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The last five years have seen surge fluctuations in yields and prices. For example, the average corn price for 1994 was about \$2.20, while 1996 corn prices went above \$5.00. With these variations in yields and prices, producers and landowners are looking at methods of keeping the benefit of a cash lease and at the same time sharing the price and yield risk.

Base Rent: Your first step is to estimate the base rent. Below are some guidelines for estimating the base rent. The base rent should cover taxes, insurance and some return on investment. For example, the base could be set at taxes, insurance plus a 3% return on investment. If taxes are \$23.00 per acre, insurance is \$2 per acre and the land is valued at \$2,500 per acre. The base rent would be \$100 per acre. Another method would take 20%-25% of the gross value of the crop. For example, if the average corn yield is 150 bushels per acre with an average price of \$2.50 per bushel. The gross value of the crop would be \$375. Base rent would be \$75 - \$94.

Adjusting for Price and Yield: One method of modifying a fixed cash rent is by using a formula of current yields divided by the five-year average yield. When yields are higher than average, rents are adjusted up. This formula also allows for rent to be adjusted down if actual yields are lower than the five-year average. For example, a cash rent of \$120 on land that averages 150 bushels per acre is agreed upon by the landowner and operator. The actual yield turns out to be 120 bushels per acre. The rent would be adjusted down to \$96. The formula would be:

$$\$120 \times \frac{120 \text{ bu.}}{150 \text{ bu.}} = \$96 \text{ actual rent}$$

The same method can be used to adjust for price on a combination of price and yield.

Bonus Rent: For many years, commercial

urban real estate has paid a flat-rate rent plus a percentage of the gross income of the business. This concept is being transferred to farm rents. A base rent is established, for example: \$100.00 per acre. A base yield is also established, for example: 120 bushels of corn per acre. Each year the amount of rent is adjusted by the operator paying the owner a share of the corn yield (1/3rd) that exceeds 120 bushels times an agreed upon price-- either fixed or indexed. The landowner's share of the excess crop should be approximately the landowner's netshare of the gross income.

Base Rent with Upward

Adjustments: With this method, the tenant and landowner agree on a minimum cash rent for a normal yield and a relatively low price. For example, the average yield is 150 bushels per acre and \$2.00 per bushel, and a base rent of \$120 per acre. Then the rent would be adjusted for price above the agreed-upon amount. For example, for each \$0.10 per bushel in price rent would be increased \$3.00 per acre. Thus, if the current price turns out to be \$2.70 a bushel, the cash rent would be \$120 plus \$21(7 X \$3.00) or \$141.00. It should be noted that the tenant still is assuming much of the risk. If yields drop to 100 bushels per acre and prices go up to \$3.00, the tenant would owe \$150 cash rent.

Percent of Product: The cash rent is the share of the crops produced times the price of the crops at a specific time. The cash rent is determined by both yield and price. The tenant pays all the expenses just like other cash rent, while the landowner pays the land taxes. The range of the share in Illinois is from 25% for the lower productive soil to a high of 40% for the best soil.

Adjustments Outside Normal Range:

A cash lease can be adjusted to provide protection for the operator as well as allowing the landowner to share in the good years. This can be done by putting in the lease

arrangements an expected yield range. If the expected yield range is 100 to 140 bushels per acre, and yields fall below the 100 bushels per acre, the rent would be reduced by the difference in yields times 33% of the value of the yield difference. For example, assume a normal cash rent is \$120 per acre, but this year's yields were only 70 bushels per acre. The difference would be a reduction in rent of 30 bushels times \$.90 (one third of the value of the corn), or \$27, adjusting the cash rent to \$93. The same method could be used to adjust the rent up if the yield went above the 140 bushels per acre. The range would allow for normal variations in yield, but provide for an adjustment for the operator if yields fall below an acceptable level. This also allows the landowner to share in a very good year.

There are a few methods that can be used to adjust cash rent. A variable cash rent arrangement protects the producer from a disaster as well as rewards the landowner in a good year.

Cash Rent Per Bushel Harvested: This method allows the landowner to benefit from the increase in yields but not improvements in price. According to the leasing survey, cash rent is from \$.80-\$.85 per bushel. You could establish a base rent, of which half would be paid in the Spring, and, after the actual yields are known after harvest, the second payment would be made. *For example:* If the average corn yield is 140 bushels per acre, then your cash rent would be \$112-\$119. If your base rent is \$100, you would pay \$50 in the Spring. Then, after harvest, when you have actual yields of 160 bushels per acre, the second payment would be \$86(160 X .85 -50=86).

Average Yields and Prices: It is important to agree ahead of time on the procedure for estimating the final rent. If yields are to be used to adjust cash rents, then the details of how the current year's yields should be spelled out. Is the yield to be estimated by measuring the storage bins, or by taking field samples, or by weighing and correcting for moisture? If yield is determined by volume, when will the volume be determined? Another method of determining yields would be use of county average yield. If county yields are used, there may be a delay until the final county yields are known. The price used can be the cash price at a specified location on a set date, or a future

contract price, minus a normal basis amount.

