity (bushels, tons, pounds, etc.) of the primary crop. The price used for determining this value would be based on price quotations at a particular location and period available to the operator. For example, if the primary crop were corn, the lease might state the following: "The amount of the cash rent shall be equal to the value of 56 bushels of corn per acre based on the average daily closing price at the Anytown Elevator during the period September 15 to November 1. The location and time period to be used for determining the price should be agreed upon in advance and stated in the lease agreement. With this method, cash rent flexes as crop price changes. (This method is similar to the Fixed Bushel Rent method cited in Part II "Establishing an Equitable Fixed Cash Rental Rate". The method discussed in this section differs by not setting the price at the beginning of the lease period.)
Example:

56 bushels \times \$8.00 \text{ per bushel} = \$448.00 \text{ per acre}

**Base rent with stated adjustments for prices outside a specified range.** Under this approach, the operator and landlord agree on a base cash rent that applies as long as the current year’s price is within a specified range. For example, the operator and the landlord might agree on a cash rent of $175.00 per acre if the current year’s corn price is in a $3.40 to $3.60 range. For each $0.10 change in the corn price above or below the stated range of prices, the cash rent would increase or decrease correspondingly by a stated number of dollars such as $5.00 per acre. Thus, if the price of corn for the current year (determined in the same manner as for the first two methods) was $3.80 per bushel, the cash rent would be $175.00 + (2 \times 5\text{)} or $185.00 per acre. If the price of corn for the current year were $3.10 per bushel, then the cash rent would be $175.00 - (3 \times 5\text{)} or $160.00 per acre. A variation of this method would allow for an adjustment for any change in the price of corn or other crops above or below the base prices agreed upon.

**Minimum base rent with upward adjustments.** With this method, the operator and landlord agree on a minimum cash rent for normal yields and a relatively low crop price. For example, both parties might agree that with an average yield of 170 bushels per acre and a $3.00 per bushel corn price, the cash rent would be $150.00 per acre. Also, the cash rent would increase by an agreed-upon amount (such as $5\text{)} for each $0.10 per bushel increase in price. Thus, if the current year’s price was $3.75 per bushel, then the cash rent would be $150 + (7.5 \times 5\text{)} or $187.50.

**Flexing for Yield Only**

In some states or for certain commodities, crop yields are highly uncertain. In other cases, the crop that is grown may only be fed to livestock, so no relevant market price exists. In such cases, producers may prefer to negotiate a flexible lease agreement that bases the annual rent solely on the actual yield achieved. The same general approaches shown above for flexing the rent based on price can be used for flexing on yield, as well.

1. A base yield equal to a long-term average or expected yield can be established, along with a base cash rent. The actual rent is then equal to the base rent multiplied by the ratio of the actual yield to the base yield. For example, the base rent is $175.00 and the base yield is 170 bushels of corn. If the actual yield is only 150 bushels, the cash rent calculation would be as follows:

   \[
   \frac{175.00 \times (150 \text{ bu.} / 170 \text{ bu.})}{150} = 154.11
   \]

2. The actual yield can be multiplied by a fixed dollar value per bushel or ton, which would be agreed on in advance. For example, the rent for land planted to wheat is set at $2.00 per bushel of wheat produced. A yield of 75 bushels per acre would result in a rent of $150 per acre, but a yield of only 35 bushels would result in a rent of $70 per acre.

   It is important to specify in the lease a standard quality grade and/or moisture level to which yields will be corrected. In both cases a minimum rent may be agreed on, especially if the producer is able to purchase crop insurance based on a guaranteed level of production and a fixed indemnity rate.

**Flexing for Price and Yield**

Ultimately, the value of what a particular farm produces and the operator's ability to pay a equitable compensation to the owner depend on both actual prices and yields. Moreover, market prices may be inversely correlated with yields in a given year. A flexible rent based only on price or only on yield may not accurately reflect the economic return the operator has derived from the farm that year. For these reasons the most popular flexible lease contracts take into account year-to-year variations in both prices and yields.

This method requires the operator and landlord to agree on a base cash rent tied to a base yield (average or expected yield)
and a base expected price for each crop being considered. If only one crop is grown, this is the only crop considered. If several crops are grown and all are considered equally important, all crops may be considered in determining the current year's cash rent. If one crop accounts for most of the income or is planted on most of the land, the cash rent might be adjusted according to changes in price and yield of the main crop even though other minor crops are produced.

The adjustment for yield changes should be based on the yields actually obtained on the particular farm being leased. Sales records, warehouse receipts, or crop insurance yields are reliable evidence of production. If crops have not yet been delivered to a buyer or commercial storage, on-farm bin measurements can be used. Data from combine yield monitors can also be used, but is usually not as accurate as direct measurements. Yields should be corrected to a standard moisture level, such as number 2 yellow corn. The lease agreement also should specifically state how the current year's price is to be determined. The time and place to be used for determining the current year's price should be agreed upon at the beginning of the agreement. Some agreements use an average of the local cash market prices available on several specified days during harvest. Others include forward contract prices available on certain dates prior to harvest, so as to better reflect the operator's marketing opportunities. Other possibilities include futures prices (adjusted for basis), FSA posted county prices, or USDA average monthly cash prices.

Assume the same facts as presented in the first discussion of “flexing for crop price only”: base cash rent of $175.00 per acre, base corn price of $3.50 per bushel, and a base yield of 170 bushels per acre. After harvest, the actual corn price turns out to be $3.80 per bushel (average closing price at Anytown Elevator during the period September 15 to November 1). The actual yield is determined to be 200 bushels per acre for the current year.

The formula for the calculation of the cash rent would be as follows:

\[
\text{base rent} \times (\text{current year's yield} - \text{base yield}) \times (\text{current year's price} - \text{base price})
\]

\[
= 175.00 \times (200 - 170) \times (3.80 - 3.50)
\]

\[
= 223.50
\]

Stated percentage of the current crop's value. With this method, the operator and landowner need to agree at the beginning how to determine the current year's yield and price. Both parties also need to agree on the percentage share of the crop to be used for calculating the actual amount of rent. The formula for determining each year's cash rent is:

\[
\text{current year's yield} \times \text{current year's price} \times \text{agreed-on percentage}
\]

This method results in a sharing of risk similar to that realized under a crop-share agreement, except the owner does not bear any risk for higher input costs.

The owner and operator should discuss and agree on whether crop insurance indemnity payments will be included in the value used to determine the rent. Under a crop-share lease the landowner can purchase crop insurance on his/her share of the crop. By including any insurance payments received by the operator in the gross revenue, the owner can indirectly "insure" the cash rent to be received. If insurance payments are included, however, the premiums paid by the operator should be netted out first, even in the years that no indemnities are received.

**Minimum base rent plus a bonus.** With this method, the operator and landowner agree upon a minimum base rent for the field or farm, and a base gross revenue value. Base gross revenue should reflect an expected yield and price. These values can be determined in the same manner as for a fixed cash rent. This base rent is typically discounted from the "market" rent due to additional risk being
passed on to the operator with the flexible nature of the rent. Both parties will have to agree upon what percentage of the increased value over and above the base revenue would be added to the base rent. Again, these details should be worked out at the beginning of the leasing period and included in the lease agreement.

This method operates as follows: Suppose both parties agree on a base cash rent of $175.00 per acre, assuming a normal yield of 170 bushels per acre and a corn price of $3.50 per bushel. The base gross revenue would equal 170 bu. x $3.50, or $595.00 per acre. They also agree the cash rent will increase by 30 percent of any increase in crop value above $595.00 per acre. To illustrate, if the price of corn increased to $3.80 per bushel and the yield turned out to be 190 bushels per acre, the cash rent would be increased to $213.10 per acre. The cash-rent bonus value is calculated as follows:

\[ \text{\$3.80} \times 190 = \text{\$722.00} \]
\[ \text{\$722.00} - \text{\$595.00} = \text{\$127.00} \]
\[ \text{\$127.00} \times 30\% = \text{\$38.10} \]
\[ \text{\$175.00} + \text{\$38.10} = \text{\$213.10} \]

As discussed above, the owner and operator should agree on whether or not to include crop insurance indemnity payments in the gross revenue value.

**Flexing Rent on Changes in Cost of Inputs**

The cost of variable inputs can change significantly from year to year and cause large swings in profitability. Incorporating a factor that reflects a ratio of the base year’s cost of inputs divided by the current year’s cost of inputs will help stabilize the bottom line for operators. The important inputs to include in this calculation are seed, fertilizer, pesticides (herbicide, fungicide and insecticide), and diesel and drying fuel. These costs should be expressed in dollars per acre rather than price due to the difference in the level of use of the different inputs. Bear in mind that basing rent on input costs will naturally increase the landowner’s interest in how the operator purchases those inputs (for example, he or she may wonder if everything is being done to minimize such costs, such as hedging input prices, buying in quantities sufficient to get discounts, soliciting bids from multiple suppliers to get the best price, etc.). These issues should be discussed by the landowner and operator, and should also be addressed in the written lease.

The total cost of seed, fertilizer, pesticides, and diesel and drying fuel per acre must be calculated for the current year and the base year. Dividing the current year’s input costs by the base year’s input costs adjusts the base rent up or down depending on the change in these input costs.

If the rent is to be adjusted on yield, price and input costs, the formula for the calculation of cash rent would be as follows:

\[ \text{base rent} \times (\text{current year’s yield} - \text{base yield}) \times (\text{current year’s price} - \text{base price}) \times (\text{base year’s input costs} - \text{current input costs}) \]

For the “base rent plus bonus” approach to setting a flexible cash rent, the base gross revenue can be set equal to the operator’s actual cost of production rather than the expected revenue. In this way the bonus rent becomes a share of the operator’s profits, so the lease is in effect a profit-sharing agreement. A charge for the operator’s labor and management, as well as base rent, should be included in the estimate of production costs. This type of agreement shifts some of the risk of unexpected increases in input costs such as fertilizer or fuel to the landowner. It also requires the operator to accurately determine the production costs for that particular land unit, and communicate them to the owner. This will require sound, verifiable farm production and financial records be kept by the operator. This type of agreement also requires some ability on the part of the landowner to audit and verify this information.
Incorporating Flexible Provisions in Written Lease

If it is decided to use some form of flexible cash rent, the details of how the rent will be determined should be clearly specified in a written lease agreement. Including one or two examples with different prices and yields is helpful, as well. The example lease included in this publication includes a page designed for two of the methods for flexing rent discussed in the preceding sections. If some other method of flexing cash rent is preferred, the method should be described in detail in “Method III” of the agreement. Whatever the method used for flexing cash rent, it should be described in writing and included as section IV-C in the total lease agreement.

PART IV

Putting the Agreement in Writing

A copy of a cash-rent lease agreement form is included in this publication. Some of the advantages of a written agreement are:

1. It encourages a detailed discussion of the agreement that leads to a better understanding by both parties.

2. It serves as a reminder of the items originally agreed upon.

3. It provides a valuable guide for the heirs if either the operator or landowner dies, by statute of frauds, interest in real estate generally must be in writing.

The agreement should be carefully reviewed each year to ensure the terms of the agreement are still applicable and desirable.

Every lease should include certain items. These are the names of the parties involved, an accurate description of the property being rented, the beginning and ending dates of the agreement, the amount of rent to be paid, a statement of how and when the rent is to be paid, and the signatures of the parties involved.

These minimal provisions alone, however, do not meet all the requirements of a good lease. Additional provisions should provide guidance on how the land is to be used and outline possible problem areas and solutions.

A good lease should clearly identify the property being rented. If the landowner wishes to reserve the use of certain improvements on the land, these reservations should be clearly stated in the lease.

Absent a statutory or constitutional limitation, the duration of the lease can be any length of time agreed upon by the parties. Most leases are for at least one full year. Operators sometimes request leases for more than one year, particularly if they must invest additional capital in equipment or make improvements on the farm being rented. In some states, farm leases are automatically renewed on a certain date if neither the owner nor the operator provides a notice of termination to the other. In other states, the lease terminates on a certain date if neither the owner nor the operator provides a notice of termination to the other. In other states, termination notices must be served a minimum number of days before the lease is to end. Either party should communicate a desire to end or modify a lease agreement far enough in advance for the other party to make needed adjustments, seek other rented land, or seek a new operator. When a lease is terminated, provisions should be made to reimburse the operator for unrecovered investments in improvements, fertilizer applications, tillage or other considerations.

Landowners and operators should also consider the cropping systems likely to be used on the property when setting the starting and ending dates of the agreement to avoid the issues that can arise when a lease is terminated with a crop still growing on the property.

In general, most transactions involving real estate require a contract in writing to be enforceable. In most states, though, oral leases for not more than one year are valid. Nevertheless, even if the lease term is a year or less, landowners and operators alike should strongly consider using a written lease to make sure that the obligations and rights of the parties are clearly defined and understood.
Landowners, as well as operators, should enter into long-term leases only after very careful consideration. Remember that the lease is a contract — a contract that "marries" the parties to favorable and unfavorable terms alike. Long-term leases commit both parties to each other for the length of the lease. Long-term leases specifying a fixed cash rent are particularly risky because of unpredictable commodity prices and uncertain costs of operation. Landowners and operators should consider adjusting rental rates from time to time when economic conditions change by adding language to their lease that specifies what conditions will justify an adjustment, and how that adjustment will be calculated.

Cash renting gives the operator a comparatively free hand to decide what crops to grow and the number of acres of each crop. Even so, the landowner and operator should have an understanding about which acres can be used for row crops, small grains, and forage. This is particularly important if the land is subject to wind or water erosion. Both parties also should have a specific understanding of issues such as how much silage may be grown, the maximum number of cattle or other livestock that may be grazed on existing pasture, or how much crop residue can be removed.

Generally, it is desirable to set the dates for paying the cash rent to coincide with sales of crops or livestock. Paying more than one installment also may be desirable. For example, one-half the lease payment may be due at the time the lease agreement is signed and the other one-half payment at the time crops are sold. Several smaller payments can help the operator from a cash-flow standpoint while better meeting the needs of the landowner who may be dependent on the farm rental income for family living expenses.

The sample lease contained in this publication contains provisions for most concerns of both the operator and landowner. The parties can cross out or omit unwanted provisions. Be sure both parties initial these lease changes. But, before provisions are eliminated, the landowner and operator should remember that one of the functions of a written lease is to anticipate possible developments and to state how to handle such problems if they actually do develop.

**Cash Farm Rental Agreement Lease Checklist**

**Parties to Lease and Description**

- Date the lease is entered into.
- Names and addresses of the landowner and operator.
- Legal description of the leased property.
- Signatures of the landowner and operator.

**General Terms**

- Time period of the lease, including beginning and ending dates.
- Rental amount for cash lease.
- When and how rent will be paid and penalties for late payments.
- Who will carry insurance on the property and the crop.
- Statement that the landowner and operator do not intend to create a partnership by entering into the agreement. Neither party will obligate the other for debts, liabilities or damages.
- Conditions under which the operator may or may not sub-lease the property.
- If the land is enrolled in an agricultural district, providing protection against nuisance suits over farm operations and additional review if land is taken by eminent domain.

**Termination**

- When and how the lease may be terminated and requirements for notice of termination.
☐ Reimbursement provisions for crop nutrients, lime and/or completed fieldwork upon termination of the lease.

☐ Acts of the operator that would constitute default of the lease.

☐ Operator’s rights if the property is transferred or condemned during the lease period.

☐ Reimbursement provisions for a crop still in the ground when the lease is terminated.

**Operation and Maintenance**

☐ Desired or prohibited farming practices, including types of chemicals that may not be used on the property.

☐ Process of measuring and maintaining soil fertility and pH levels.

☐ Which party is responsible for controlling noxious weeds.

☐ Which party is responsible for maintaining fences.

☐ Whether the operator has the right to make improvements and be compensated for improvements.

☐ Whether the operator has the right to utilize improvements made by the landowner.

☐ Provisions for soil-conservation practices.

☐ Statement regarding the existing environmental status of the property and responsibility to minimize activities that may cause contamination.

☐ Use of non-cropland, garden plots, trees, buildings, grain bins, pasture or other areas not rented for cropland.

☐ Map of the property showing areas authorized for tillage, any areas off-limits to the operator, and any other special features of the property (for example, potentially dangerous areas, areas where hunters may be present, etc.).

**Landowner Rights and Government Payment**

☐ Landowner’s right to enter the property for specific purposes.

☐ Landowner’s right to a security interest in the crops or other provisions for ensuring payment.

☐ Statement of which party will participate in federal farm programs, including responsibility for eligibility and receipt of payments.

☐ Nature of landowner participation in management. This may relate to issues regarding income and self-employment, taxes, Social Security payments, and estate planning.

**Arbitration of Differences**

☐ Provision that any amendments must be in writing and signed by both parties.

☐ Procedure for resolving disputes, including the applicable state statutes.

For additional references, see the North Central Farm Management Extension Committee Website at: http://AgLease101.org/
### Worksheet 1. Landownership Costs as Basis for Fixed Cash Rent

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Acre Value</th>
<th>Rate</th>
<th>Annual Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$________</td>
<td>×</td>
<td>$________</td>
</tr>
<tr>
<td>Interest</td>
<td>×</td>
<td>%</td>
<td>$________</td>
</tr>
<tr>
<td>Real Estate Tax</td>
<td>×</td>
<td>%</td>
<td>$________</td>
</tr>
<tr>
<td>Land Improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tiling</td>
<td>$________</td>
<td>×</td>
<td>$________</td>
</tr>
<tr>
<td>Surface drainage</td>
<td>$________</td>
<td>×</td>
<td>$________</td>
</tr>
<tr>
<td>Conservation practices</td>
<td>$________</td>
<td>×</td>
<td>$________</td>
</tr>
<tr>
<td>Lining</td>
<td>$________</td>
<td>×</td>
<td>$________</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Worksheet 2. Converting Landowner’s Net-Share Rent to Cash Rental Rate

#### Landowner’s Share of Gross Crop Value

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Yield per Acre</th>
<th>Percent of Crop</th>
<th>Tons or Bushels</th>
<th>Price</th>
<th>Total Value</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals (A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Landowner’s Share of Shared Expenses

<table>
<thead>
<tr>
<th>Crops</th>
<th>Landowner Share</th>
<th>Seed</th>
<th>Fert. &amp; Lime</th>
<th>Pesticides</th>
<th>Harvest</th>
<th>Drying</th>
<th>Total Cost</th>
<th>Cost/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>%</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>%</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>%</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Totals (B)</td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

#### Landowner’s Crop Rent (A–B) $________

#### Less risk shifted to operator $________

Net landowner’s share rent per acre $________

---

1 If whole farm leased on a cash-rent basis, list all crops grown, income and shared expenses from each crop
2 Use average yields, allowing for both good and bad years. Incorporate trend in yields
3 Use current prices and costs.
4 USDA payments, crop, stover, etc.
5 Example risk value is 5% of total crop receipts. This number will vary depending on the production risk in your area.
Worksheet 3. Amount of Cash Rent Operator Can Afford to Pay

### Gross Value of Crops Produced

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Acre²</th>
<th>Price³</th>
<th>Total Value</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Income$⁴</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals (A)</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Variable Costs³</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crops</th>
<th>Acres</th>
<th>Acre²</th>
<th>Costs</th>
<th>Per Acre Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Totals (B)</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

**Total Fixed Costs, Labor, and Management$³**

- Crop machinery: machinery value per acre $________
- Depreciation for ____ years $________
- Interest on average investment at ____ percent $________
- Taxes at ____% $_______
- Insurance at ____% $_______

(C) Total machinery fixed costs $________
(D) Labor charge$⁵ ____ hrs/ac @ ____/hr $________
(E) Management charge (____% of total crop values) $________

(F) Total production costs (B+C+D+E) $_______
(G) Amount that can be paid for rent per acre (A-F) $_______

---

1. If whole farm leased on a cash-rent basis, list all crops grown, income from each crop, and variable expenses for each crop.
2. Use average yields, allowing for both good and bad years. Incorporate trend in yields.
3. Use current prices and costs. Variable costs include fuel, oil, repairs, fertilizer, herbicide, insecticide, interest on operating costs, custom hire, drying, insurance, and miscellaneous costs.
4. USDA payments: crop stover, etc.
5. Labor expense or charge may be included in variable expenses.

---

Worksheet 4. Percent of Land Value Approach

<table>
<thead>
<tr>
<th>Crops Grown</th>
<th>Acres:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Acre Value</th>
<th>Annual Rate</th>
<th>Annual Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$_____ ×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Rent to Value</td>
<td>× ____ %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost or Desired Return</td>
<td>$_______</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Worksheet 5. Cash Rent Equal to a Percent of Expected Gross Revenue

<table>
<thead>
<tr>
<th>Crop</th>
<th>Expected Yield</th>
<th>Expected Price</th>
<th>Expected Gross Revenue</th>
<th>Rent as % of Gross Revenue</th>
<th>Cash Rental Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
<tr>
<td>Wheat</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
</tbody>
</table>

Weighted Average:

Based on Corn: ___ acres, soybeans: ___ acres, wheat: ___ acres $

### Worksheet 6. Dollars per Bushel of Production

<table>
<thead>
<tr>
<th>Crop Grown:</th>
<th>Acres:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Average Yieldª</th>
<th>$ per Bushel²</th>
<th>Annual Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>× $</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

ª Certain states have a productivity rating that may be used

² Based on a percent of observed historical rents

### Worksheet 7. Fixed Bushel Rent

<table>
<thead>
<tr>
<th>Crop Grown:</th>
<th>Acres:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Bushel Rentª</th>
<th>Price per Bushel</th>
<th>Annual Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>× $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ªBased on historic rent as a percent of revenue. Based on an equitable crop share percentage (landowner paying no expenses except land) with a discount for production risk.

**NOTES**
Cash Farm Lease

For additional information see NCFMEC-01 (Fixed and Flexible Cash Rental Arrangements For Your Farm).

This form can provide the landowner and operator with a guide for developing an agreement to fit their individual situation. This form is not intended to take the place of legal advice pertaining to contractual relationships between the two parties. Because of the possibility that an operating agreement may be legally considered a partnership under certain conditions, seeking proper legal advice is recommended when developing such an agreement.

This lease entered into this ______ day of _________________________, 20___, between

________________________________________, owner, of ____________________________

________________________________________

Address

________________________________________, spouse, of ____________________________

________________________________________

Address

hereafter known as “the owner,” and

________________________________________, operator, of ____________________________

________________________________________

Address

________________________________________, spouse, of ____________________________

________________________________________

Address

hereafter known as “the operator.”

I. Property Description

The landowner hereby leases to the operator, to occupy and use for agriculture and related purposes, the following described property:

________________________________________

consisting of approximately _____ acres situated in _______ County (Counties), ___________ (State)

II. General Terms of Lease

A. Time period covered. The provisions of this agreement shall be in effect for _____ ___ year(s), commencing on the ______ day of _________________________, 20___. This lease shall continue in effect from year to year thereafter unless written notice of termination is given by either party to the other at least ___ days prior to expiration of this lease or the end of any year of continuation.

B. Review of lease. A written request is required for general review of the lease or for consideration of proposed changes by either party, at least ____ days prior to the final date for giving notice to terminate the lease as specified in II-A.

C. Amendments and alterations. Amendments and alterations to this lease shall be in writing and shall be signed by both the owner and operator.

D. No partnership intended. It is particularly understood and agreed that this lease shall not be deemed to be, nor intended to give rise to, a partnership relation.
E. Transfer of property. If the owner should sell or otherwise transfer title to the farm, such action will be done subject to the provisions of this lease.

F. Right of entry. The owner, as well as agents and employees of the owner, reserve the right to enter the farm at any reasonable time to a) consult with the operator; b) make repairs, improvements, and inspections; and c) (after notice of termination of the lease is given) do tilling, seeding, fertilizing, and any other customary seasonal work, none of which is to interfere with the operator in carrying out regular operations.

G. No right to sublease. The owner does not convey to the operator the right to lease or sublet any part of the farm or to assign the lease to any person or persons whomsoever, including for purposes of hunting, trapping or other recreational uses.

H. Binding on heirs. The provisions of this lease shall be binding upon the heirs, executors, administrators, and successors of both owner and operator in like manner as upon the original parties, except as provided by mutual written agreement.

Additional agreements regarding terms of lease:

III. Land Use

A. General provisions. The land described in Section I will be used in approximately the following manner. If it is impractical in any year to follow such a land-use plan, appropriate adjustments will be made by mutual written agreement between the parties.

1. Cropland
   a) Row crops
   b) Small grains
   c) Hay
   d) Rotation pasture

2. Permanent pasture

3. Other: ________________ Acres

   ________________________ Acres

TOTAL ACRES ________________ Acres

B. Government Programs. The extent of participation in federal, state or county government programs for purposes of commodity support, conservation enhancement or other objectives will be discussed and decided on an annual basis or when the original contract expires. The course of action agreed upon should be placed in writing and be signed by both parties. A copy of the course of action so agreed upon shall be made available to each party.

IV. Amount and Payment of Rent

If a flexible cash rental arrangement is desired, describe it on the last page of this form and omit section A below.

A. Cash rental rates. The operator agrees to pay as cash rent the amount as calculated in the “Amount of Cash Rent” table for each kind of land; or, one total may be entered for Entire Farm unit.

<table>
<thead>
<tr>
<th>Kind of Land or Improvements</th>
<th>Acres</th>
<th>Rate per Acre</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row crops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small grains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent pasture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm buildings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwelling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entire Farm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Amount of Cash Rent (Part IV-A)
B. Rental payment. The annual cash rent shall be paid as follows:

$_________ on or before _____ day of ___________________ (Month)

$_________ on or before _____ day of ___________________ (Month)

$_________ on or before _____ day of ___________________ (Month)

$_________ on or before _____ day of ___________________ (Month)

If rent is not paid when due, the operator agrees to pay interest on the amount of unpaid rent at the rate of _____ percent per annum from the due date until paid.

C. Payee information. The rental payments shall be sent to the address of the owner as shown on page 1 of this lease, or to the following address:

D. Liens. The operator acknowledges and agrees that the owner may file and perfect a lien upon the crops grown under this lease to secure the payment of rents or any other amounts due under this lease, and that the operator may execute the same against such crops in accordance with state law.

V. Operation and Maintenance of Farm

In order to operate this farm efficiently and to maintain it in a high state of productivity, the parties agree as follows:

A. The operator agrees:

1. General maintenance. To provide the labor necessary to maintain the farm and its improvements during the rental period in as good condition as it was at the beginning. Normal wear and depreciation and damage from causes beyond the operator’s control are excepted.

2. Noxious weeds. To use diligence to prevent noxious weeds from going to seed on the farm. Treatment of the noxious weed infestation and cost thereof shall be handled as follows:

3. Conservation. Control soil erosion according to an approved conservation plan; keep in good repair all terraces, open ditches, inlets and outlets of tile drains, and ponds; preserve all established watercourses or ditches including grassed waterways and field borders; and refrain from any operation or practice that will injure such structures.

4. Damage. Upon termination of the lease agreement, to pay the owner reasonable compensation for any damages to the farm for which the operator is responsible. Any decrease in value due to ordinary wear and depreciation or damages outside the control of the operator are excepted.

5. Costs of operation. To pay all costs of operation except those specifically referred to in Sections V-A-4 and V-B.

6. Repairs. Not to buy materials for maintenance and repairs in an amount in excess of $______ within a single year without written consent of the owner.

7. Documentation. To provide the owner with yield or production information for harvested crops sufficient to meet requirements for crop insurance documentation and participation in USDA commodity programs.

B. The owner agrees:

1. Loss replacement. To replace or repair as promptly as possible the dwelling or any other building or equipment regularly used by the operator that may be destroyed or damaged by fire, flood, or other cause beyond the control of the operator or to make rental adjustments in lieu of replacements.

2. Materials for repair. To furnish all material needed for normal maintenance and repairs.

3. Skilled labor. To furnish or pay for any skilled labor tasks that the operator is unable to perform satisfactorily. Additional agreements regarding materials and labor are:
4. **Reimbursement.** To pay for materials purchased by the operator for purposes of repair and maintenance in an amount not to exceed $_________ in any one year, except as otherwise agreed upon. Reimbursement shall be made within ________ days after the operator submits the bill.

5. **Removable improvements.** Let the operator make minor improvements of a temporary of removable nature, which do not mar the condition or appearance of the farm, at the operator’s expense. The owner further agrees to let the operator remove such improvements even though they are legally fixtures at any time this lease is in effect or within _____ days thereafter, provided the operator leaves in good condition that part of the farm from which such improvements are removed. The operator shall have no right to compensation for improvements that are not removed except as mutually agreed.

6. **Compensation for crop expenses.** To reimburse the operator at the termination of this lease for field work done and for other crop costs incurred for crops to be harvested during the following year. Unless otherwise agreed, current custom rates for the operations involved and actual costs for materials applied will be used as a basis of settlement.

C. **Both agree:**

1. **Not to obligate other party.** Neither party hereto shall pledge the credit of the other party hereto for any purpose whatsoever without the consent of the other party. Neither party shall be responsible for debts or liabilities incurred, or for damages caused by the other party.

2. **Capital improvements.** Costs of establishing hay or pasture seedings, new conservation structures, improvements (except as provided in Section V-B-5), or of applying lime and other long-lived fertilizers shall be divided between owner and operator as set forth in the following table. The operator will be reimbursed by the owner either when the improvement is completed, or the operator will be compensated for the share of the depreciated cost of the operator’s contribution when the lease ends based on the value of the operator’s initial contribution and depreciation rate shown in the “Compensation for Improvements” table. (Cross out the portion of the preceding sentence which does not apply.) Rates for labor, power and machinery contributed by the operator shall be agreed upon before construction is started.

3. **Mineral rights and wind/solar development.** The landowner shall have the right to enter into agreements for the development of petroleum, wind, solar, or other resources on the property, and may also authorize third parties to enter the property to survey, construct, and/or operate the facilities reasonably necessary to develop those resources. The landowner agrees to reimburse the tenant for any actual damage suffered for crops destroyed by these activities and to release the tenant from obligation to continue farming this property when and if development of such resources interferes materially with the tenant’s opportunity to make a satisfactory return.

4. **Environmental issues.** The operator shall conduct all operations on the property in a manner consistent with all applicable local, state, and federal environmental codes, regulations, and statutes and shall bear sole responsibility for any violations thereof. The operator shall be solely responsible for securing any permits or approvals necessary for his or her activities on the property. In the event of any legally-prohibited release of materials to the environment, the operator will indemnify the landowner for any costs of environmental cleanup and restoration as well as any penalties, fines, judgments or other amounts incurred by landowner as a result of such release.

5. **Arbitration of differences.** Any differences between the parties as to their several rights or obligations under this lease that are not settled by mutual agreement after thorough discussion, shall be submitted for arbitration to a committee of three disinterested persons, one selected by each party hereto and to the third by the two thus selected. The committee’s decision shall be accepted by both parties.
VI. Amount of Rent to be paid when Cropland is rented on a Flexible Basis

Flexible cropland rent. (Use Method I, II, or III.)

1. Basic information to be used in Methods I and II

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Base Cash Rent (per acre)</th>
<th>Base Yield (bushel or ton per acre)</th>
<th>Base Price (per bushel or ton)</th>
<th>Base Input Costs (per acre)</th>
<th>Minimum Cash Rent (per acre)</th>
<th>Maximum Cash Rent (per acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The current price for the current year shall be Average Price at close of day based on the following time periods(s) and location(s).

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Day</th>
<th>Month through</th>
<th>Day</th>
<th>Month at</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Price Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Base Year Input Costs

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Seed</th>
<th>Fertilizer</th>
<th>Pesticides</th>
<th>Fuel</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

For each year of this lease, the Base Cash Rent per acre for each crop shall be adjusted at the close of the cropping season by one of the following methods:

Method I - Flexing for Price Only

\[
\text{Adjusted Rent for the Year} = \text{Crop(s)} \times \frac{\text{Current Price}}{\text{Base Price}} \times \text{Rent Per Acre} \times \text{Acres Grown}
\]

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Base Rent</th>
<th>(Current Price ÷ Base Price)</th>
<th>Rent Per Acre¹</th>
<th>Acres Grown</th>
<th>Adjusted Rent for the Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Method II - Flexing for Price and Yield

\[
\text{Adjusted Rent for the Year} = \text{Crop(s)} \times \frac{\text{Current Price}}{\text{Base Price}} \times \frac{\text{Current Yield}}{\text{Base Yield}} \times \text{Rent Per Acre} \times \text{Acres Grown}
\]

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Base Rent</th>
<th>(Current Price ÷ Base Price)</th>
<th>(Current Yield ÷ Base Yield)¹</th>
<th>Rent Per Acre</th>
<th>Acres Grown</th>
<th>Adjusted Rent for the Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Method III - Flexing for Price, Yield and Input Costs

\[
\text{Flexible Rent} = \text{Crop(s)} \times \frac{\text{Base Rent}}{\text{Current Base Price}} \times \frac{\text{Current Yield}}{\text{Base Yield}} \times \frac{\text{Base Costs}}{\text{Current Costs}} \times \text{Acres Grown}
\]

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Base Rent</th>
<th>(Current Price ÷ Base Price)</th>
<th>(Current Yield ÷ Base Yield)¹</th>
<th>(Base Costs ÷ Current Costs)</th>
<th>Acres Grown</th>
<th>Flexible Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ If calculated figure is less than “minimum cash rent” in Part I, use the set minimum. If calculated figure is more than “Maximum Cash Rent” in Part I, use the set maximum.

¹The current yield shall be the “farm” yield for the current lease year.
Method IV - Work Out and Record Procedure To Be Used

Executed in duplicate on the date first above written:

__________________________  __________________________
Operator                      Owner

__________________________  __________________________
Operator’s spouse              Owner’s spouse

State of ________________________
County of ________________________

On this __________ day of ____________, A.D. 20______, before me, the undersigned, a Notary Public in said State, personally appeared ______________________, ______________________, ______________________, and ______________________ to me known to be the identical persons named in and who executed the foregoing instrument, and acknowledged that they executed the same as their voluntary act and deed.

__________________________
Notary Public