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Making Money and Managing Risk with Flexible Cash Leases

Nebraska Lincoln EXTENSION

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Objectives

- As a result of this section, you will have a basic understanding of:
  - Cash rent vs. flex rent
  - Base rent
  - Concepts important to flexible leases
  - Two basic methods of starting flexible cash leases

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Players

- Brad and wife Cindy

- Brad has been farming for several years
- He owns 220 acres and rents 1000
- Money is tight and he does not have access to large pools of capital

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Players

- Landowner #1
- Phil – retired farmer, but still very adept at farm practices and markets

- Landowner #2
- Kaylee – estate owner with siblings; greatly removed from farming but receives "advice" from her sister

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Background

- Brad – rents ground from both landowners, currently on straight cash rent
- Farms are both located in Fillmore County, NE
- Farm #1 is 160 acres of irrigated ground with a corn APH of 198 bushels per acre; Brad pays cash rent of $280 per acre
- Farm #2 is 320 acres, also irrigated corn with a corn APH of 210 bushels per acre; Brad pays cash rent of $320 per acre
- Brad recently met with both landowners separately to renegotiate his contracts – both are written

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More on Phil

- Phil is concerned about what has been happening with crop markets this past 5 years
- Phil wants to keep Brad on the farm, he likes his farm philosophy and Brad has helped on several occasions
- Phil wants to be fair.....but....
  - What might Phil be thinking?

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More on Kaylee

- Kaylee is a professional in Kansas City, MO and has not been on the farm in about 15 years
- When her mom passed, the farm passed into a trust fund, of which Kaylee is the executor
- Kaylee negotiates on behalf of her sister (also far removed), but doesn't really keep up on agriculture
- She gets her info from sis and from the internet
- Kaylee wants to be fair….but….
  - What might Kaylee be thinking?

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Brad's First Meeting - Phil

- What are Brad's concerns with farming for next year?
  - Crop prices are OK now, but who knows what will happen in the future. I'm OK with offering some bonus rents, but I want some protection also if things go south
- What are Phil's concerns with farming for next year?
  - Crop prices are up….yields are up….how can I get in on some of these uptrends and still be fair?

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Brad's Second Meeting - Kaylee

- Kaylee's concerns – sis says that crop prices are through the roof and yields are great. She says we should double the rent. I really hate negotiating these contracts, but it's my job. I want to make sure I get paid for all this trouble. I don't know Brad from Boo…why should I care who farms the ground anyway?
- Brad's concerns – How do I show this landowner that I am doing a good job and want to be fair in the cash rent I pay? I can't afford to farm the ground at almost $700 per acre!

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What are the Main Issues Here?

- Brad wants to be able to farm the ground at a fair price and is willing to offer bonus rent…if they are there. He is also looking for protection and is unwilling to accept more risk without any return
- Kaylee wants to know her investment is paying off
- Phil is willing to take more risk, but only if there is the potential for payout in the end

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What is Cash Rent?

- The owner receives a fixed and established rent for the use of agricultural assets, by the tenant
- Why is this important?
  - SET amount, written or verbal contract
  - Fixed, there is no variation due to price or yield

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Flexible Cash Leases?

- Brad approaches both Phil and Kaylee with a new idea – Flexible cash lease provisions
- These additions to the lease are designed to adjust a cash lease for changes in yield, price, farm income…or all the above
- Kaylee is interested, Phil is concerned about his land and how he will make his owner payments

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Brad Negotiates….

- Brad suggests that they (landowners) work to first establish a base cash rent; somewhere they can flex from. Brad suggests using the current cash rent per acre as the base
  - Kaylee is concerned that the cash rent is already too low and wants to renegotiate the base
  - Phil is OK with the current rent as the base

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Setting the Base

- How do you know what to charge?
  - Ask around…neighbors…coffee shop?
  - University and NASS reports?
  - Return on investment?
  - Other?
- Many sources of information are available…which one is the best?

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Kaylee Looks Around

- She gets the NASS and University reports
- She asks her neighbors and family for help
- Kaylee comes up with a myriad of numbers, but none of them are even close to each other!?!
- Which should she pick?

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How Do the Various Methods Compare?

Filimore County #1– Irrigated 5-Year Average APH = 198 bu. Per ac. Average land value of $4500/ac.	
Method	
Current rate	$280/ac.
Historic Area Rent	$201/ac.
Historic County Rent	$206/ac.
Gross Rent-to-Value	$216/ac.
Rent-per-Harvested bu.	$198/ac.
Gross Margin	$256/ac.
Average of all methods	$215/ac. (Excludes TR)

None of these are even close to the current rate…what went wrong?

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Brad Talks with Phil

- "Brad, I'm OK with the base rent but how do we put together this flexible cash lease? I would like to have a lease that adjusts for yields…I'm not as concerned with the price you get, but I want compensated for yields"
- Brad suggests they look at the following
  - Rent-per-bushel
  - Gross cash rent
  - Change in APH yields

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The "By the Bushel Contract"

- Brad drafts this provision; rent is established by the final yield
- The net cash rent will be established by taking the final bushels harvested per acre by some number
- Phil was OK with a cash rent of $320 per acre and the farm has an APH of 210 bushels per acre…Brad calculates an average rent-per-bushel:
  - $320/210 = $1.52 per harvested bushel

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Variable Rent by Total Yield

- Provision – Owner receives rent equal to the total production times some set value for the commodity
  for example:
  - $1.52 per bushel of harvested corn/Ac.

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Variable Rent by Total Yield

- How might this provision play out
- Brad runs some examples for Phil:
  - Scenario #1 – the farm yields a 2012 total of 230 bushels per acre. The final payment would be $1.52 * 230 = $350 per acre
  - Scenario #2 – the farm yields 190 bushels per acre the final payment would be $1.52 * 190 = ~$289
- Phil is concerned – what if the yield is 0???

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Limit Your Risk Exposure

- Brad suggests they use a risk spread:
- This is a contract – protect your risk
  - Set ceilings and floors
  - The tenant will never pay more than ____ amount and the landowner will never accept less than ____ amount.

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Floors and Ceilings

Upper Limit - $370

Tenant Risk of Reduced Return

Owner Rewarded for Productivity

Base Cash Rent - $320

Tenant Risk Management Tool

Owner Financial Risk in Operation

Lower Limit - $270

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Protect Against Undue Risk

- Brad drafts the provision:
- The tenant will pay the landowner $1.52 for every harvested bushel of corn. The tenant will never pay more than $370 per acre and the landowner will not accept anything less than $270
- Phil asks Brad when payments are due….

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Brad Continues with the Contract

- Brad suggests that he pay Phil the minimum due on March 1st ($270) and that the final adjusted payment, if any, be paid on Dec. 1st
- Phil agrees
- Phil confirms that this contract will meet the requirements for the FSA farm program with Brad…

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What Else Can We Try?

- Brad explains that there are a few other options they can try…
- Brad demonstrates how they might use a change in expected yield as a way of flexing the rent

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Brad Explains Metrics

- Anything you can measure
  - A beginning value
  - An ending value
  - Calculate change
- Are these metrics?
  - Husker games won this year
  - MPG of your Toyota
  - Weight of your dog

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Understand Calculating Change

- Calculates the change in a variable from one period to another:

$$\text{Percent Change in } X = \left[\frac{(New\,Value\,of\ X - Old\,Value\,of\ X)}{Old\,Value\,of\ X}\right] \textit{times } 100$$

Our Variable is Price

	Price
Time Period One	$ 10.00
Time Period Two	$ 18.00

= [($18 - $10)/$10] * 100 = .80 or 80%

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Variable Rent by Yield Adjustment

Farm Base Rent	$320.00
5-yr Farm APH	210 bu.
2012 Actual Production	220
Difference (Actual – APH)	6 bu.
Percent Change (220-210)) x 100 210	4.76%
New Rental Payment (Farm Base) x (1 + Percent Change/100) $128 x (1 + .041) =	$325
Represents a farm that realized 104.76% of expected production, thus receives 104.76% of expected rental payment	

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Rent by Yield Adjustment

Farm Base Rent	$320.00
5-yr Farm APH	210 bu.
2011 Actual Production	190 bu.
Difference (Actual – APH)	- 20 bu.
Percent Change (190-210) x 100 210	-9.52%
New Rental Payment (Farm Base) x (1 + Percent Change/100) $320 x (1 - .0952) =	$290
Represents a farm that realized 90.48% of expected production, thus receives 90.48% of expected rental payment	

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Protecting Against Risk

- Brad and Phil also suggest that they use the same risk spread as the rent-per-bushel method
- Brad drafts the lease:
  - The tenant will pay the landlord a rent equal to a percentage change based on expected yield and final yield. The tenant will never pay more than $370 per acre and the landowner will never accept anything less than $270 per acre. Minimum payment due on March 1st.

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Brad and Phil Reach an Agreement

- Both parties agree to use the percent change in expected yield and the means of flexing the final rent due. Have they met their objectives?
  - Phil accepts risk in return for potential reward
  - Brad extends risk to the landowner and gives up some potential reward, but also gets some protection should anything go wrong

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Brad Meets with Kaylee

- Kaylee explains that her family is calling all the time saying that corn prices are through the roof and that they should receive some payment for this windfall pricing
- Kaylee explains she has checked the internet and sees that corn prices have been in high $6's and low $7's
- What is Kaylee missing, what should Brad tell her?

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Brad Negotiates

- Kaylee understands that there is variation in pricing and suggests that they find a way to flex the rent based on price
- Brad recommends they look at the following options
  - Change is cash price
  - Percent of total yield as a cash payment

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Brad Shuffles His Papers…

- Brad pulls out his notes from working with Phil and explains to Kaylee how they might flex the base rent based on a percent change in some price
- Options they might use:
  - Futures price?
  - Change in basis?
  - Change in some local price?
  - Crop insurance index?
  - Which is best?

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Variable Provision by Crop Price

Farm Base Rent	$280
5-yr Farm APH	198 bu.
March Crop Insurance Index	$5.20
Harvest Crop Insurance Index	$6.00
Percent Change (Harvest - Plant) x 100 ($6.00 - $5.20) / $6.00 x 100	13.3%
New Rental Payment (Farm Base) x (1 + Percent Change/100) $280 x (1 + .133) =	$317
What are some of the problems with this method? What problems do you see?	

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Variable Provision by Crop Price

Farm Base Rent	$280
5-yr Farm APH	198 bu.
March Crop Insurance Index	$5.20
Harvest Crop Insurance Index	$4.50
Percent Change (Harvest - Plant) x 100 ($4.50 - $5.20) / $4.00 x 100	-15.5%
New Rental Payment (Farm Base) x (1 + Percent Change/100) $280 x (1 - .155) =	$236
What are some of the problems with this method? What problems do you see?	

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Kaylee Pulls the Brake

- "Hold on a minute…what if the price drops out completely? How do I protect my investment here?"
- Brad suggests they use the same type of floor and ceiling as he did with Phil
- Kaylee is new to agriculture and wants a short risk spread. Brad suggests they start this year easy and only flex $25 each direction off the base…

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Brad's Provision

- Brad drafts the following provision:
- The tenant will pay the landowner a final rent based on a percent change in crop insurance price index from Spring to Harvest using COMBO. The tenant will never pay more than $305 and the landowner will never accept less than $255 per acre. The minimum payment will be due on March 1st and a final payment will be due on Jan. 1st of 2013.

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Kaylee Continues…

- "I'm concerned…I know yields are important, but they don't show up here. Is there a problem? I went to business school and I know that supply and demand affect price…"
- Brad explains the correlation between price and yield in the midwest and some problems with using crop prices as a flexible lease provision alone…

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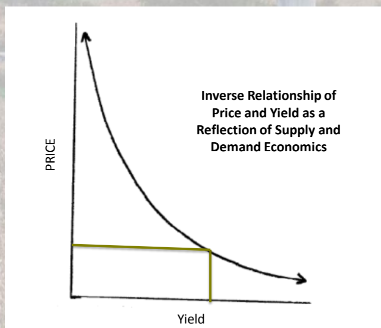

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Final Payment as a Percent Gross Income

- Kaylee looks back
  - "Maybe I need to look at another option. You said something about gross bushel payments…what is that? It sound like something I might be able to sell my sister easier than the percent change"

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Percent Gross Income

- Brad explains:
  - Historically, cash rents make up some portion of the final gross production in bushels
  - We can draft a flexible lease that says you receive some agree upon portion of the final gross production

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Kaylee is Interested…

- Brad explains
  - First we need to figure out how many bushels your farm gets in rent payment. We can do that by looking at the APH and current base rent
  - First, we need to estimate what the average crop price will be 2012
  - Then, we need to calculate how many bushels it will take to reach that base payment

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Percent of Product

- Brad examines some documents that forecast a price and suggests they use $5.30 per bushel…Kaylee agrees
- Brad takes the base rent of $280 per acre and divides it by the crop price of $5.30
  - $280/$5.30 = 52.8 bushels
  - Brad calculates the percent – 52.8/198 = 26.6% of production
- Kaylee pulls back
  - I don't want bushels, I just want a check!

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Percent of Product

- Brad suggests that during the production year, she have the option of setting her payment price
- Brad suggests they use HIS local elevator cash forward contract….why?
- Brad suggests that sometime between April 1 and Oct.1 she contact him and set her payment price
- Kaylee wants to know what this looks like before she says yes

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Brad Demonstrates

- Brad drafts the following:
  - The tenant will pay the landlord 26.6% of the final per bushel yield. The landlord will contact the tenant and set the price based on a local cash forward contract between Apr. 1 and Oct. 1
  - Assume that the price on June 1st is $5.00 per bushel in 2012; the landowners calls and sets the price
  - At the end of harvest in 2012, the final yield is calculated to be 210 bushels per acre

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The Results

- Percent of product
- 210 bushels per acre * .266 = 55.86 bushels rent
- 55.86 bushels * $5.00 = $279 per acre final rent payment
- Kaylee is concerned – "I don't want to wait till the end of the year to get paid! What do we do?"

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Brad Continues…

- Brad suggests they use the floor and ceiling, just like he had used with Phil
- Brad continues the provision
  - The tenant will never pay the landlord more than $305 per acre final payment and the landowner will never accept less than $255 per acre with the minimum payment due on March 1st and final payment, if any due on Jan. 1st

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The Result

- Kaylee likes this method, there is a connection between both price and yield. Her sister agrees…
- Brad and Kaylee draft the contract…

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What Happens Next Year?

- There are an infinite number of ways to flex a cash lease, these are only a few examples…
- Start simple and small and build from there
- Evaluate different options and methods of flexing the lease
- Remember the objectives
  - Risk for reward and protection
- Example of a flex cash lease at the end of your packet
- Other information is included – average yields for 2010, percent of gross income, and per-bushel average rents

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Summation

- Does variable flex leasing have a place in Nebraska?
- How does variable flex leasing help the landowner?
- How does variable flex leasing aid the tenant?
- How can variable flex leasing be used to encourage agricultural participation by the younger generation?

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