Non-Convergence in Hard Red Winter (HRW) Wheat Futures

How does non-convergence affect crop insurance?

by

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Non-Convergence Issue

1. Non-Convergence in the 2016 Hard Red Winter (HRW) futures contract issue is being presented in a series of 3 videos that include the following topics:
   a. What is Non-Convergence?
   b. Alternative policies and consequences for addressing non-convergence.
   c. **How does non-convergence affect crop insurance?**

Non-Convergence Affects Crop Insurance Too

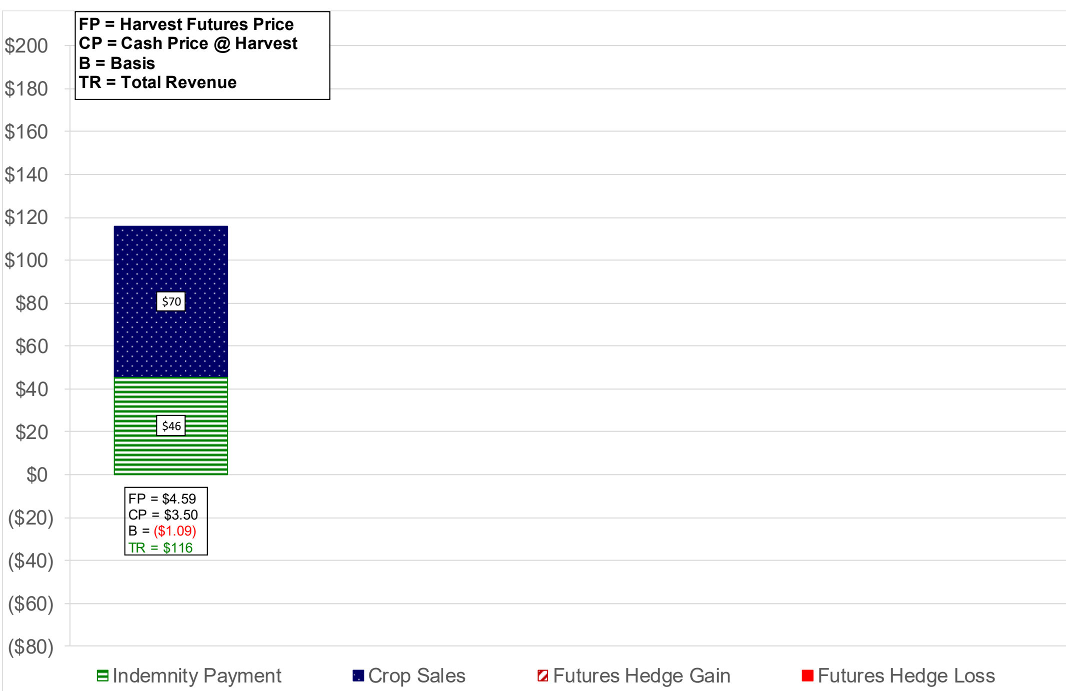
1. Only falling futures prices causes the crop insurance low price peril to trigger payments. A falling cash price has no effect on crop insurance.

2. The $4.59 crop insurance strike price includes the market's expectation of non-convergence.

3. Futures markets set the crop insurance planting prices & harvest prices.

4. Crop insurance assumes a zero basis. This helps cover some of the non-insurable elevator price dockage for light test weight, foreign material, cracked kernels, farmer paid premium, etc.

Revenue Streams by Source for 75% RP Insured Wheat Farm with a 40 Bu. APH under 5 Different Harvest Price Scenarios and Half of a Crop with 30 bu. Hedged @ $4.59.



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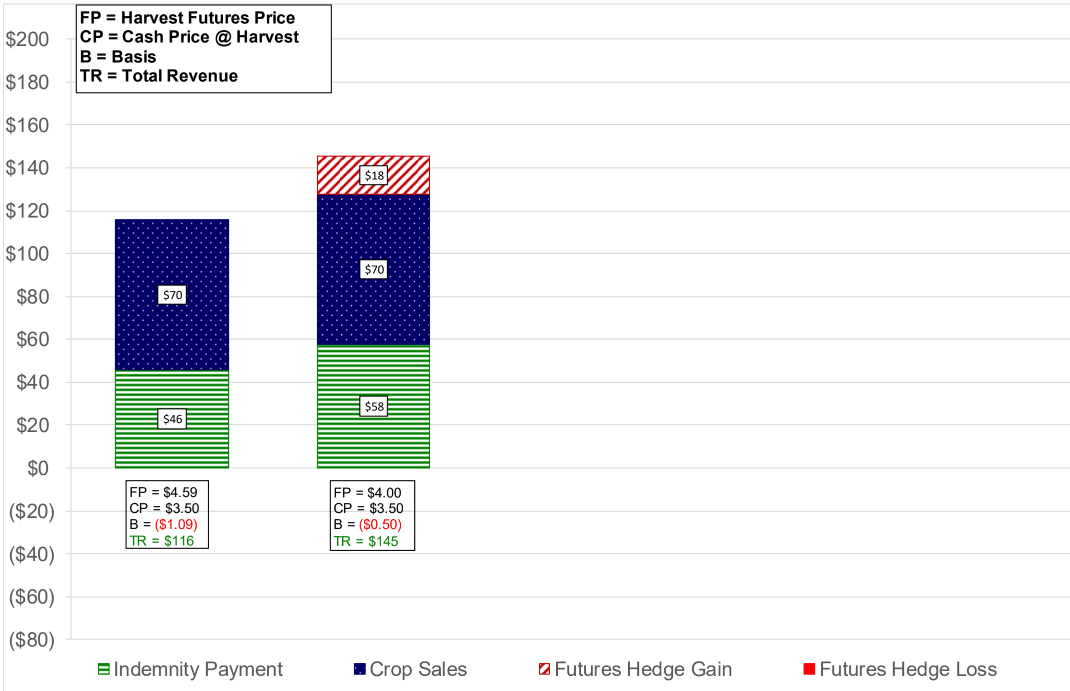

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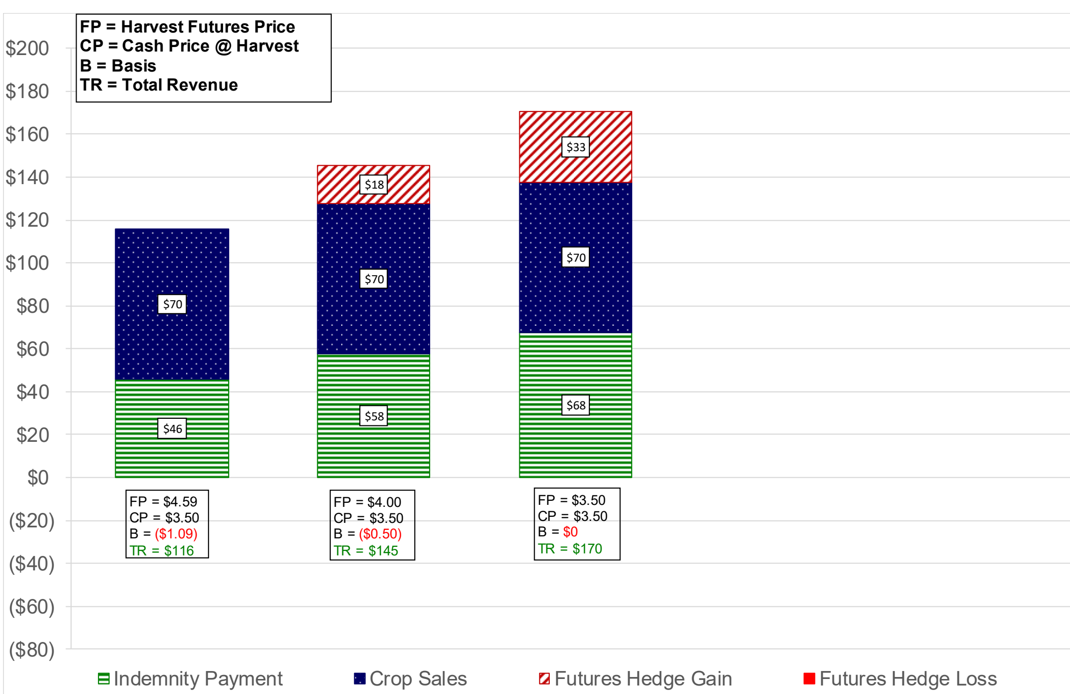

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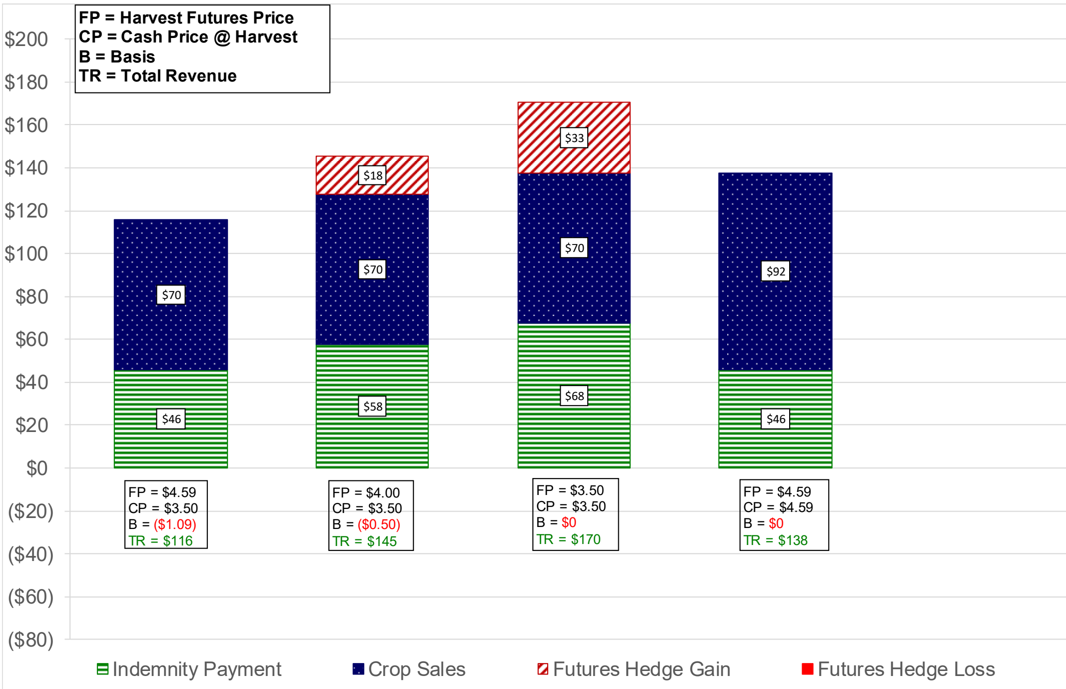

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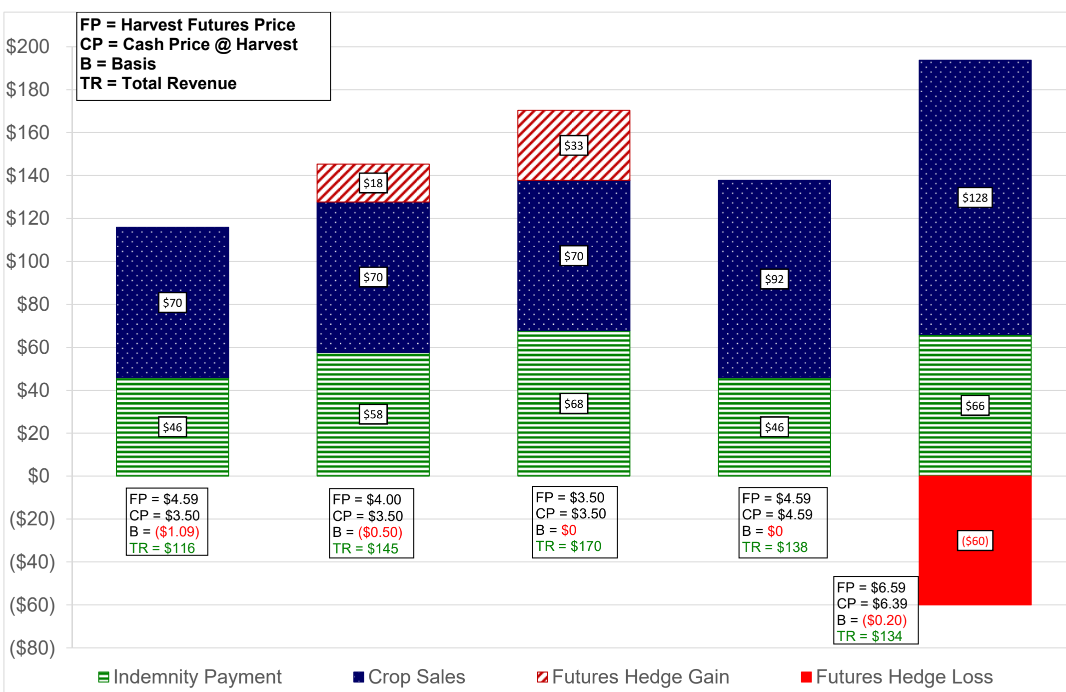
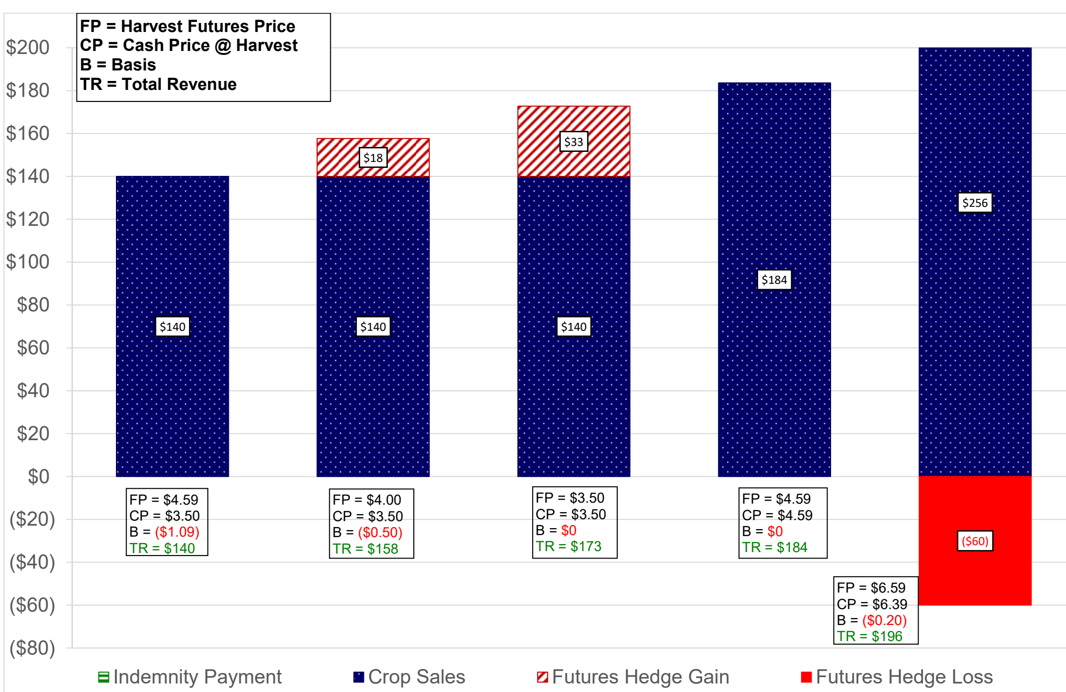


Example Farm Data Presented in the Bar Chart Assumes a 75% Insured Great Plains Wheat Farmer under RP, $4.59 Insurance Price, and Hedges 75% of the APH Yield at an Average Price of $4.59 and 20 Bu. Crop Yield **(details)**

	Futures & Cash Price Don't Change	Futures Price Falls 59 Cents	Futures Price Falls 59 Cents to Cash, Zero Basis	Cash Price Increase to Futures	Futures & Cash Price Both Increase
APH (10 yr Average Yield)	40.0	40.0	40.0	40.0	40.0
Strike price hedge/Crop ins	$4.59	$4.59	$4.59	$4.59	$4.59
Expected Gross Revenue[1]	$183.60	$183.60	$183.60	$183.60	$183.60
Coverage	75%	75%	75%	75%	75%
Harvest Yield	20.0	20.0	20.0	20.0	20.0
Harvest Futures Price	$4.59	$4.00	$3.50	$4.59	$6.59
Cash Price @ Harvest	$3.50	$3.50	$3.50	$4.59	$6.39
Harvest Basis	($1.09)	($0.50)	$0.00	$0.00	($0.20)
Indemnity Payment[2]	$45.90	$57.70	$67.70	$45.90	$65.90
Crop Sales	$70.00	$70.00	$70.00	$91.80	$127.80
Futures Hedge Gain		$17.70	$32.70	$0.00	$0.00
Futures Hedge Loss[3]					($60.00)
Total Revenue	$115.90	$145.40	$170.40	$137.70	$133.70

[1]Expected Gross Revenue may not cover costs for a number of reasons. Recent yield losses will lower 10 year average yield below expected yield or wheat prices are below cost of production.
[2]Indemnity payment is gross and farmer paid premium has not been deducted.
[3]When prices increase a hedge farmer receives margin call, but one sells the crop at higher cash price or the Revenue Protection (RP) crop insurance contract replaces the guaranteed bushels at the higher price.

Revenue Streams by Source for 75% RP Insured Wheat Farm with a 40 Bu. APH under 5 Different Harvest Price Scenarios and a Normal Crop with 30 bu. Hedged @ $4.59.



Example Farm Data Presented in the Bar Chart Assumes a 75% Insured Great Plains Wheat Farmer under RP, $4.59 Insurance Price, and Hedges 75% of the APH Yield at an Average Price of $4.59 and 40 Bu. Crop Yield **(details)**

	Futures & Cash Price Don't Change	Futures Price Falls 59 Cents	Futures Price Falls 59 Cents to Cash, Zero Basis	Cash Price Increase to Futures	Futures & Cash Price Both Increase
APH (10 yr Average Yield)	40.0	40.0	40.0	40.0	40.0
Strike price hedge/Crop ins	$4.59	$4.59	$4.59	$4.59	$4.59
Expected Gross Revenue[1]	$183.60	$183.60	$183.60	$183.60	$183.60
Coverage	75%	75%	75%	75%	75%
Harvest Yield	40.0	40.0	40.0	40.0	40.0
Harvest Futures Price	$4.59	$4.00	$3.50	$4.59	$6.59
Cash Price @ Harvest	$3.50	$3.50	$3.50	$4.59	$6.39
Harvest Basis	($1.09)	($0.50)	$0.00	$0.00	($0.20)
Indemnity Payment[2]	$0.00	$0.00	$0.00	$0.00	$0.00
Crop Sales	$140.00	$140.00	$140.00	$183.60	$255.60
Futures Hedge Gain		$17.70	$32.70	$0.00	$0.00
Futures Hedge Loss[3]					($60.00)
Total Revenue	$140.00	$157.70	$172.70	$183.60	$195.60

[1]Expected Gross Revenue may not cover costs for a number of reasons. Recent yield losses will lower 10 year average yield below expected yield or wheat prices are below cost of production.
[2]Indemnity payment is gross and farmer paid premium has not been deducted.
[3]When prices increase a hedge farmer receives margin call, but one sells the crop at higher cash price or the Revenue Protection (RP) crop insurance contract replaces the guaranteed bushels at the higher price.

Non-Convergence Affects on Crop Insurance

1. Crop insurance rating assumes an efficient futures markets that includes convergence.
2. HRW wheat project price of $4.59 includes bidding in over $1 in expected non convergence for the 2017 crop.
3. HRW wheat farmers will pay higher premiums per acre based on a $4.59 projected price versus a much lower price without the non-convergence premium.
4. Farmers who normally hire custom cutters to cut their crop and reduce the time exposed hail, may chose to cut with just their combine because with non-convergence the crop is worth more in insurance than in the bin. Only consider with optional units.

Non-Convergence Affects on Crop Insurance

5. Cash prices could increase next summer to $4.59, the market traded estimate, and effectively eliminate the low price peril. Any indemnity payments would require an insurable yield loss.

6. Cash prices could remain at current levels and have futures fall to cash, triggering revenue payments without a yield loss. However, crop insurance is not rated for this loss because the rating assumes an efficient market. Non-convergence has created a market failure.

7. Next summer futures could increase above $4.59, then it will require a yield loss to trigger any indemnity payment. Likely the increase in price will be due to either demand or supply causing convergence in the futures markets.

MARKET SUMMARY

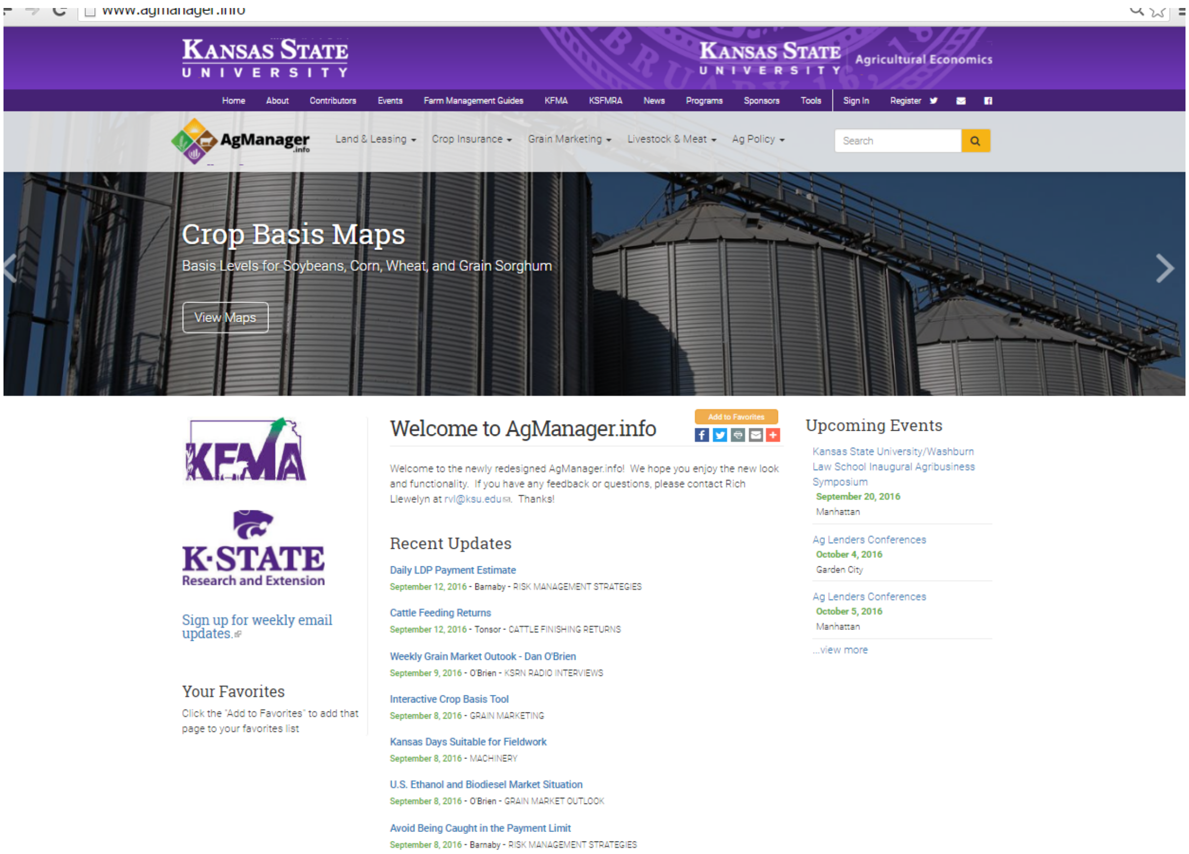
1. Once farmers plant their crop, they are long the market!

2. All farmer marketing plans include feeding their crop to livestock or dairy cows, storing the crop for later sales, deferred price contracts, forward cash contracts, minimum price contracts, hedge to arrive contracts, selling futures, buying put options, buy puts-sell calls, cash sales off the combine at harvest, etc. **assumes production.**

3. Only RP will insure the coverage percentage of a farmer's expected production at replacement value. This will replace a feed supply, a forward contract, a hedge, etc.

4. Farmers will liquidate their long position, even if it only means selling cash grain off of the combine.

5. Without convergence a short hedge will under perform for both farmers and County-COOP elevators.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