Analysis

A current look at farmland rental rates and arrangements

An analysis of variable cash lease arrangements

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This is the third in a series of three articles on this topic

Rental rates are correlated with crop revenues but the rate of increase in cash rates has lagged behind crop prices. The jump in crop prices in a given crop year raises the ability and the expectation about net returns in the next crop year. Tenants are then prepared to offer more (and landlords expect more) based on what happened in the past.

The steady increase in prices over the last several years has benefited tenants; returns have often exceeded initial expectations when rents were set. What happens to the financial situation if crop prices fall rather than increase? Are there rental arrangements to mitigate this risk with methods other than price and/or yield insurance?

The potential for prices to fall should be considered when making rental decisions. One approach would be to lower cash rates based on expected prices but these price projections will vary by tenant and the landlord will accept the highest cash rate, which will come from the farmer with the most optimistic price forecast. You could be left out of the rental market.

An alternative to the fixed cash rental is a share arrangement or a mixture of a cash and share agreement. The use of a cash rent with bonus contract is increasing in the US Midwest as it offers downside protection to the tenant but also allows the landlord to enjoy higher returns if the upside potential of revenues are reached.

A variable cash lease involves a fixed cash rental rate that must be paid by the tenant regardless of revenue but also includes a bonus for the landlord if revenues exceed a target. The negotiations are more complex for such a rental contract as the farmer and landlord must agree on: 1) the base rent, 2) the revenue trigger that kicks in the bonus, and 3) the landlord share of revenue above the trigger.

An example of a variable cash lease and the returns it offers to the tenant and landlord is given in Table 4. The minimum cash rent that must be paid by the farmer is $200 per acre in this example. A crop revenue target is established at $750 per acre, which just covers the land cost of $200 and non-land expenses of $540 per acre. Revenue is measured by actual yield from the land being rented and price, which can be measured as the local harvest price or a 6-month average of new crop prices for the period leading up to harvest. The revenue share to the landlord going to the landlord for returns above this target is set at 40%.

At the target revenue of $750, the landlord receives the guaranteed rent of $200 and the tenant receives the remainder after non-land costs ($540) and rent ($200) are covered, which is $10 per acre. If revenues increase to $1000, the landlord gets the $200 but also a bonus payment. The bonus is equal to 40% of the difference between actual and target revenue (1000-750=250), which is $100. Thus, the landlord receives a total of $300 equal to the base rent of $200 plus the bonus of $100. From the $1000 revenue, the farmer must cover his expenses of $540 and pay a rent of $300, which leaves a net of $160.

As revenues increase, the amount going to both parties increases. For every $250 increase in revenue above the target, the rent going to the landlord increases by $100 (40% of $250). The return to the farmer increases by $150 for every $250 increase in revenue about $750.

The advantage of the variable cash rental arrangement is that it partially shares both the downside and upside risks of the commodity markets between the tenant and landlord without going into a complete profit share agreement. The contrast with a fixed cash rent of $300 is illustrated in Table 4. The return to both parties is the same as with the fixed and variable cash rent options if revenue is $1,000 per acre. This revenue can be obtained under current expected harvest

Table 4. Net Returns to Tenant and Landowner under Fixed and Variable Cash Rental Arrangements for Different Crop Revenue Conditions ($ per acre)

CROP RENTAL ARRANGEMENT		REVENUE PER ACRE ($/ACRE) 750	1000	1250	1500
Fixed Cash Rent	Tenant	-90	160	410	660
$300	Landowner	300	300	300	300
Cash Rent with Bonus	Tenant	10	160	310	460
$200 base 40% share > $750 target	Landowner	200	300	400	500
$250 base	Tenant	-40	135	310	485
40% share > $750 target	Landowner	200	325	400	475

Non-land variable costs of $540 per acre are paid by the tenant and do not include principal and interest on long-term debt.

prices of $5.50 per bushel and a yield of 182 bushels per acre. If prices or yields fall below these expectations and actual revenue is $750, the farmer would lose $90 under a fixed cash rent of $300 but have a small surplus with the variable cash lease. However, if harvest conditions exceed expectations and revenues are $1250 per acre, then the landlord receives $400 under the bonus scheme as opposed to $300 with the fixed cash rent. The return to the farmer would drop by the $100 from $410 to $310 but the returns are still healthy and may be worth the downside protection.

These parameters are interrelated and cannot be negotiated separately. For example, the tenant may want a lower base rent but the landlord will seek a lower trigger and/or higher bonus share in return. An alternative variable cash lease arrangement is listed in Table 4 with the base rent increased to $250 and the share above the target lowered to 30%. The University of Illinois offers a spreadsheet to estimate the returns to each party with alternative parameters and revenue conditions (FAST 2012).

Farmland rental markets have become more competitive over the last several years due to the increase in commodity crop prices. Since rents have lagged behind crop prices, the returns to renting have exceeded expectations. This has fed the optimism in the market by both tenants and landlords. However, 2013 prices are expected to fall from those for the current crop year and rental rates offered by tenants should carefully consider likely prices, yields and costs when making a bid. Alternative rental arrangements may offer a means to protect the downside risk to farmers but also allow landlords to earn some of the returns from upside risk.

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