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Wide Basis also affects Crop Insurance, but Less than Most Farmers Think¹

Introduction. Currently cash has been trading at historically large discounts to Kansas City Board of Trade (KCBOT) futures, i.e. a wide basis. If one just wants to know "what time it is" then the simple answer is deliveries on Kansas City wheat futures have been insufficient to force convergences of futures and cash prices. However, if one wants to know "how the watch was built" then the answer for the wide basis is more complicated. Even more complicated is what will cause futures and cash to converge, do the futures' contracts need changes to create economic incentives to cause convergence, and are there any current alternatives? There is no agreement among the experts on any of these issues. Dr. Dan O'Brien and I are working on a discussion paper that will be posted on the AgManager.info website in the near future to better explain the wide basis on Kansas City wheat.

Currently, KCBOT wheat futures have a cash basis at delivery terminals and country elevators that are 45-50 cents weaker than "normal" (in some local markets the basis was even weaker) compared to the last several years. Because of the fact there was nearly a half year's supply of wheat in storage in the U.S. before hard red winter (HRW) wheat harvest started (with "low" protein levels on a large share of the stored wheat), most market analysts would expect future prices to decline rather than cash prices to increase

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to generate a historically "normal" cash-futures basis relationship. If it is assumed that the cash market price accurately represents supply-demand conditions for HRW wheat at this time, then a "normal" basis would likely mean lower futures prices rather than higher cash prices.

Because futures' prices have not declined to bring about a narrower basis it has caused a loss of short hedge profits for both country elevators and farmers. Even if farmers are not using the futures, their local country grain elevators are using short hedge positions in grain futures to manage price risk. As a result, wider basis bids for wheat throughout the grain handling system will affect local cash bids to farmers for wheat. If there is no adjustment made to the delivery method then one would expect elevators to widen their basis on new crop forward contract bids in the future, as long as the expectation for a wide basis remains. Also there were July put strikes that expired worthless that otherwise would have had value assuming futures would have fallen with convergence between cash-future prices.

How does a wide basis effect Indemnity payments? It has been pointed out because futures did not fall to a "normal" basis level it reduced the Crop Revenue Coverage (CRC) indemnity payment (table 1). As a result, it has been suggested that crop insurance should base or calculate indemnity payments on cash prices rather than futures prices. However, it is not that simple, because farmers with very low yields will generate larger crop insurance payments based on futures' prices than they would with lower cash prices. Bushels lost below the insurable yield (35.2 bushels in the example farm) were paid at a rate of \$5.42, that is well above most cash prices. Assuming a price discovery was changed to cash using the Minneapolis Grain Exchange (MGEX) cash settlement method, then those same lost bushels would have been paid a lower cash price of \$4.49. Farmers with yields near their aph will generate smaller payments with futures if basis does not narrow than would be the case if claims were based on a national cash price. The example farm with a 38 bushel yield would have generated revenue payment of \$8.76 versus \$20.49 if cash price discovery were used (table 2). Farmers with a "bumper" crop would generate no crop insurance claim with either cash or futures based settlements on indemnities (tables 1 & 2). However, none of these possible results would be relevant issues if the basis were to narrow, bringing futures close to conformity with cash market supply-demand conditions.

Farmers with above average yields probably will not have a claim on their revenue insurance. Nor would they have a claim even if futures prices were lower by nearly a dollar. That is because farmers can produce their way out of a CRC loss. The example farm in table 1 would not have a Crop Revenue Coverage (CRC) claim with a 50 bushel yield, even if futures had been nearly a dollar lower and that assumes 80% coverage. This farm's aph is 44 bushels but the harvest yield was near 50 bushels. This farm's insurable yield is about 35 bushels (80% coverage CRC enterprise unit times a 44 bushel aph). So this farm has no insurable yield loss but she also does not have a CRC revenue loss either because her 2010 yields are substantially higher than her aph yield.

Farmers that are near a delivery point might expect basis to be about 25 cents under (futures contract states 6 cents under for delivery at Wichita). So the analysis on the example farm was completed with \$1.17 under and 25 cents under basis. With a \$1.17 under basis, this farmer would need a yield that is below 39 bushels to trigger a CRC payment, but this farmer produced 50 bushels. If the basis were “normal”, then this farmer would only need a yield below 49 bushels to trigger a payment (table 1). The non-convergence also would have reduced this farmer’s hedge profits from \$55.80 to \$22.68, assuming she forward sold the guaranteed bushels. However, the worst outcome is to produce a yield near the insurance yield trigger point or 35.2 bushels for this example farm but the trigger would have been lower if this farmer had not purchased an 80% coverage CRC contract. Farmers with yields near their aph yield combined with falling prices and a “normal” basis, their insurance payments would have been “smaller”, because most farmers have a 25-35% deductible and they still have all of the harvest expenses.

This wheat farmer had experience with the 2009 freeze damaged crop. The farm’s yield was right at the insurable yield trigger. The freeze did trigger a CRC payment because of lower prices but the payment would have been much larger with a zero yield. This farmer keeps producing yields greater than the county, so there were farmers near her with zero yields and much higher insurance payments! Any indemnity bushels (bushels lost below 35.2 bushels for the example farm), is replaced at \$5.42 that is more than a dollar above cash for most wheat farmers. This is the reason the total cash revenue continues to increase as yields approach zero. The results in table1 show the combined indemnity payments and cash sales continue to increase as yields approach zero and the farmer would save the harvest expenses. The worst outcome for an insured farmer is half of a crop. Insured farmers are better off with zero yield or big crop, 50 bushels are better in the example farm in table 1.

Should cash prices be used to settle crop insurance claims? Before changing price discovery in Crop Revenue Coverage (CRC) from futures to cash, policy makers should consider why futures were selected for price discovery when the original research work was completed. A private insurance company developed Market Value Protection (MVP) first released in 1990. The issue in the early 1990’s was when farmers had a short crop and prices increased farmers lost their deficiency payments and crop insurance did not cover that risk. The reason is Multi-Peril Crop Insurance (MPCI) triggers off of bushels but it does not guarantee bushels. MPCI guarantees bushels if and only if the RMA price forecast is correct, and it seldom is even close when prices increase compounded by a low yield. There is no suggestion there is a better price forecasting method so one might as well just use the market generated prices.

MVP changed MPCI from a yield triggered payment to a yield replacement contract. With yield replacement it allows farmers to forward contract the guaranteed bushels (hedge, puts, etc.) and at harvest time either have those bushels to deliver or receive enough indemnity dollars to replace those lost bushels at current market value, even if a short crop caused a substantial price increase. If farmers are in a negative basis location, then MVP will likely cover the premium too when the crop fails.

CRC was introduced in 1996 by the same company. CRC combined MVP and a revenue guarantee together in to a single contract. In 2000, Revenue Assurance added the Harvest Price Option (RA-HPO) that created very similar coverage to CRC. Starting in the fall of 2010 with winter wheat, the Risk Management Agency (RMA) will combine CRC, RA-HPO, MPCI, and Income Protection (IP) in to a single crop insurance product to be renamed the Common Crop Insurance Policy (CCIP). One concern with CCIP is it has a price limit (2 times the base or planting time price), so if prices were to exceed the limit at harvest then farmers would lose some of the yield replacement feature.

Futures were picked for price discovery in CCIP so coverage would match margin calls for insured farmers hedging grain and using the CCIP insurance contract to replace the bushels if the crop fails. Basis can change, and become weak too if futures are increasing faster than cash. Therefore, the company picked futures for price discovery and it was the correct decision, rather settling the insurance contract on a cash price as has been suggested. Farmers who hedge their guaranteed bushels also would add their hedge profits to the returns. If futures had fallen by a dollar to narrow the basis to 25 cents under in the example farm in table 1, the hedge profits would have increased from \$22.68 to \$55.80.

Prices can also increase, especially with a crop failure that would trigger indemnity payments. Under the short crop scenario, farmers who hedged their grain will receive margin calls if futures increase however, if futures increase faster than cash, causing a weak basis, then they will net less than expected. If the crop failed and as is being suggested, the insurance paid based on cash prices, then the insurance contract would not offset the hedge either. The current contract would pay at the futures price and cover the lost bushels at the current higher futures prices. That would clearly help cover most (all) of the margin calls.

People keep trying to substitute crop insurance for marketing and that was never the intent. CRC was designed to reduce the risk of marketing; i.e. "I can't sell a crop I don't have".

Finally, the analysis was completed assuming CCIP payments were based on cash prices rather than futures. Changing to a cash based CCIP contract, will require RMA to take the new crop futures plus an RMA forecasted basis to set the CCIP guarantee, and then settle on cash. That creates a new problem, what cash prices would RMA use to settle CCIP claims?

The analysis assumes RMA would use the DTN national average hard red winter wheat cash price used to settle the Minneapolis Grain Exchange (MGEX) hard red winter wheat index contract. The basis was 93 cents under Kansas City in September of 2009. The basis was added to the KCBOT new crop price generating a crop insurance price based on expected cash at \$4.49 versus \$5.42 in the current revenue insurance contracts. The basis widen in June 2010 from 93 cents under to \$1.17 under, i.e. comparing the MGEX

cash settlement price with the nearby KCBOT futures. So changing to a national cash price did not eliminate all of the basis risk.

A cash based CCIP contract would have trigger payments with yields below 42 bushels in the example farm. However, farmers with low yields below 24 bushels (approaching zero) would have had major reductions in their crop insurance payments (table 2). A cash settled contract with a zero yield would reduce the CCIP payment from \$190.78 to \$158.05 with a zero yield.

Changing to cash settled CCIP contracts would require RMA to set the guarantee based on their forecasted basis. Do farmers really want RMA forecasting basis? In the past some of those RMA price forecasts were set low because someone in the administration wanted to reduce the crop insurance budget costs. Many farmers would prefer when possible that the market set the prices in the crop insurance contract and not USDA.

Cash price increase would also cause convergence. The above analysis assumes futures would fall and cause convergence but it is also possible that cash prices could increase and also cause convergence. Most analysts under current supply-demand conditions would expect futures to fall in order to have convergence. However, in the future it is also possible that cash price could increase and create convergence. If cash prices were to increase from \$1.17 under to 25 cents under, then there would be convergence but no impact on the indemnity payments (table 3). The cash sales would be higher under this scenario. However, indemnity payments would be substantially lower if cash prices were used for price discovery in the CCIP crop insurance contract (table 3).

Prices do increase. How quick people forget. In 2008 we had market prices that were moving substantially higher, and that means margin calls for the short hedger. The worst case out come for insured farmers is a crop failure that requires them to buy grain to fill their forward contracts. If 2011 is a short crop year, then likely future prices would increase and at the same time cash prices would increase faster than futures causing the basis to narrow. Forward contracted farmers with a crop failure would then need to buy grain at higher futures prices and a strong basis to deliver on forward contracts with a low futures price and weak basis! These farmers will need all of the cash available from their crop insurance payment. A CCIP insurance contract using cash prices for price discovery under this scenario would receive substantially lower indemnity payments than in the current system that uses futures for price discovery (table 4).

In the future, it is likely that any forward contract will carry a basis that is at least a dollar weaker than normal. If a short crop causes this basis to narrow then a forward contract will capture none of that basis improvement. The only outcome that would be worse is combining this scenario with a crop failure, as shown above. Farmers want to be careful being caught on the wrong side of the basis when it narrows. For that reason farmers may want to hedge, purchase puts, or in some cases find elevators offering open basis contracts, also called hedge to arrive contracts. The current market conditions have created a lot of basis risk because hedgers can no longer count on cash-futures conversion at delivery points.

Conclusions. Using cash prices for price discovery in crop insurance does not necessarily mean higher crop insurance payments. There are many other possible and just as likely outcomes in the future. They include prices increasing, cash increasing faster than futures, and indemnity bushels are paid at a higher price if there is negative basis. So one should be careful what they ask for because changing crop insurance prices to cash will not always give the higher payment. There is also the problem of selecting a cash price by RMA for crop insurance. They could use Agricultural Marketing Service, National Agricultural Statistics Prices, MGEX cash price, cash prices at futures delivery points, Gulf cash prices, etc.

If there are things “broke” with crop insurance, price discovery is not one of them. Fix convergence and all of this is just academic.

Table 1. Total Revenue Comparisons of Crop Insurance with a Weak Basis (\$1.17 under) versus a Strong Basis (\$0.25 under)

	Weak Basis	Strong Basis
CRC Planting Price	\$5.42	\$5.42
CRC Harvest Price	\$4.79	\$3.87
National Average		
DTN Reported Cash	\$3.62	\$3.62
Normal basis	\$0.25	\$0.25
Current Basis	\$1.17	\$0.25
CRC Coverage	80%	80%
aph	44	44
Actual Yield	50	50

Yield	\$190.78 CRC Guarantee based on Futures Prices			\$190.78 CRC Guarantee based on Futures Prices		
	Crop Ins	Cash Sale	Total	Crop Ins	Cash Sale	Total
54	\$0.00	\$195.48	\$195.48	\$0.00	\$195.48	\$195.48
52	\$0.00	\$188.24	\$188.24	\$0.00	\$188.24	\$188.24
50	\$0.00	\$181.00	\$181.00	\$0.00	\$181.00	\$181.00
48	\$0.00	\$173.76	\$173.76	\$5.02	\$173.76	\$178.78
46	\$0.00	\$166.52	\$166.52	\$12.76	\$166.52	\$179.28
44	\$0.00	\$159.28	\$159.28	\$20.50	\$159.28	\$179.78
42	\$0.00	\$152.04	\$152.04	\$28.24	\$152.04	\$180.28
40	\$0.00	\$144.80	\$144.80	\$35.98	\$144.80	\$180.78
38	\$8.76	\$137.56	\$146.32	\$43.72	\$137.56	\$181.28
36	\$18.34	\$130.32	\$148.66	\$51.46	\$130.32	\$181.78
34	\$27.92	\$123.08	\$151.00	\$59.20	\$123.08	\$182.28
32	\$37.50	\$115.84	\$153.34	\$66.94	\$115.84	\$182.78
30	\$47.08	\$108.60	\$155.68	\$74.68	\$108.60	\$183.28
28	\$56.66	\$101.36	\$158.02	\$82.42	\$101.36	\$183.78
26	\$66.24	\$94.12	\$160.36	\$90.16	\$94.12	\$184.28
24	\$75.82	\$86.88	\$162.70	\$97.90	\$86.88	\$184.78
22	\$85.40	\$79.64	\$165.04	\$105.64	\$79.64	\$185.28
20	\$94.98	\$72.40	\$167.38	\$113.38	\$72.40	\$185.78
18	\$104.56	\$65.16	\$169.72	\$121.12	\$65.16	\$186.28
16	\$114.14	\$57.92	\$172.06	\$128.86	\$57.92	\$186.78
14	\$123.72	\$50.68	\$174.40	\$136.60	\$50.68	\$187.28
12	\$133.30	\$43.44	\$176.74	\$144.34	\$43.44	\$187.78
10	\$142.88	\$36.20	\$179.08	\$152.08	\$36.20	\$188.28
8	\$152.46	\$28.96	\$181.42	\$159.82	\$28.96	\$188.78
6	\$162.04	\$21.72	\$183.76	\$167.56	\$21.72	\$189.28
4	\$171.62	\$14.48	\$186.10	\$175.30	\$14.48	\$189.78
2	\$181.20	\$7.24	\$188.44	\$183.04	\$7.24	\$190.28
0	\$190.78	\$0.00	\$190.78	\$190.78	\$0.00	\$190.78

Table 2. Total Revenue Comparisons of Crop Insurance versus Cash Settled Crop Insurance and a Weak Basis (\$1.17 under)

	Futures	Cash
CRC Planting Price	\$5.42	\$4.49
CRC Harvest Price	\$4.79	
National Average		
DTN Reported Cash Bid	\$3.62	\$3.62
Normal basis	\$0.25	
Current Basis	\$1.17	
CRC Coverage	80%	80%
aph	44	44
Actual Yield	50	50

Yield	\$190.78 CRC Guarantee based on Futures Prices			\$158.05 CRC Guarantee based on Cash Prices		
	Crop Ins	Cash Sale	Total	Crop Ins	Cash Sale	Total
54	\$0.00	\$195.48	\$195.48	\$0.00	\$195.48	\$195.48
52	\$0.00	\$188.24	\$188.24	\$0.00	\$188.24	\$188.24
50	\$0.00	\$181.00	\$181.00	\$0.00	\$181.00	\$181.00
48	\$0.00	\$173.76	\$173.76	\$0.00	\$173.76	\$173.76
46	\$0.00	\$166.52	\$166.52	\$0.00	\$166.52	\$166.52
44	\$0.00	\$159.28	\$159.28	\$0.00	\$159.28	\$159.28
42	\$0.00	\$152.04	\$152.04	\$6.01	\$152.04	\$158.05
40	\$0.00	\$144.80	\$144.80	\$13.25	\$144.80	\$158.05
38	\$8.76	\$137.56	\$146.32	\$20.49	\$137.56	\$158.05
36	\$18.34	\$130.32	\$148.66	\$27.73	\$130.32	\$158.05
34	\$27.92	\$123.08	\$151.00	\$34.97	\$123.08	\$158.05
32	\$37.50	\$115.84	\$153.34	\$42.21	\$115.84	\$158.05
30	\$47.08	\$108.60	\$155.68	\$49.45	\$108.60	\$158.05
28	\$56.66	\$101.36	\$158.02	\$56.69	\$101.36	\$158.05
26	\$66.24	\$94.12	\$160.36	\$63.93	\$94.12	\$158.05
24	\$75.82	\$86.88	\$162.70	\$71.17	\$86.88	\$158.05
22	\$85.40	\$79.64	\$165.04	\$78.41	\$79.64	\$158.05
20	\$94.98	\$72.40	\$167.38	\$85.65	\$72.40	\$158.05
18	\$104.56	\$65.16	\$169.72	\$92.89	\$65.16	\$158.05
16	\$114.14	\$57.92	\$172.06	\$100.13	\$57.92	\$158.05
14	\$123.72	\$50.68	\$174.40	\$107.37	\$50.68	\$158.05
12	\$133.30	\$43.44	\$176.74	\$114.61	\$43.44	\$158.05
10	\$142.88	\$36.20	\$179.08	\$121.85	\$36.20	\$158.05
8	\$152.46	\$28.96	\$181.42	\$129.09	\$28.96	\$158.05
6	\$162.04	\$21.72	\$183.76	\$136.33	\$21.72	\$158.05
4	\$171.62	\$14.48	\$186.10	\$143.57	\$14.48	\$158.05
2	\$181.20	\$7.24	\$188.44	\$150.81	\$7.24	\$158.05
0	\$190.78	\$0.00	\$190.78	\$158.05	\$0.00	\$158.05

Table 3. Total Revenue Comparisons of Crop Insurance versus Cash Settled Crop Insurance and a Strong Basis Caused by a Cash Price Increase (\$0.25 under)

	Futures	Cash
CRC Planting Price	\$5.42	\$4.49
CRC Harvest Price	\$4.79	
National Average		
DTN Reported Cash Bid	\$4.54	\$4.54
Normal basis	\$0.25	
Current Basis	\$0.25	
CRC Coverage	80%	80%
aph	44	44
Actual Yield	50	50

Yield	\$190.78 CRC Guarantee based on Futures Prices			\$159.81 CRC Guarantee based on Cash Prices		
	Crop Ins	Cash Sale	Total	Crop Ins	Cash Sale	Total
54	\$0.00	\$245.16	\$245.16	\$0.00	\$245.16	\$245.16
52	\$0.00	\$236.08	\$236.08	\$0.00	\$236.08	\$236.08
50	\$0.00	\$227.00	\$227.00	\$0.00	\$227.00	\$227.00
48	\$0.00	\$217.92	\$217.92	\$0.00	\$217.92	\$217.92
46	\$0.00	\$208.84	\$208.84	\$0.00	\$208.84	\$208.84
44	\$0.00	\$199.76	\$199.76	\$0.00	\$199.76	\$199.76
42	\$0.00	\$190.68	\$190.68	\$0.00	\$190.68	\$190.68
40	\$0.00	\$181.60	\$181.60	\$0.00	\$181.60	\$181.60
38	\$8.76	\$172.52	\$181.28	\$0.00	\$172.52	\$172.52
36	\$18.34	\$163.44	\$181.78	\$0.00	\$163.44	\$163.44
34	\$27.92	\$154.36	\$182.28	\$5.45	\$154.36	\$159.81
32	\$37.50	\$145.28	\$182.78	\$14.53	\$145.28	\$159.81
30	\$47.08	\$136.20	\$183.28	\$23.61	\$136.20	\$159.81
28	\$56.66	\$127.12	\$183.78	\$32.69	\$127.12	\$159.81
26	\$66.24	\$118.04	\$184.28	\$41.77	\$118.04	\$159.81
24	\$75.82	\$108.96	\$184.78	\$50.85	\$108.96	\$159.81
22	\$85.40	\$99.88	\$185.28	\$59.93	\$99.88	\$159.81
20	\$94.98	\$90.80	\$185.78	\$69.01	\$90.80	\$159.81
18	\$104.56	\$81.72	\$186.28	\$78.09	\$81.72	\$159.81
16	\$114.14	\$72.64	\$186.78	\$87.17	\$72.64	\$159.81
14	\$123.72	\$63.56	\$187.28	\$96.25	\$63.56	\$159.81
12	\$133.30	\$54.48	\$187.78	\$105.33	\$54.48	\$159.81
10	\$142.88	\$45.40	\$188.28	\$114.41	\$45.40	\$159.81
8	\$152.46	\$36.32	\$188.78	\$123.49	\$36.32	\$159.81
6	\$162.04	\$27.24	\$189.28	\$132.57	\$27.24	\$159.81
4	\$171.62	\$18.16	\$189.78	\$141.65	\$18.16	\$159.81
2	\$181.20	\$9.08	\$190.28	\$150.73	\$9.08	\$159.81
0	\$190.78	\$0.00	\$190.78	\$159.81	\$0.00	\$159.81

Table 4. Total Revenue Comparisons of Crop Insurance versus Cash Settled Crop Insurance and an Increase in Futures Prices with a Weak Basis (\$1.17 under).

	Futures	Cash
CRC Planting Price	\$5.42	\$4.49
CRC Harvest Price	\$6.79	
DTN Reported		
Cash Bid	\$5.62	\$5.62
Normal basis	\$0.25	
Current Basis	\$1.17	
CRC Coverage	80%	80%
aph	44	44
Actual Yield	50	50

Yield	\$239.01 CRC Guarantee based on Futures Prices			\$197.82 CRC Guarantee based on Cash Prices		
	Crop Ins	Cash Sale	Total	Crop Ins	Cash Sale	Total
54	\$0.00	\$303.48	\$303.48	\$0.00	\$303.48	\$303.48
52	\$0.00	\$292.24	\$292.24	\$0.00	\$292.24	\$292.24
50	\$0.00	\$281.00	\$281.00	\$0.00	\$281.00	\$281.00
48	\$0.00	\$269.76	\$269.76	\$0.00	\$269.76	\$269.76
46	\$0.00	\$258.52	\$258.52	\$0.00	\$258.52	\$258.52
44	\$0.00	\$247.28	\$247.28	\$0.00	\$247.28	\$247.28
42	\$0.00	\$236.04	\$236.04	\$0.00	\$236.04	\$236.04
40	\$0.00	\$224.80	\$224.80	\$0.00	\$224.80	\$224.80
38	\$0.00	\$213.56	\$213.56	\$0.00	\$213.56	\$213.56
36	\$0.00	\$202.32	\$202.32	\$0.00	\$202.32	\$202.32
34	\$8.15	\$191.08	\$199.23	\$6.74	\$191.08	\$197.82
32	\$21.73	\$179.84	\$201.57	\$17.98	\$179.84	\$197.82
30	\$35.31	\$168.60	\$203.91	\$29.22	\$168.60	\$197.82
28	\$48.89	\$157.36	\$206.25	\$40.46	\$157.36	\$197.82
26	\$62.47	\$146.12	\$208.59	\$51.70	\$146.12	\$197.82
24	\$76.05	\$134.88	\$210.93	\$62.94	\$134.88	\$197.82
22	\$89.63	\$123.64	\$213.27	\$74.18	\$123.64	\$197.82
20	\$103.21	\$112.40	\$215.61	\$85.42	\$112.40	\$197.82
18	\$116.79	\$101.16	\$217.95	\$96.66	\$101.16	\$197.82
16	\$130.37	\$89.92	\$220.29	\$107.90	\$89.92	\$197.82
14	\$143.95	\$78.68	\$222.63	\$119.14	\$78.68	\$197.82
12	\$157.53	\$67.44	\$224.97	\$130.38	\$67.44	\$197.82
10	\$171.11	\$56.20	\$227.31	\$141.62	\$56.20	\$197.82
8	\$184.69	\$44.96	\$229.65	\$152.86	\$44.96	\$197.82
6	\$198.27	\$33.72	\$231.99	\$164.10	\$33.72	\$197.82
4	\$211.85	\$22.48	\$234.33	\$175.34	\$22.48	\$197.82
2	\$225.43	\$11.24	\$236.67	\$186.58	\$11.24	\$197.82
0	\$239.01	\$0.00	\$239.01	\$197.82	\$0.00	\$197.82