Exercise 3a

Calculating overall or average unit prices

Calculate the following weighted averages of contract and cash prices.

Market price	Contract price	Percentage contracted	Overall or average unit price
$65.00	$73.00	50	
75.00	83.00	40	
1.65	1.75	35	
4.25	3.50	80	
54.00	65.00	72	
3.00	2.75	65	
83.00	72.00	75	
83.00	72.00	55	
83.00	72.00	30	
83.00	72.00	0	

Exercise 3b

Scenario analysis of fixed-price contracting strategies

Your task is to determine your overall or average unit price in each scenario for a range of fixed-price contracting strategies. This will give you information that will be useful in choosing a marketing strategy that is right for you. Use the scenarios you defined in Exercise 2. Use the following five steps:

1. Identify several contracting strategies (defined by percent contracted) that you want to evaluate.
2. Review the cash or market price levels for each scenario.
3. Review the contract base price of the commodity in question.
4. For each strategy, calculate the overall or average unit price.
5. Analyze the results.

Price scenario analysis work sheet

Scenario analysis for: _____

Delivery location: _____ Delivery date: _____

Product specifications: _____

	Scenario				
	1	2	3	4	5
Market price	____	____	____	____	____
Contract price	____	____	____	____	____
Strategy	**Overall or average unit price**				
1. No contracting	____	____	____	____	____
2. Contract 25%	____	____	____	____	____
3. Contract 50%	____	____	____	____	____
4. Contract 75%	____	____	____	____	____
5. Contract 100%	____	____	____	____	____

Exercise 4

Net income scenario analysis of fixed-price contracting strategies

Your task is to determine your net income in each scenario for a range of fixed-price contracting strategies. This will give you information that will be useful in choosing a marketing strategy that is right for you. Use the scenarios you defined in Exercise 2 and the overall prices calculated in Exercise 3. Use the following four steps and complete the work sheet on page 22.

1. Determine the level of price risk.
2. Determine the level of production and per unit cost of production.
3. Calculate gross revenue and net income for each scenario and summarize in a table.
4. Select the final strategy by comparing income figures with your price or management objective.

Net income scenario analysis work sheet

Scenario analysis for: _____

Delivery location: _____ Delivery date: _____

Product specifications: _____

Expected production: _____ Unit production cost: _____

	Scenario				
	1	2	3	4	5
Market price					
Contract price					
Production cost					

1. Multiply expected production by the appropriate overall or average unit price from the price scenario analysis work sheet to calculate gross revenues.

Strategy	Gross revenues ($)				
1. No contracting					
2. Contract 25%					
3. Contract 50%					
4. Contract 75%					
5. Contract 100%					

2. Subtract the production cost from each gross revenue to calculate net income levels.

Strategy	Net income ($)				
1. No contracting					
2. Contract 25%					
3. Contract 50%					
4. Contract 75%					
5. Contract 100%					

Answer key 1

Video questions

Indicate whether each of the following statements is true (T) or false (F).

(T) F 1. Risk is defined as the chance or probability of an unfavorable outcome or result.

Comment: True. This is the basic definition of risk. Price risk is the chance or probability of an unfavorable price.

T (F) 2. A farmer or rancher's primary risk management objective should be to totally eliminate risks, if at all possible.

Comment: False. Total elimination of risks may also eliminate any potential for profitability. The primary risk management objective is to achieve a reasonable level of profit at an acceptable level of risk.

(T) F 3. Fixed price forward contracts eliminate price risks, but also eliminate the potential for prices higher than the contract level.

Comment: True. Farmers or ranchers with fixed-price contracts get the same price regardless of market prices at time of delivery.

(T) F 4. The advantage to a producer of forward cash contracting is that it removes all of the price risk for the quantity contracted.

(T) F 5. One reason many farmers or ranchers do not forward cash contract is because they are afraid of crop reduction or failure in which case they would be unable to deliver the quantity contracted.

(T) F 6. As a farmer or rancher increases the percentage of his/her crop that is forward contracted, he/she sacrifices chances to benefit from higher-than-expected prices.

(T) F 7. The demand side of the supply-demand equation is typically a little easier to predict because we know historically how much buyers are willing to pay for various quantities of things.

T (F) 8. The secret to managing price risk is to find someone who knows what prices are going to be in the future.

Comment: False. No one knows what prices will be—not even the experts.

T (F) 9. Price forecasting is a very exact science.

Comment: False. Price forecasters have to deal with uncertain weather, imperfect supply information, and unpredictable producers in making their supply estimates so it can never be an exact science.

(T) F 10. Scenario analysis is a technique to help producers think about risk management in a systematic way.

T (F) 11. When assessing future market events and prices through scenario analysis, you must describe all possible scenarios in order to successfully predict the price risk you face.

Comment: False. You cannot possibly include all events and price levels. A few select scenarios will give you a good idea of the kinds of possibilities you are facing.

T (F) 12. Once you have defined the scenarios, the secret of good management is to pick the scenario that you want to happen.

Comment: False. The best you can do is to make judgments about which scenarios are most likely and which are least likely to occur.

T (F) 13. Hedging in the futures market is the most commonly used tool that farmers and ranchers currently use for dealing with price uncertainty.

Comment: False. The most common marketing tool is forward cash contracting.

Answer key 3a

Calculating overall or average unit prices

Calculate the following weighted averages of contract and cash prices.

Market price	Contract price	Percentage contracted	Overall or average unit price	
$65.00	$73.00	50	**$ 69.00**	(0.5 X 65) + (0.5 X 73)
75.00	83.00	40	**78.20**	(0.6 X 75) + (0.4 X 83)
1.65	1.75	35	**1.69**	(0.65 X 1.65) + (0.35 X 1.75)
4.25	3.50	80	**3.65**	(0.2 X 4.25) + (0.8 X 3.50)
54.00	65.00	72	**61.92**	(0.28 X 54) + (0.72 X 65)
3.00	2.75	65	**2.84**	(0.35 X 3) + (0.65 X 2.75)
83.00	72.00	75	**74.75**	(0.25 X 83) + (0.75 X 72)
83.00	72.00	55	**76.95**	(0.45 X 83) + (0.55 X 72)
83.00	72.00	30	**79.70**	(0.7 X 83) + (0.3 X 72)
83.00	72.00	10	**81.90**	(0.9 X 83) + (0.1 X 72)

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