SMART CONTRACTS

WHAT THE PROS DO AND WHY

HOW TO GUIDE

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Using Contracts to Minimize Risk

Producers can not eliminate risk, but they can reduce it. Contracts are an excellent tool which, if used correctly, will help producers reduce risk and increase profitability.

There is specific time and place for each contract depending on current market conditions, time of year, personal preference, etc. Understanding which contract to use and why to use it is critical for successful grain marketing.

Each grain company has a variety of contracts. Some are unique to a certain company while others are generic; however, most contracts follow the same basic principles outlined within this document.

* Many of these contracts also apply to end users, but in reverse. i.e. Protection against high prices.

Fixed Price Contract

What is it?

- Contract for a certain amount of grain at a predetermined price for a particular delivery period.
- i.e. Typical fixed price contract. 44 mt of Barley is sold at $4.00/bu for immediate delivery.
- A production contract could be considered a fixed price contract if both price and quantity are locked in. Some production contracts may have Act of God coverage.

Risks:

- Market may continue to rise after grain is priced
- Typically no Act of God clause
- Easy to miss profitable opportunities
- Storage risk

Benefits:

- Don’t have to wait until delivery date to price out grain.
- Know when grain will be moving
- Price is known. No surprises (providing grain makes contracted requirements).

Target Price Contract

What is it?

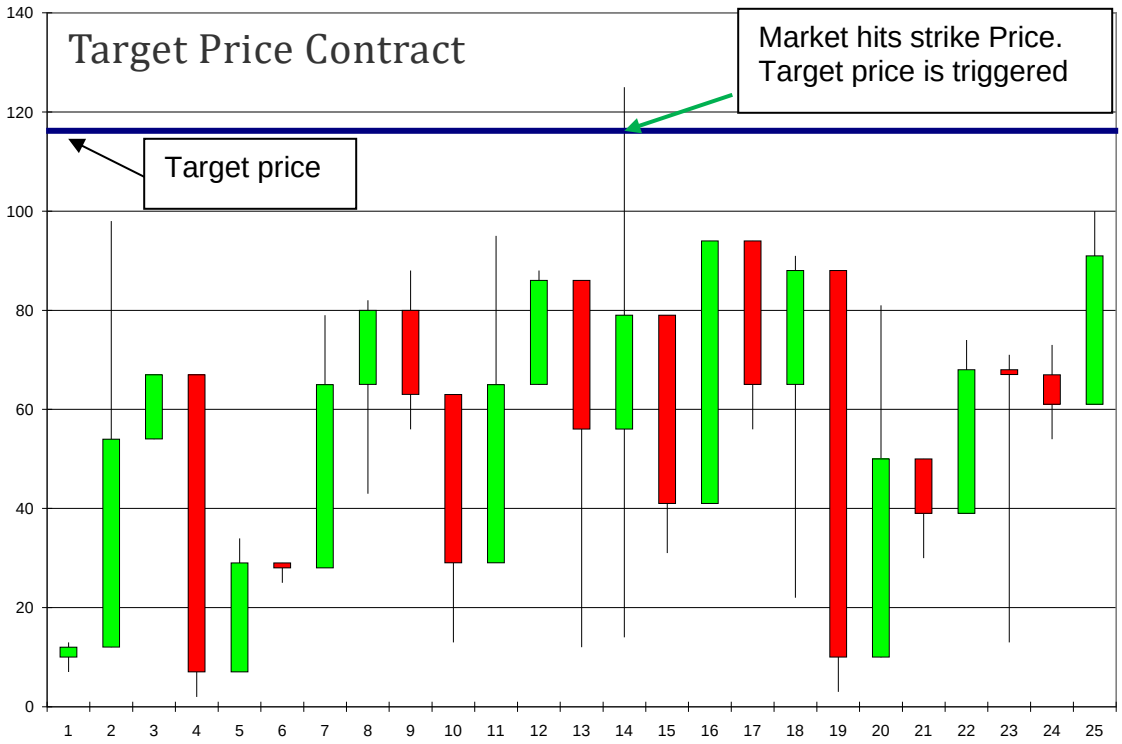
- Is an order to sell a specified amount of grain if the market reaches a predetermined level within a given time period.
- Once target has been triggered the target price contract **automatically** becomes a purchase or sales contract.

Risks:

- Market may continue to rise after grain is priced
- Market may not quite reach target price
- Once a target price contract is triggered it becomes a contract which grain is deliverable on.

Benefits:

- Instills discipline by removing some of the emotion attached with marketing decisions
- Saves time. Market is automatically monitored for you.
- Eliminates worry about missed pricing opportunities
- Benefit from market rallies
- Flexible. Can be entered or cancelled at anytime.
- Stop Loss – If market drops below a certain level a target price can be triggered to prevent further losses.



Basis Contract

What is it?

- Basis is locked in for a particular delivery period.
- It does not guarantee a price, but can protect from a widening basis.
- Futures portion remains un-priced.

Risks:

- Basis could narrow
- Futures market risk
- Must deliver at a predetermined time

Benefits:

- Elimination of basis risk
- Can benefit from futures price increase

Who might use this contract?

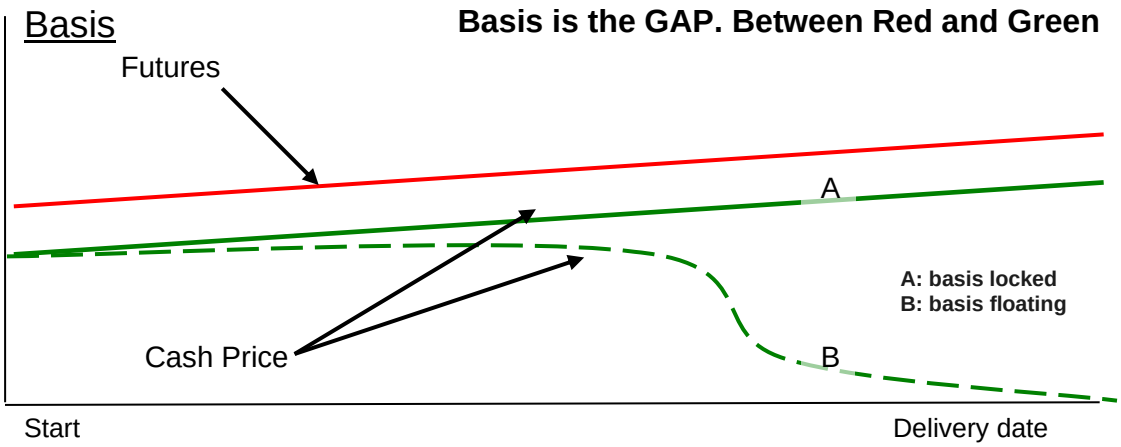
- A producer who wants to retain the ability to benefit from a rising market but wants to lock in the current basis.

Defining Basis

- Basis is the difference between a local cash price and the relevant futures contract price for a specific time period. For a specific commodity basis is defined as:

  Basis = Cash Price - Futures Price

- Basis consists of: Storage, interest, cost of handling, margin and freight.
- It is affected by supply and demand conditions. When supply outweighs demand the basis will widen. When demand is high and supply is low the basis will narrow.
- Basis acts as flow control valve for the cash market. A wide basis means that the local market is well supplied with grain.



Scenario A: Basis is locked in. Because the basis is locked in the cash price will follow the futures. The futures price has increased so the cash price will increase to the same degree.

Scenario B: Basis is not locked in and has widened. Although the futures price has increased the basis has widened more than the gain in the futures therefore causing the net cash price to decrease.

Rolling Basis

- The change from a nearby futures month to a further out one when the basis is already locked in.
- Rolling is done only to extend pricing period. ie. Speculation
- **Removes the carry in the futures market.**
  Carry is the difference between the two futures contracts. It is composed of : cost of interest, storage and insurance on a commodity. Essentially, carry is what pays you to store your grain.

Math works like this:
(Current Futures) **+** (Current Basis) **=** (Further Out Futures) **+** (Further Out Basis)
Solve For: (Further Out Basis)

Locked In Basis		Roll Basis		New Basis	
Current Futures:	100	**Current Futures:**	100	Old Locked in Basis:	10
Locked in Basis:	+10	Locked in Basis:	+10	**New Locked in Basis :**	**-10**
		Further out Futures:	-120		
		New Basis:	**-10**	**Basis widened by *20* because of the roll**	
Current Price:	**=110**	**Current Price:**	**= 110**		

Notice how the current price stays the same. It's the basis that widens out. It's just math.

Futures Only Contract

What is it?

- Futures price is fixed
- Basis is left open

How it works.

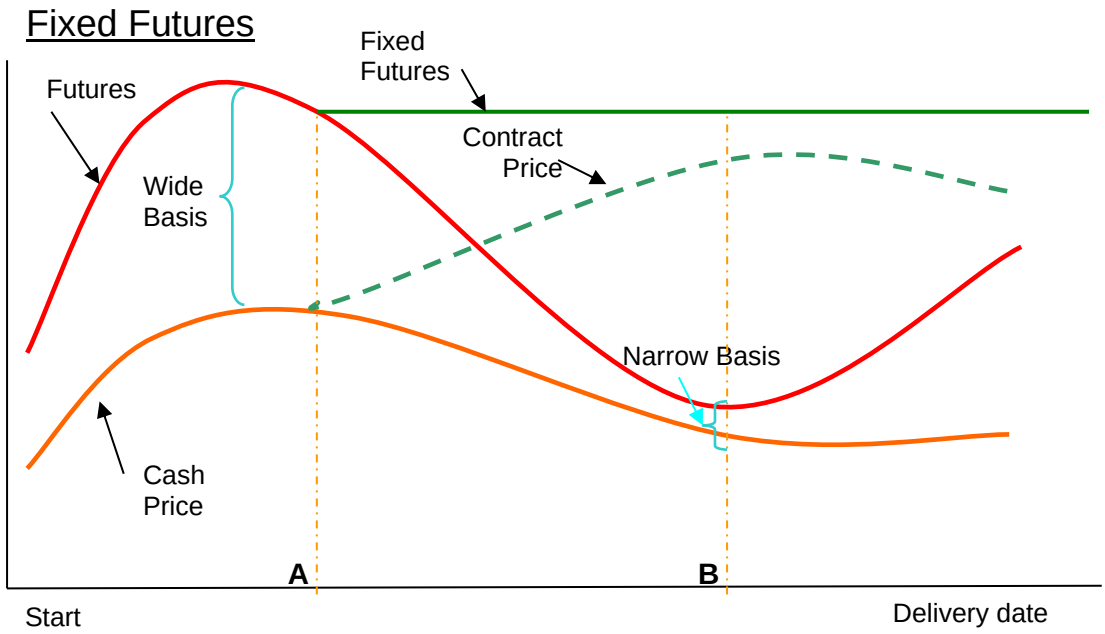
- Futures are locked in on a certain amount of tonnage in a given month.
- Used when basis is weak and futures price is high

Risks:

- Basis can weaken
- Futures market could strengthen

Benefits:

- Removes the most volatile part of pricing
- Basis can strengthen
- Take advantage of full carry in market
- Take advantage of an inverse market (backwardation)



A. Futures price is high and basis is wide.
Futures are locked in. Basis is undesirable, left open.
B. Futures are low and basis is narrow.
Futures are locked in **(A)**. Basis is desirable. Lock in basis portion of contact.

Contracted price is equal to fixed future price plus the basis. Because basis is narrowing the contracted price is increasing.

Minimum Price Contract

What is it?

- Allows you to deliver a specific quantity and quality of grain for a future delivery time at a minimum price while retaining the ability to achieve a higher price if the market moves in your favor.
- Minimum price contracts must be priced out before delivery date.
- Some minimum price contracts may come with an Act of God clause until priced.
- An upfront premium must be paid before a minimum price contract becomes valid.

How it works:

- An insurance premium is purchased to establish a price floor.
- A price floor is achieved by buying an option. Either a call option or a put option can be used to create a price floor.

Risks:

- Can only be priced once
- Prices may improve after grain is priced

Benefits:

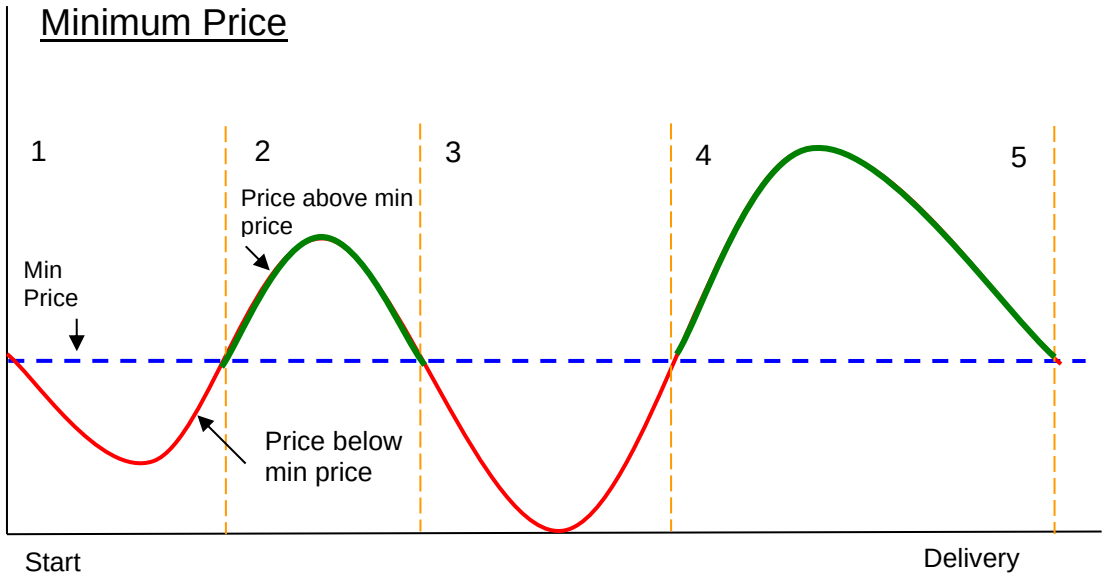
- Minimum price protection
- Cash flow protection
- Disciplined marketing.
- Production risk protection. ie. buyout would be minimized because still in the market.

Who might use this contract?

- Producer who wants to protect himself from adverse market conditions, but thinks the market has potential.
- When commodity prices are at historic levels.

Is the premium a waste of money?

The premium which is purchased is a form of insurance. Some minimum price contracts will reduce two types of risk: production and price. Some contracts carry an Act of God clause which eliminates the need to buy out the contract in the event of a crop failure or other catastrophe.
Because all markets are volatile, a minimum price contract will limit potential loss by ensuring a minimum price. For the cost of the premium a producer can insure himself against losses well below his cost of production.
Like all insurance, a risk to benefit analysis should be done before purchasing minimum price protection. If the perceived benefit is greater than the perceived risk then the premium for minimum price protection is not a waste of money.



Zone 1: Minimum price protection is triggered
Zone 2: Futures are higher and potential gain could be realized. If priced out producer cannot benefit from higher prices.
Zone 3: Minimum price protection is triggered.
Zone 4: Futures move higher and potential gain is greater than before, as contract is getting close to maturing and pricing would be wise.
Zone 5: If contract has not been priced out it will automatically be priced.

Minimum Price Contract example:

*Simple numbers will be used for this example and values are for illustration only.

Fixed Price Contract	***Minimum price option:***
Futures: 150 (Current Futures)	Strike price: 150 (Guaranteed Price)
Basis: 10 (Locked Basis)	Cost of premium: 5 (Insurance cost)
Net 160	

Minimum price: if futures were to rise

Futures price: 160 (Futures rise 10 and contract is priced out)
Premium: 5 (Subtract cost of insurance)
Basis 10 (Add Basis)
Net 165

Minimum price: if futures were to drop

With Min Price Protection:	**Without Min Price Protection:**
Current futures: 120 (Futures drop 30)	Current futures: 120 (Futures drop 30)
Premium: 5 (cost of insurance)	Basis 10
Strike in price 150 (Guaranteed Price)	
Basis 10	
With Min Price: 155	**Without Min Price: 130**
(Strike Price - Premium + Basis)	(Current futures + Basis)

Value of the option = $10 (drop in futures) - $5 (Premium) = $5/mt (Advanced)

Premium	$	5.00
Return on Investment (ROI)	Futures Loss	
-100%	$	-
-80%	$	1.00
-60%	$	2.00
-40%	$	3.00
-20%	$	4.00
0%	$	5.00
20%	$	6.00
60%	$	8.00
100%	$	10.00
140%	$	12.00
180%	$	14.00
220%	$	16.00
260%	$	18.00
300%	$	20.00
340%	$	22.00

ROI = $\frac{Gain - Cost}{Cost} \times 100$

Scenario A:
If the futures were to drop $5/mt (premium cost) there would be no benefit form purchasing a minimum price contract. However, if the futures were to drop $10/mt there would be a $5/mt net grain. In essence it costs $5/mt to make $10/mt therefore doubling initial investment.

Scenario B:
The market is $10/mt below the strike price. It would seem reasonable that someone would be willing to pay up to $10/mt to sell his grain at the strike price.

$10/mt (revenue) - $5/mt (cost) = $5/mt (profit)

Deferred Pricing Contract

What is it?

- Deliver your grain today and price it later off an underlying futures contract.
- Pricing can be done on the same commodity futures or a different commodity.
  i.e. Sell barley now then price off barley futures or corn futures.
- Upon delivery of the grain an initial payment will be made. A percentage of total cash value will be issued. *depends on grain company
- Some companies offer special contracts that allow averaging of price over a predetermined amount of time.
- Easily done with a futures and options account. ie. sell canola on fixed price contract when basis is good or off combine then buyback canola on the futures.

Risks:

- Futures may go down after grain is delivered; however, this is less risky than holding grain in the bin. Grain in the bin has the added risk of spoilage and the cost of storage and interest. Market risk is still the same.
- Retains the risk of market fluctuations.

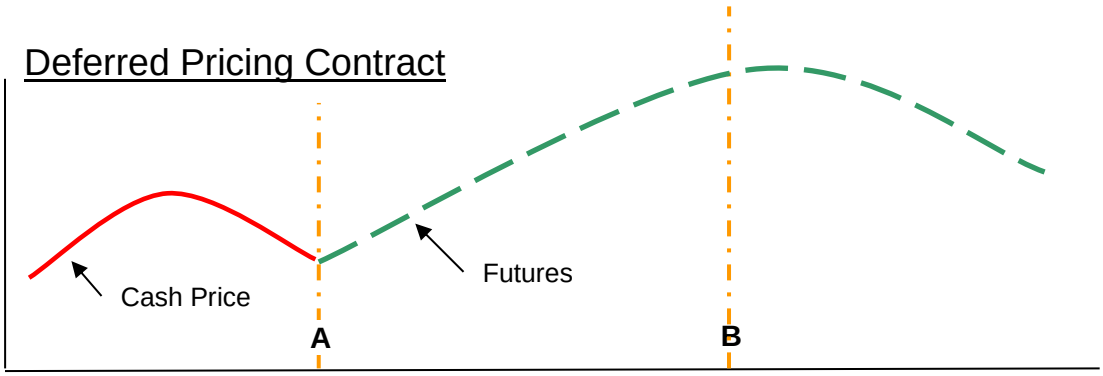
Benefits:

- Immediate cash flow
- Can be combined with other contracts
- Can capture market fluctuations
- Move grain now. Price it later

Who might use this contract?

- Producer believes market will rise.
- Producer believes the market will rise and does not have enough storage.
- Producer who believes markets will rise and has off grade grain. Although grain will be discounted in the cash market, future spoilage risk is eliminated.

Deferred Pricing Contract



A: Deferred Pricing contract is made. Grain is delivered. Producer now enters into the futures market.

B: Producer exits the futures market. Gain in futures market now increases net price.

Cross Hedging – A deferred pricing strategy (advanced)

What is it?

- The act of hedging ones position by taking an offsetting position in another good with similar price movements.
- Although the two goods are not identical they are correlated enough to create a hedged position as long. An example is cross hedging a barley cash contract with a long position in corn. Even though these two products are not identical, their price movements are similar enough to use for hedging purposes.

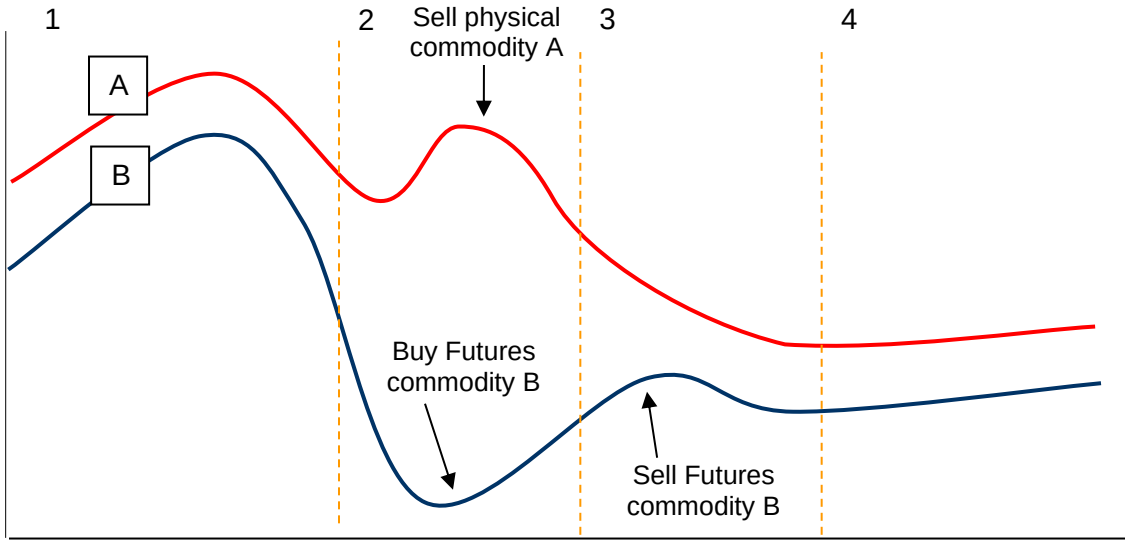
Why use it:

- The price of one commodity is overvalued when compared to a substitutable commodity which means there should be price movement to realign the two commodities to their previous relationship.
- There are possible liquidity issues with the underlying futures contract. Certain contracts are too thinly traded to be an effective hedge.

How it works:

- A producer sells the physical commodity into the cash market and buys back a futures position. This is done because the producer feels that the market still has potential to generate profits.
- For Example. Sell the physical barley now when the cash barley price is much higher than the futures market. Feeling that the futures market still has potential one would buy the same amount of corn on the futures market and therefore take advantage of the upside potential.

Cross Hedging



Zone 1: Two commodities are trading within normal range of each other.

Zone 2: Both commodities A and B drop. Since the decrease is far more significant with commodity B the two commodities are no longer in their normal trading spread.
For some reason commodity A remains strong. It might be overvalued and thus is expected to decrease. When commodity A remains high and commodity B low end users will start to substitute commodity B for A causing B demand to increase.

Zone 3: The market believes commodity B is undervalued and price is rising. The market situation for commodity A has changed and the market now believes that commodity A is overvalued. The price will drop causing a correction.

Zone 4: Commodities A and B have realigned themselves and the spread between the two has been corrected. They are now trading within the same range as in zone 1.

When to use this type of marketing strategy:

- This strategy is to be used when there is market divergence between two substitutable goods. e.g. Corn and Barley.
- When the cash market is significantly higher than the futures market and there is still a possibility that the futures market will increase.
- Liquidity problems with underlying futures contract.

Do You Need A Futures And Options Account?

NO. Most of the ideas and concepts discussed in this book can be done at the local elevator. Some companies allow certain contracts and others don't. Using a grain company to utilize the futures is a great way to learn. However, It must be mentioned that the **futures markets are very unforgiving.**
A word to the wise: Most of the people promoting Futures and Options accounts are not going to foot the bill when things go south - remember that.
That being said, A futures and Options account can be an extremely powerful and profitable tool when used correctly.

Choosing The Right Contract

Strong (High) Futures **Weak (Wide) Basis** • Fixed Price Contract • Deferred Pricing Contract • Futures Only	**Strong Futures** **Strong Basis** • Sell Signal • Fixed Price Contract • Minimum Price Contract
Weak Futures **Weak Basis** • Store Signal • Deferred Pricing Contract	**Weak Futures** **Strong Basis** • Deliver Into Cash Market • Basis Contract • Store
Target Price Contracts are always an excellent choice in any market.	

When doing a contract with any company Always, Always state the terms back to the buyer and make sure you understand them in full.

Contracting Rule Of Thumb:

- If it sounds too good to be true it probably is.
- Always know if there is currency risk
- *Hopeium is not a marketing strategy.*

Futures Rule of Thumb:

- The futures can remain "wrong" longer than you can stay liquid.

Smart Selling - Contracting Guidelines

- **Get Paid. Get Paid Fast.** Keep your accounts receivable as small as possible.

  What happens if you don't get paid?
- If the price sounds too good it probably is. Proceed with **EXTREME** caution or **Run Away.**
- Know the **TERMS** of the contract. Repeat them back to the buyer.
- Understand the **TYPE** of contract. Can you explain how this contract **works** to your Mom, Wife, Dad, Brother or Business partner?
- Basis and Future contacts – Calculated risk to reward
  - Potential upside must be a minimum 10-25%. Should have Minimum 3-4 months for current crop and 6-8 months new crop.
    (ie. $10 now = $11 future)
  - **Do not roll contracts.**
  - **HAVE A STRATEGY. No exit plan = No contract.**
- Smart Contracting
  - Caution when delivery month is over 3 months away. Potential grade risk or storage risk.
  - Discounts can be huge. Know them.

Just A Few Things That Influence Your Selling Price	
Market Factors • Tight Market • Volatile Market • Trend Up Or Down; Potential Change • Upper And Lower Limits • Historical Reference • Seasonal Nature • Supply Demand • Politics • Money Flow • Technical Analysis • Fundamental Analysis	**Farm Factors** • Risk To Reward • Debt Ratio • Speculative Factor • Breakeven Prices • Breakeven Volume • Crop and Grade Factors • Transportation Factors • Life Style • Farm Life Cycle • Farm Transition Cycle