



www.agmanager.info  
abarnaby@agecon.ksu.edu  
(785) 532.1515 (phone)  
(785) 532.6925 (fax)

G.A. "Art" Barnaby Jr.

Copyright 2007. All rights reserved. Contact Art to be added to e-mail list

**Disclaimer:** This web page is designed to aid farmers with their marketing and risk management decisions. The risk of loss in trading futures, options, forward contracts, and hedge-to-arrive can be substantial and no warranty is given or implied by the author or any other party. Each farmer must consider whether such marketing strategies are appropriate for his or her situation. This web page does not represent the views of Kansas State University.

### Missing your musing on MPC1 this year<sup>1</sup>

*Sir - I have missed your thoughts on MPC1 this year. Has KSU decided to not comment on this topic?*

*In Iowa, the first blush looks like that since the premium for CRC is lower it might be recommended over RA w/ harvest. I think this was true for last year also; then the harvest price adjustment for the extra RA harvest price month probably trumped the lower CRC premium.*

*Would you share your thoughts this year? Or if I just haven't seen them, would you direct me to where I can review?*

*Thank you - from one who has missed your musings.*

*One of your readers*

I am a little slow this year but just let me say "this is the most price risk I have seen in 30 years". This price spike was caused by a shift in demand caused by ethanol demand. If we get a short corn crop in the Corn Belt then prices will likely increase above the \$5.56 price limit in CRC and GRIP. For that reason I am suggesting RA with the harvest price option that has no price limit. If prices increase to \$7 and you lose the crop you will be paid \$7 under RA-HPO while CRC would pay \$5.56 and MPC1 would pay \$3.50.

---

<sup>1</sup>Prepared by G. A. (Art) Barnaby, Jr., Professor, Department of Agricultural Economics, K-State Research and Extension, Kansas State University, Manhattan, KS 66506, March 12, 2007, Phone 785-532-1515, e-mail – [abarnaby@agecon.ksu.edu](mailto:abarnaby@agecon.ksu.edu).

**I would NOT buy RA without the HPO.** The reason why is the corn stocks are very tight and even a little yield reduction will cause a “negative carry over” and that is not possible so price would have to increase to ration out the available supply. If the national corn yield were similar to the 129 bushel yield produced in 2002, the USA will be short about a billion bushels. If that were to happen, I expect the price would exceed the CRC price limit of \$1.50 on corn and grain sorghum. For that reason I recommending RA plus the harvest price option because RA-HPO has unlimited price protection. If we have a short crop causing the price to exceed \$6, then CRC coverage will be capped at \$5.56. The same is true for GRIP because this year it also has a \$1.50 limit on the price move. I would suggest not buying either RA or GRIP without the HPO because if this is a short crop then the price will increase reducing any indemnity payments. It is even possible that the payments will be less than provided under APH (MPCI) coverage.

There is no RA offer on milo, so to get unlimited liability one would need to buy a \$5.50 Dec corn call on the guaranteed bushels plus the CRC contract. The call built in the RA-HPO contract will likely be cheaper than a CBOT call because the CBOT call only requires the price to increase to generate an “indemnity”, while the call in RA-HPO is adjusted for yield. The first requirement is there must be an insurable yield loss, otherwise the HPO expires worthless. The full value of the call in RA requires a zero yield. Any production reduces the value of the call. In addition the RA-HPO is subsidized.

### **Should I cut my coverage because of higher premiums?**

If it made sense to buy 75% coverage a year ago then it makes sense today. It is like trading in an old beat up Ford for a new Cadillac and then cut ones insurance coverage on the new Cadillac. Growers’ corn/milo crop (asset) has nearly doubled in value so why would farmers want to under insure their asset? Premiums will be about 50% higher than a year ago but the rate per dollar of coverage probably has changed very little.

### **What about GRIP/GRP?**

I would first refer the reader to the following email:

*“RMA expected milo yield for 2006 was 52.5 bu/acre for GRP in Rawlins County, Kansas. For 2007, the trend yield is 40.9! How can a long-term expected yield drop 11.6 bu/acre or 22% in one year? Moreover, the “expected future yield,” i.e., the trend, is now 15% below the 15 year average yield? Of course, we can just as easily find counties where the opposite is true, e.g., a gross increase in trend yields in one year.”*

The key to GRIP/GRP is the expected county yield set by RMA and if RMA sets the expected county yield below the 20 year average yield, then GRIP/GRP are not good buys. GRIP/GRP on Rawlins county grain sorghum is not a good buy.

To check the results for other counties and crops one needs to download the production for each of the past 20 years from USDA NASS web site. Then divide the annual production by planted acres to calculate the yield per planted acre. In some states/counties GRIP/GRP is based on harvested yield and not planted yield.

As a “rule of thumb” the expected planted wheat yield should be 105% of the 20 year average county yield, 107% for grain sorghum, 110% for soybeans and 120% for corn. If the RMA expected yield is below these values then it is unlikely that GRIP/GRP will be good buys. If the expected yield is below the county average yield (negative yield trend) then GRIP/GRP is not a good buy.

If the expected GRIP/GRP county yield is above the 120% of the 20 year average county yield, then the next test is to compare the farms historical corn yields with the county yield. The higher the correlation between the county yield and the farm yield the more risk the GRIP/GRP coverage will transfer. If one farms the whole county then the county yield and farm enterprise yield are the same, so the larger the farm then normally the correlation increases.

GRIP/GRP losses are adjusted at the county level, so the GRP is a “put option” on expected county yield and GRIP is a put option on expected county revenue. And like a price option, farmers have a basis risk, the difference between the percent county yield loss and percent farm yield loss. Farmers can reduce the basis risk by purchasing up to 150% of the dollars of coverage. For example if the county has a 25% yield loss but the farm has a 50% yield loss then by multiplying the smaller percent county yield loss times a larger dollar amount will generate an indemnity payment that is closer to the value of the farm loss.

In Kansas RMA does not separate irrigated from dryland production and that will be important for some growers. Therefore, irrigated farmers who are located in counties that are dominated by dryland corn yields will likely find the GRIP/GRP to be a good offer because their corn yields are less variable than the county yields. However, there is little (no) hail protection in the GRIP/GRP contract and that is a major reason farmers’ purchase crop insurance on irrigated corn.

**What is your recommendation for soybeans and spring wheat?** My suggestion is to purchase the cheaper of either CRC or RA-HPO, because there is little reason to expect the market will exceed the \$3 price limit in soybeans or the \$2 limit on spring wheat. There is some upside price risk because an increased corn price will drag the wheat and soybean price higher, especially wheat. Wheat can be used to produce ethanol or as a feed grain, so higher corn prices will prevent the bottom from falling out of the wheat market.

**A word of caution.** Just to “trim the horns a little,” remember the USA can import grain. Also there was a recent Wall Street Journal article about how Brazilian ethanol was avoiding the tariff by reprocessing the ethanol to remove water in one of the non-tariff countries and then re-exported to the USA without tariff. Given that Brazil can produce ethanol for a lower cost makes all of this possible. If this occurs that will limit some of the very large price increases.