

**Evaluation of Alternative Base Periods for a National Counter Cyclical
Payment Program for Rice, Upland Cotton, Corn, Wheat, Soybeans and Sorghum**

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Expanded

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Executive Summary

A risk analysis of a national counter cyclical payment (CCP) program for six crops was completed for one year. National planted acre yield risk over the 1986-2000 period was used with FAPRI's stochastic projection of crop prices for 2001 in the analysis. Four alternative base periods for triggering a CCP were evaluated. Three Added AMTA scenarios and a Base scenario of no additional market loss or CCP were also run for each of the crops.

An earlier analysis of 18 alternative base periods for a rice CCP program narrowed the number of alternative scenarios to the seven used for the present study. The same four base periods for the CCP were used for all six crops analyzed. The four base periods for defining a CCP program scenario were:

- Simple Average 1994-1998
- Simple Average 1995-1999
- Olympic Average 1994-1998
- Olympic Average 1995-1999

Average base revenue per planted acre, used to trigger a CCP, was calculated as follows for the two Simple Average base period scenarios:

- Calculate national planted acre yield for each of 5 years

National planted acre yield = national production / national planted acres

- Calculate national market receipts per planted acre for each of 5 years

National market receipts per planted acre = national season average price * national planted acre yield

- Calculate the average national market receipts per planted acre calculating a simple average of the 5 years of receipts.

For the Olympic Average base period scenarios, the same formulas were used but the effective average for triggering a payment was calculated ignoring the lowest and highest market revenues.

A simulation analysis was done using historical yield and price variability for each of the crops. Historical correlation of prices and yields over the 1986-2000 period was assumed to continue for the present study. A CCP was paid when the per acre simulated market receipts were less than the average base revenue for a particular CCP scenario. The simulation analysis repeated the sampling process for 100 replications or iterations so the risk of receiving a CCP could be estimated. The formulas for calculating a CCP were:

Stochastic market receipts = Stochastic price for 2001 * Stochastic national planted acre yield

If (stochastic market receipts < average base receipts per acre) then the payment equals
CCP = average base receipts - stochastic market receipts

Because the market receipts were both expressed on a per planted acre basis, the CCP would be paid to producers based on the number of acres they planted. The cost of the program was estimated using USDA's recent planting estimates for the 2001 crop year.

The Added AMTA scenarios assumed that the announced 2001 AMTA payment rate would be augmented by a fixed amount. Three alternative Added AMTA scenarios were analyzed for each crop. The added AMTA rates were:

- Rice – \$2.25, \$2.50, \$2.75/cwt.
- Cotton – \$0.067, \$0.074, \$0.081/lb.
- Corn – \$0.295, \$0.328, \$0.361/bu.
- Wheat – \$0.565, \$0.628, and \$0.69/bu.
- Soybean – \$0.061, \$0.067, and \$0.074/bu.
- Sorghum – \$0.248, \$0.275, and \$0.303/bu.

The Added AMTA payments were analyzed assuming that the payments were made based on the 1996 farm program formula for calculating AMTA payments.

A Base scenario was run for comparison purposes. Market receipts per planted acre equaled stochastic yield times price. The per unit loan deficiency payment (LDP) was calculated using the stochastic prices and estimated adjusted world prices, the 2001 loan rate and the stochastic yield. Base AMTA payments were calculated using the 1996 farm program formula for calculating this payment. The total receipts for the Base scenario were used along with the CCPs or Added AMTA payments to calculate a total receipts per yield unit for the crops. Based on the ratio of rice base acres to planted acres in 2001, it is assumed that every planted acre carries approximately 1.27 contract payment acres. Similar ratios were applied to the other crops.

While we acknowledge that there are crop contract acre payments that do not accrue to current operators, it was decided that the assumption would be preferable to assuming every planted acre has only one associated contract acre. In summary, the eight alternatives analyzed include:

- Base – projected market receipts, loan deficiency payments, and \$2.10/bu. AMTA payments. No additional CCP payments are included.
- Avg 95-99 – Base revenue plus an additional CCP triggered when 2001 market receipts fall below the average market receipts on a planted acre basis for the 95-99 marketing year.
- Avg 94-98 – Base revenue plus an additional CCP triggered when 2001 market receipts fall below the average market receipts on a planted acre basis for the 94-98 marketing year.

- Olym Avg 95-99 – Same as Avg 95-99, except the high and low market year receipts are dropped and the remaining three years are averaged as the base.
- Olym Avg 94-98 – Same as Avg 94-98, except the high and low market year receipts are dropped and the remaining three years are averaged as the base.
- AMTA \$2.25 – Assumes producers receive an additional \$2.25 AMTA paid on planted acres.
- AMTA \$2.50 – Assumed producers receive an additional \$2.50 AMTA paid on planted acres.
- AMTA \$2.75 – Assumed producers receive an additional \$2.75 AMTA paid on planted acres.

Results of the simulation analysis were reported in a probabilistic format for each crop, using the following variables:

- CCPs or Added AMTA payments per yield unit (cwt., lb., or bu.),
- Total receipts per yield unit as defined above, and
- Total government payments in 2001 for each crop.

In addition the scenarios were ranked for each crop using a risk ranking procedure assuming that farmers are averse to risk. The procedure also reported the marginal economic benefit of the preferred program option to the alternative scenarios.

Summary of Results for Payments per Yield Unit

- The CCP using the Olympic Average 95-99 and the CCP using the Olympic Average 94-98 were associated with the largest mean payment per cwt. for rice (Table 1). The olympic average process leaves the same three years to be averaged under both periods for rice. The CCP using the Olympic Average 94-98 was associated with the greatest mean payment per yield for cotton, corn, soybeans, and sorghum.
- An added AMTA of \$0.69/bu. for wheat resulted in the largest average per bu. payment rate. Wheat producers would earn higher payments under an Added AMTA because of the practice of grazing out wheat has resulted in: planted acres exceeding harvested acres by 15%, harvested acre yield exceeding planted acre yield by 15%, and base acres exceeding planted acres for 2001 by 30%.
- The maximum per yield unit payment was observed for the CCP scenario using the Olympic Average 94-98 in all crops except wheat. The largest maximum payment was observed for wheat when the Simple Average 94-98 was used to define the base CCP trigger receipts.
- The probability that the CCPs would equal the minimum level are only 1% for rice (Table 1). For the other crops this probability ranged from a low of 3% for soybeans and sorghum to a high of 26% for cotton.

Table 1. Counter Cyclical Payments per Yield Unit for Alternative Base Periods or Added AMTA Payments, 100% Trigger

| | Mean | Min | Max | P(x=Min) |
|----------------------|-----------------|--------------|--------------|----------|
| Rice (Cwt.) | (\$/Yield Unit) | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 2.289 | 0.397 | 5.205 | 1% |
| Avg 94-98 | 2.457 | 0.565 | 5.373 | 1% |
| Olym Avg 95-99 | 2.613 | 0.721 | 5.529 | 1% |
| Olym Avg 94-98 | 2.613 | 0.721 | 5.529 | 1% |
| AMTA 2.25 | 1.977 | 1.977 | 1.977 | 100% |
| AMTA 2.5 | 2.197 | 2.197 | 2.197 | 100% |
| AMTA 2.75 | 2.416 | 2.416 | 2.416 | 100% |
| Cotton (lb.) | | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 0.093 | 0.000 | 0.353 | 26% |
| Avg 94-98 | 0.168 | 0.000 | 0.443 | 10% |
| Olym Avg 95-99 | 0.111 | 0.000 | 0.376 | 20% |
| Olym Avg 94-98 | 0.176 | 0.000 | 0.452 | 8% |
| AMTA 0.067 | 0.061 | 0.061 | 0.061 | 100% |
| AMTA 0.074 | 0.068 | 0.068 | 0.068 | 100% |
| AMTA 0.081 | 0.074 | 0.074 | 0.074 | 100% |
| Corn (bu.) | | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 0.320 | 0.000 | 1.091 | 21% |
| Avg 94-98 | 0.413 | 0.000 | 1.201 | 12% |
| Olym Avg 95-99 | 0.318 | 0.000 | 1.088 | 21% |
| Olym Avg 94-98 | 0.440 | 0.000 | 1.231 | 12% |
| AMTA 0.295 | 0.228 | 0.228 | 0.228 | 100% |
| AMTA 0.328 | 0.253 | 0.253 | 0.253 | 100% |
| AMTA 0.361 | 0.278 | 0.278 | 0.278 | 100% |
| Wheat (bu.) | | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 0.499 | 0.000 | 1.495 | 13% |
| Avg 94-98 | 0.603 | 0.000 | 1.611 | 7% |
| Olym Avg 95-99 | 0.486 | 0.000 | 1.480 | 13% |
| Olym Avg 94-98 | 0.581 | 0.000 | 1.587 | 8% |
| AMTA 0.565 | 0.610 | 0.610 | 0.610 | 100% |
| AMTA 0.628 | 0.678 | 0.678 | 0.678 | 100% |
| AMTA 0.69 | 0.746 | 0.746 | 0.746 | 100% |
| Soybean (bu.) | | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 1.491 | 0.000 | 3.325 | 9% |
| Avg 94-98 | 1.754 | 0.000 | 3.608 | 4% |
| Olym Avg 95-99 | 1.506 | 0.000 | 3.342 | 9% |
| Olym Avg 94-98 | 1.808 | 0.000 | 3.664 | 3% |
| AMTA 0.061 | 0.093 | 0.093 | 0.093 | 100% |
| AMTA 0.067 | 0.104 | 0.104 | 0.104 | 100% |
| AMTA 0.074 | 0.114 | 0.114 | 0.114 | 100% |
| Sorghum (bu.) | | | | |
| Base | 0.000 | 0.000 | 0.000 | 100% |
| Avg 95-99 | 0.355 | 0.000 | 0.842 | 16% |
| Avg 94-98 | 0.476 | 0.000 | 0.978 | 8% |
| Olym Avg 95-99 | 0.384 | 0.000 | 0.876 | 13% |
| Olym Avg 94-98 | 0.593 | 0.000 | 1.103 | 3% |
| AMTA 0.248 | 0.297 | 0.297 | 0.297 | 100% |
| AMTA 0.275 | 0.330 | 0.330 | 0.330 | 100% |
| AMTA 0.303 | 0.363 | 0.363 | 0.363 | 100% |

Added AMTA payments are calculated using current national farm program yield, national base acres, and a payment fraction of 0.85 per base acre. Added AMTA payments were divided by average national planted acre yields for 1996-2000 to put them on a comparable basis to the CCPs. Counter Cyclical Payments were calculated on a planted acre yield basis.

Summary of Total Receipts per Yield Unit

- Of the eight alternatives analyzed, rice would earn the largest average total receipts per cwt. from the two Olympic Average CCP programs (Table 2). National average total receipts per cwt. for rice was estimated at \$13.25 under these two scenarios. Average receipts under the Added AMTA of \$2.75/cwt. for rice was estimated at \$13.05/cwt. Similar results were observed for cotton, corn, soybeans, and sorghum.
- The two higher levels of Added AMTAs provided a higher minimum for total receipts than any of the four CCPs for rice (Table 2). However, the Added AMTA options did not provide the opportunity to earn as high of maximum receipts per cwt. as the CCPs. For example the maximum receipts under the Olympic Average CCPs was \$15.43/cwt. while the maximum for the highest Added AMTA option was \$13.73/cwt.
- The probabilities that the different options would result in total receipts per yield unit less than a lower target level and greater than an upper target were calculated from the simulation results (Table 2). In the case of rice the lower and upper targets were \$12 and \$13/cwt., respectively. All seven of the policy options resulted in low probabilities (1% to 4%) that receipts would fall below \$12/cwt. The two Olympic Average CCP options were associated with a 60% chance of receipts exceeding the \$13/cwt. target. An added AMTA of \$2.75/cwt. was associated with a 55% chance that receipts would exceed the upper target.
- The Base scenario of continuing the current farm bill had a significantly lower total receipts per cwt. for rice than any of the seven options. The Base scenario was associated with a 99% chance of receipts less than \$12/cwt. and a 1% chance of receipts exceeding \$13/cwt.
- In the case of cotton, the CCP Olympic Average 94-98 had the most favorable probability of exceeding a total receipt of \$0.80/lb. and the lowest chance of seeing receipts fall below \$0.70/lb. This CCP scenario was also the most favorable for corn, soybeans, and sorghum.
- Wheat experienced the most favorable total receipts per bushel under the Added AMTA with \$0.69/bu. option.

Table 2. Total Receipts per Yield Unit in 2001 for Selected Crops Under Alternative Counter Cyclical and Added AMTA Programs, Assuming a 100% Trigger

| | Mean | Min | Max | P(x=Min) | P(x<X) | P(x>Y) |
|----------------|---------------|---------------|---------------|----------|-----------|-----------|
| Rice | \$/Cwt) | | | | P(x<12) | P(x>13) |
| Base | 10.64 | 9.84 | 11.31 | 1% | 99% | 1% |
| Avg 95-99 | 12.93 | 11.58 | 15.10 | 1% | 4% | 43% |
| Avg 94-98 | 13.10 | 11.75 | 15.27 | 1% | 3% | 53% |
| Olym Avg 95-99 | 13.25 | 11.91 | 15.43 | 1% | 2% | 60% |
| Olym Avg 94-98 | 13.25 | 11.91 | 15.43 | 1% | 2% | 60% |
| AMTA 2.25 | 12.62 | 11.82 | 13.29 | 1% | 4% | 15% |
| AMTA 2.5 | 12.83 | 12.04 | 13.51 | 1% | 1% | 35% |
| AMTA 2.75 | 13.05 | 12.26 | 13.73 | 1% | 1% | 55% |
| Cotton | \$/lb. | | | | P(x<0.75) | P(x>0.8) |
| Base | 0.6347 | 0.4763 | 0.9596 | 1% | 88% | 6% |
| Avg 95-99 | 0.7282 | 0.6804 | 0.9596 | 29% | 74% | 9% |
| Avg 94-98 | 0.8027 | 0.7702 | 0.9838 | 44% | 1% | 41% |
| Olym Avg 95-99 | 0.7459 | 0.7034 | 0.9596 | 34% | 62% | 11% |
| Olym Avg 94-98 | 0.8109 | 0.7792 | 0.9928 | 46% | 1% | 44% |
| AMTA 0.067 | 0.6957 | 0.5372 | 1.0205 | 1% | 77% | 14% |
| AMTA 0.074 | 0.7024 | 0.5440 | 1.0273 | 1% | 74% | 15% |
| AMTA 0.081 | 0.7092 | 0.5507 | 1.0340 | 1% | 71% | 16% |
| Corn | \$/bu | | | | P(x<2.5) | P(x>3) |
| Base | 2.39 | 1.76 | 3.08 | 1% | 76% | 3% |
| Avg 95-99 | 2.71 | 2.52 | 3.44 | 1% | 1% | 12% |
| Avg 94-98 | 2.80 | 2.63 | 3.55 | 37% | 1% | 22% |
| Olym Avg 95-99 | 2.71 | 2.52 | 3.43 | 28% | 1% | 12% |
| Olym Avg 94-98 | 2.83 | 2.66 | 3.58 | 1% | 1% | 23% |
| AMTA 0.295 | 2.62 | 1.99 | 3.31 | 1% | 30% | 9% |
| AMTA 0.328 | 2.64 | 2.01 | 3.33 | 1% | 23% | 9% |
| AMTA 0.361 | 2.67 | 2.04 | 3.36 | 1% | 15% | 9% |
| Wheat | \$/bu | | | | P(x<3.75) | P(x>4.25) |
| Base | 3.50 | 3.02 | 4.13 | 1% | 84% | 1% |
| Avg 95-99 | 4.00 | 3.85 | 4.77 | 45% | 1% | 10% |
| Avg 94-98 | 4.10 | 3.96 | 4.89 | 27% | 1% | 16% |
| Olym Avg 95-99 | 3.98 | 3.83 | 4.76 | 45% | 1% | 10% |
| Olym Avg 94-98 | 4.08 | 3.94 | 4.86 | 50% | 1% | 15% |
| AMTA 0.565 | 4.11 | 3.63 | 4.74 | 1% | 8% | 24% |
| AMTA 0.628 | 4.18 | 3.69 | 4.81 | 1% | 5% | 31% |
| AMTA 0.69 | 4.24 | 3.76 | 4.88 | 1% | 1% | 45% |
| Soybean | \$/bu | | | | P(x<5.5) | P(x>6) |
| Base | 5.55 | 4.50 | 7.05 | 1% | 40% | 14% |
| Avg 95-99 | 7.04 | 5.96 | 9.54 | 8% | 1% | 91% |
| Avg 94-98 | 7.30 | 6.25 | 9.83 | 13% | 1% | 99% |
| Olym Avg 95-99 | 7.06 | 5.98 | 9.56 | 8% | 1% | 91% |
| Olym Avg 94-98 | 7.36 | 6.30 | 9.88 | 14% | 1% | 99% |
| AMTA 0.061 | 5.64 | 4.59 | 7.14 | 1% | 34% | 15% |
| AMTA 0.067 | 5.65 | 4.60 | 7.15 | 1% | 34% | 15% |
| AMTA 0.074 | 5.66 | 4.61 | 7.16 | 1% | 33% | 15% |
| Sorghum | \$/bu | | | | P(x<2.4) | P(x>2.85) |
| Base | 2.34 | 1.92 | 3.43 | 1% | 65% | 3% |
| Avg 95-99 | 2.70 | 2.53 | 3.43 | 3% | 1% | 25% |
| Avg 94-98 | 2.82 | 2.66 | 3.43 | 3% | 1% | 33% |
| Olym Avg 95-99 | 2.73 | 2.56 | 3.43 | 3% | 1% | 27% |
| Olym Avg 94-98 | 2.94 | 2.79 | 3.43 | 58% | 1% | 40% |
| AMTA 0.248 | 2.64 | 2.22 | 3.73 | 1% | 18% | 13% |
| AMTA 0.275 | 2.67 | 2.25 | 3.76 | 1% | 11% | 16% |
| AMTA 0.303 | 2.71 | 2.29 | 3.80 | 1% | 10% | 19% |

Total receipts includes: market receipts, LDPs, base AMTA for 2001 plus CCPs or Added AMTA.

Summary of Policy Option Rankings in a Risk Context

- Stochastic dominance was used to rank the policy options for each of the crops based on the combination of simulated total receipts per yield unit and their risk dispersion. The rankings assumed that farm operators are risk averse.
- For rice farms there was a tie between the two CCP Olympic Average options (Table 3). The least preferred option for rice was the Base scenario, as expected. The marginal benefits per yield unit of the preferred option to the less preferred option was calculated. The preferred scenarios were worth \$2.601/cwt. more than the Base scenario. An Added AMTA of \$2.75/cwt. was worth \$0.185/cwt. less than the preferred options.
- For cotton farms the preferred scenario was the CCP Olympic Average 94-98 which was worth \$0.1765/lb. more than the Base scenario (Table 3). The highest Added AMTA of \$0.081/lb. was ranked fifth and was worth \$0.1021/lb. less than the preferred scenario.
- Wheat is the only crop that preferred an Added AMTA to any of the farm CCP programs. The highest Added AMTA was worth \$0.142/bu. more than the highest ranked CCP program for wheat.

Table 3. Rankings of Alternative Counter Cyclical and Added AMTA Options Relative to the Base and Dollars per Yield Unit Required to Equate Alternative to the Preferred Option, 100% Trigger

| | Value of an Option Relative to the Preferred Option |
|---------------------------|---|
| Rice (\$/cwt.) | |
| Rice Olym Avg 95-99 | Preferred Option |
| Rice Olym Avg 94-98 | 0.000 |
| Rice Avg 94-98 | 0.156 |
| Rice AMTA 2.75 | 0.185 |
| Rice Avg 95-99 | 0.324 |
| Rice AMTA 2.5 | 0.405 |
| Rice AMTA 2.25 | 0.624 |
| Rice Base | 2.601 |
| Cotton (cents/lb.) | |
| Cott Olym Avg 94-98 | Preferred Option |
| Cott Avg 94-98 | 0.8208 |
| Cott Olym Avg 95-99 | 6.4995 |
| Cott Avg 95-99 | 8.2741 |
| Cott AMTA 0.081 | 10.2082 |
| Cott AMTA 0.074 | 10.8850 |
| Cott AMTA 0.067 | 11.5618 |
| Cott Base | 17.6529 |
| Corn (\$/bu.) | |
| Corn Olym Avg 94-98 | Preferred Option |
| Corn Avg 94-98 | 0.027 |
| Corn Avg 95-99 | 0.120 |
| Corn Olym Avg 95-99 | 0.122 |
| Corn AMTA 0.361 | 0.162 |
| Corn AMTA 0.328 | 0.187 |
| Corn AMTA 0.295 | 0.213 |
| Corn Base | 0.440 |
| Wheat (\$/bu.) | |
| Wht AMTA 0.69 | Preferred Option |
| Wht AMTA 0.628 | 0.068 |
| Wht AMTA 0.565 | 0.136 |
| Wht Avg 94-98 | 0.142 |
| Wht Olym Avg 94-98 | 0.164 |
| Wht Avg 95-99 | 0.246 |
| Wht Olym Avg 95-99 | 0.259 |
| Wht Base | 0.746 |
| Soybean (\$/bu.) | |
| Soy Olym Avg 94-98 | Preferred Option |
| Soy Avg 94-98 | 0.054 |
| Soy Olym Avg 95-99 | 0.300 |
| Soy Avg 95-99 | 0.316 |
| Soy AMTA 0.074 | 1.675 |
| Soy AMTA 0.067 | 1.685 |
| Soy AMTA 0.061 | 1.696 |
| Soy Base | 1.789 |
| Sorghum (\$/bu.) | |
| GS Olym Avg 94-98 | Preferred Option |
| GS Avg 94-98 | 0.117 |
| GS Olym Avg 95-99 | 0.210 |
| GS AMTA 0.303 | 0.231 |
| GS Avg 95-99 | 0.238 |
| GS AMTA 0.275 | 0.264 |
| GS AMTA 0.248 | 0.297 |
| GS Base | 0.594 |

For example, the Olympic Average 95-99 benefits rice producers by \$0.624/cwt more than the Added AMTA 2.25 and \$2.601/cwt more than the Base of no CCP or Added AMTA.

Summary of Total Government Program Costs by Crop for 2001

- Based on the simulation results total government costs for LDPs, Base AMTA payments, and either CCPs or Added AMTAs were calculated (Table 4).
- Under the Base scenario the average government cost for rice was calculated at \$0.8 billion for 2001 and this value could range from a minimum of \$0.55 billion to a maximum of \$1.2 billion.
- For the CCP Olympic Average 95-99 or 94-98, the average government cost was estimated at \$1.3 billion and the minimum and maximums were estimated to be \$0.72 and \$2.23 billion, respectively. The CCP paid large amounts when receipts fall significantly below the base trigger level.
- The highest Added AMTA option for rice (\$2.75/cwt.) was associated with a mean government cost of \$1.27 billion. The minimum government cost for this option was \$1.02 billion, and its maximum was \$1.66 billion.
- For all crops except wheat the Added AMTA options were associated with the highest minimum government cost but the lowest maximum costs when excluding the Base scenario.

Table 4. Total Government Costs for Base AMTA, LDP, and Counter Cyclical Payments or Added AMTA in 2001, Assuming 100% Trigger

| | Mean | Min | Max | P(x=Min) |
|----------------|-------------|-------------|--------------|----------|
| (Billions \$) | | | | |
| Rice | | | | |
| Base | 0.80 | 0.55 | 1.20 | 1% |
| Avg 95-99 | 1.24 | 0.66 | 2.17 | 1% |
| Avg 94-98 | 1.27 | 0.69 | 2.20 | 1% |
| Olym Avg 95-99 | 1.30 | 0.72 | 2.23 | 1% |
| Olym Avg 94-98 | 1.30 | 0.72 | 2.23 | 1% |
| AMTA 2.25 | 1.18 | 0.94 | 1.58 | 1% |
| AMTA 2.5 | 1.23 | 0.98 | 1.62 | 1% |
| AMTA 2.75 | 1.27 | 1.02 | 1.66 | 1% |
| Cotton | | | | |
| Base | 0.68 | 0.45 | 2.30 | 54% |
| Avg 95-99 | 1.48 | 0.45 | 5.32 | 25% |
| Avg 94-98 | 2.13 | 0.45 | 6.10 | 10% |
| Olym Avg 95-99 | 1.64 | 0.45 | 5.52 | 20% |
| Olym Avg 94-98 | 2.20 | 0.45 | 6.18 | 8% |
| AMTA 0.067 | 1.20 | 0.98 | 2.82 | 54% |
| AMTA 0.074 | 1.26 | 1.03 | 2.88 | 54% |
| AMTA 0.081 | 1.32 | 1.09 | 2.94 | 54% |
| Corn | | | | |
| Base | 3.26 | 1.92 | 10.36 | 49% |
| Avg 95-99 | 6.21 | 1.92 | 19.37 | 21% |
| Avg 94-98 | 7.06 | 1.92 | 20.38 | 12% |
| Olym Avg 95-99 | 6.19 | 1.92 | 19.35 | 21% |
| Olym Avg 94-98 | 7.31 | 1.92 | 20.67 | 12% |
| AMTA 0.295 | 5.36 | 4.02 | 12.46 | 49% |
| AMTA 0.328 | 5.59 | 4.25 | 12.69 | 49% |
| AMTA 0.361 | 5.82 | 4.49 | 12.93 | 49% |
| Wheat | | | | |
| Base | 1.36 | 1.08 | 3.05 | 58% |
| Avg 95-99 | 2.42 | 1.08 | 6.23 | 13% |
| Avg 94-98 | 2.65 | 1.08 | 6.48 | 7% |
| Olym Avg 95-99 | 2.40 | 1.08 | 6.20 | 13% |
| Olym Avg 94-98 | 2.60 | 1.08 | 6.43 | 8% |
| AMTA 0.565 | 2.66 | 2.38 | 4.35 | 58% |
| AMTA 0.628 | 2.80 | 2.53 | 4.49 | 58% |
| AMTA 0.69 | 2.95 | 2.67 | 4.64 | 58% |
| Soybean | | | | |
| Base | 3.00 | 0.00 | 10.25 | 17% |
| Avg 95-99 | 7.27 | 0.00 | 19.77 | 9% |
| Avg 94-98 | 8.02 | 0.00 | 20.58 | 4% |
| Olym Avg 95-99 | 7.31 | 0.00 | 19.82 | 9% |
| Olym Avg 94-98 | 8.17 | 0.00 | 20.74 | 3% |
| AMTA 0.061 | 3.27 | 0.27 | 10.52 | 17% |
| AMTA 0.067 | 3.29 | 0.30 | 10.55 | 17% |
| AMTA 0.074 | 3.32 | 0.33 | 10.58 | 17% |
| Sorghum | | | | |
| Base | 0.29 | 0.21 | 0.55 | 61% |
| Avg 95-99 | 0.48 | 0.21 | 0.95 | 16% |
| Avg 94-98 | 0.55 | 0.21 | 1.02 | 8% |
| Olym Avg 95-99 | 0.50 | 0.21 | 0.97 | 13% |
| Olym Avg 94-98 | 0.61 | 0.21 | 1.09 | 3% |
| AMTA 0.248 | 0.45 | 0.37 | 0.72 | 61% |
| AMTA 0.275 | 0.47 | 0.39 | 0.73 | 61% |
| AMTA 0.303 | 0.49 | 0.41 | 0.75 | 61% |

Summary of Graphs for the Simulation Results

- Cumulative distributions for the simulated payments under the eight options were summarized in Figure 1 for rice. The Added AMTA payment rates were depicted as vertical lines because they would provide a constant payment at a given level, regardless of price and yield. The Base scenario was shown with a zero payment in all situations. The CCP options resulted in payments ranging from a low of about \$0.50/cwt. to more than \$5.50/cwt. The probability that a CCP option would provide a payment greater than an Added AMTA option could be read from the figure. For example, the Olympic Average 95-99 option has about a 60% chance of paying larger payments per yield unit than the highest Added AMTA option, 70% chance of higher payments than the middle Added AMTA, and 75% chance of higher payments than the lowest Added AMTA.
- The cumulative distributions of total receipts per yield unit for rice under the alternative options were summarized in Figure 2. The CCP Olympic Average 95-99 and 94-98 option provided higher total receipts than the highest Added AMTA about 80% of the time and more than 95% of the time for the other two Added AMTA options.
- Cumulative distributions of government program costs for rice were presented in Figure 3. The Added AMTA options had the same shaped government payment distribution under risk as the Base scenario which had only the LDP as its risky component. The CCP government cost distributions showed that these options would result in lower government costs than the Added AMTAs 25 to 40% of the time. The CCP options resulted in substantially larger government costs about 5% of the time.
- Cumulative distributions of total receipts per yield unit were reported for cotton, corn, wheat, soybeans, and sorghum in Figures 4-8. Like rice, the receipt's distributions for the other crops under the Added AMTA options maintained the same shape as the receipt's distributions under the Base scenario, but with an increase for the higher constant AMTA payments. The CCP options, however, were more effective at cutting off the downside risk for the other crops. For example, the most preferred CCP option for cotton (Olympic Average 94-98) cuts the chance of receipts falling below \$0.78/lb. to almost zero, whereas the Base scenario offered a 90% chance of receipts falling below this level and the highest Added AMTA had an 80% chance of lower receipts (Figure 4). In the case of corn, the CCP options were effective at cutting off a significant amount of downside risk observed for the Base scenario and even for the Added AMTA options (Figure 5).

Figure 1. Cumulative Distributions of Counter Cyclical or Added AMTA Payments per Cwt of Rice in 2001, Assuming 100% Trigger

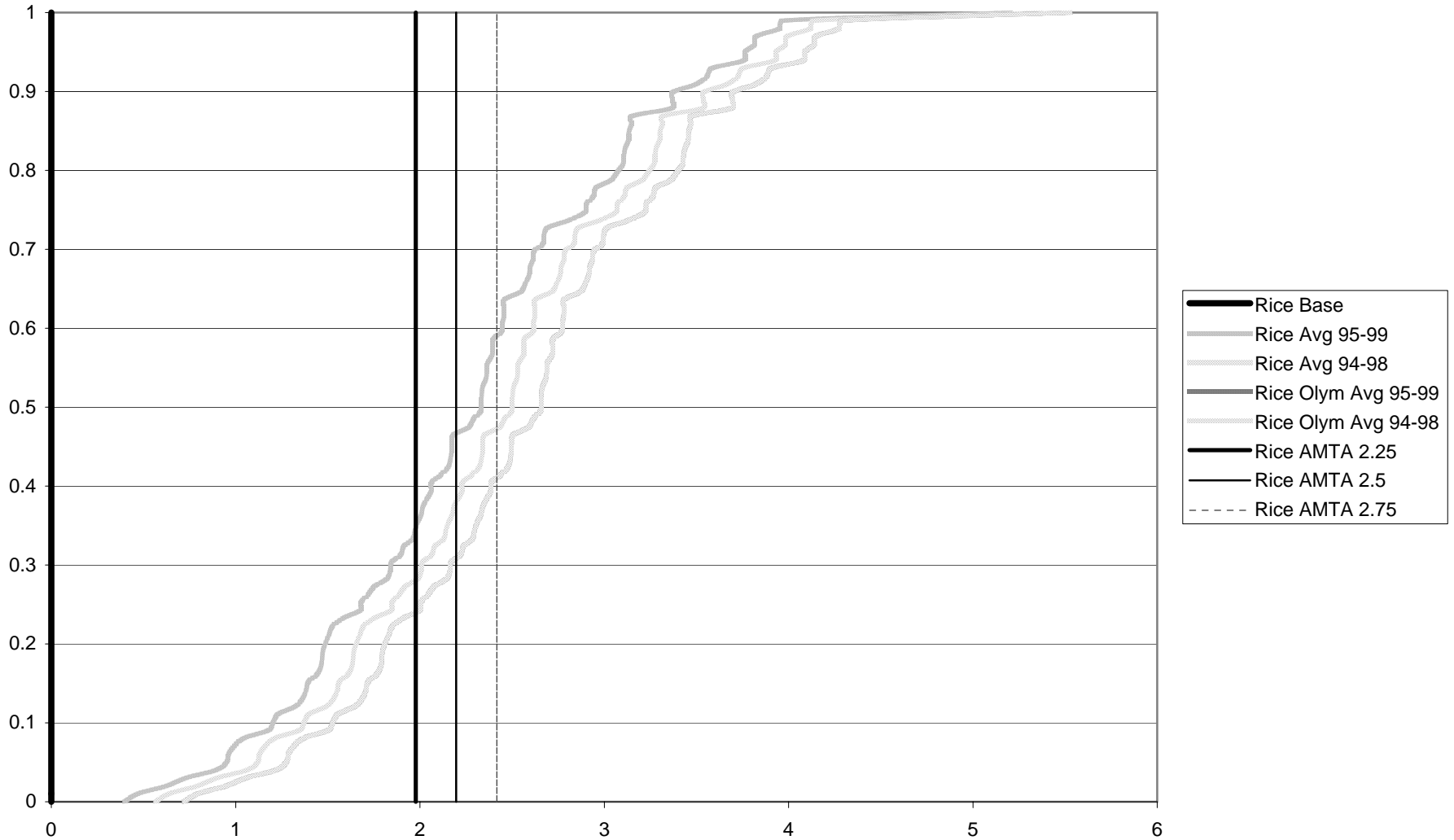


Figure 2. Cumulative Distributions of Total Receipts in 2001 for Rice, Assuming Alternative Base Periods for Counter Cyclical Program with 100% Trigger or Added AMTA Payments (\$/cwt)

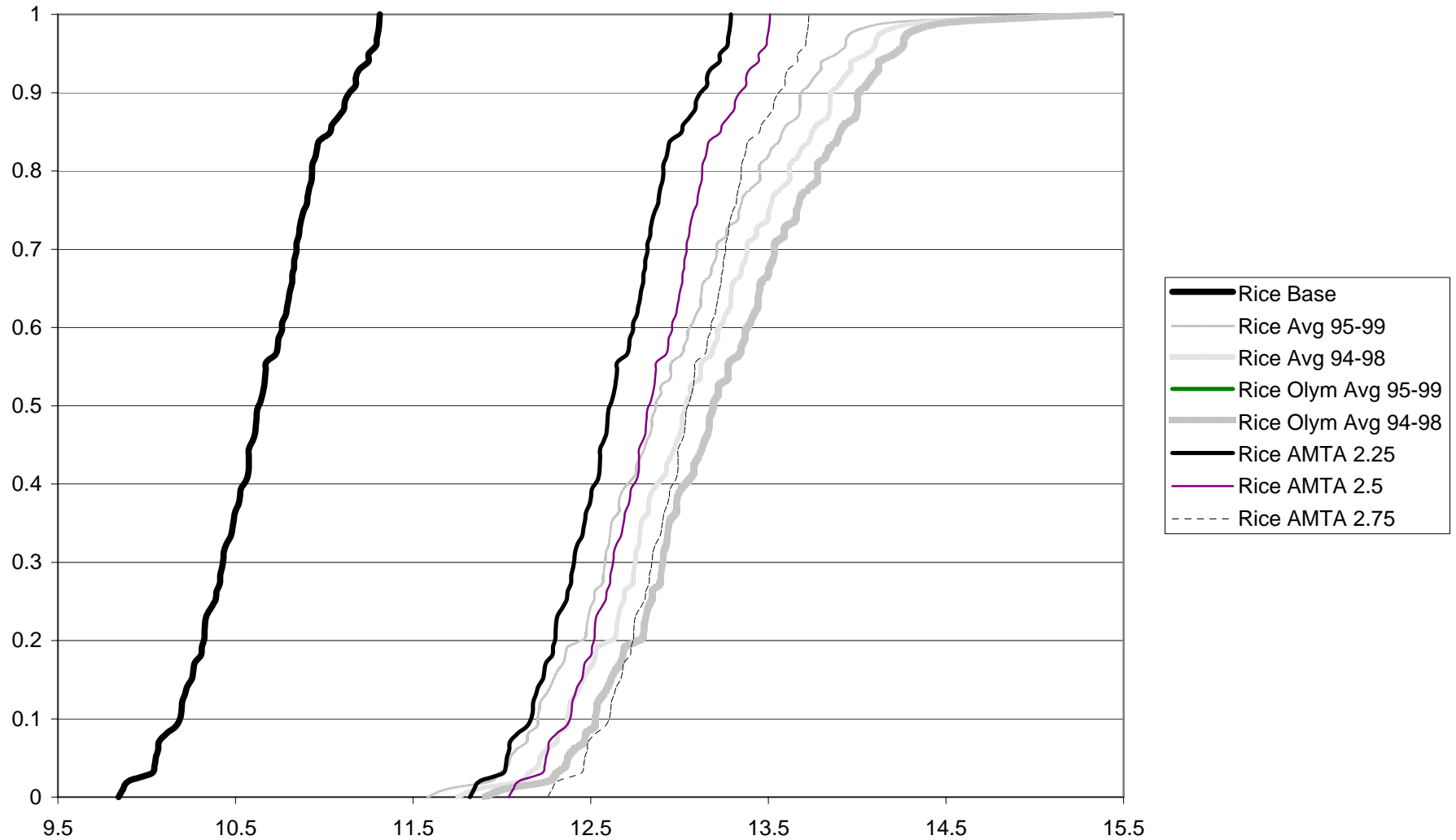


Figure 3. Cumulative Distributions of Total Government Costs for Rice in 2001 Under Alternative Counter Cyclical or Added AMTA Payments, Assuming 100% Trigger (Billions \$)

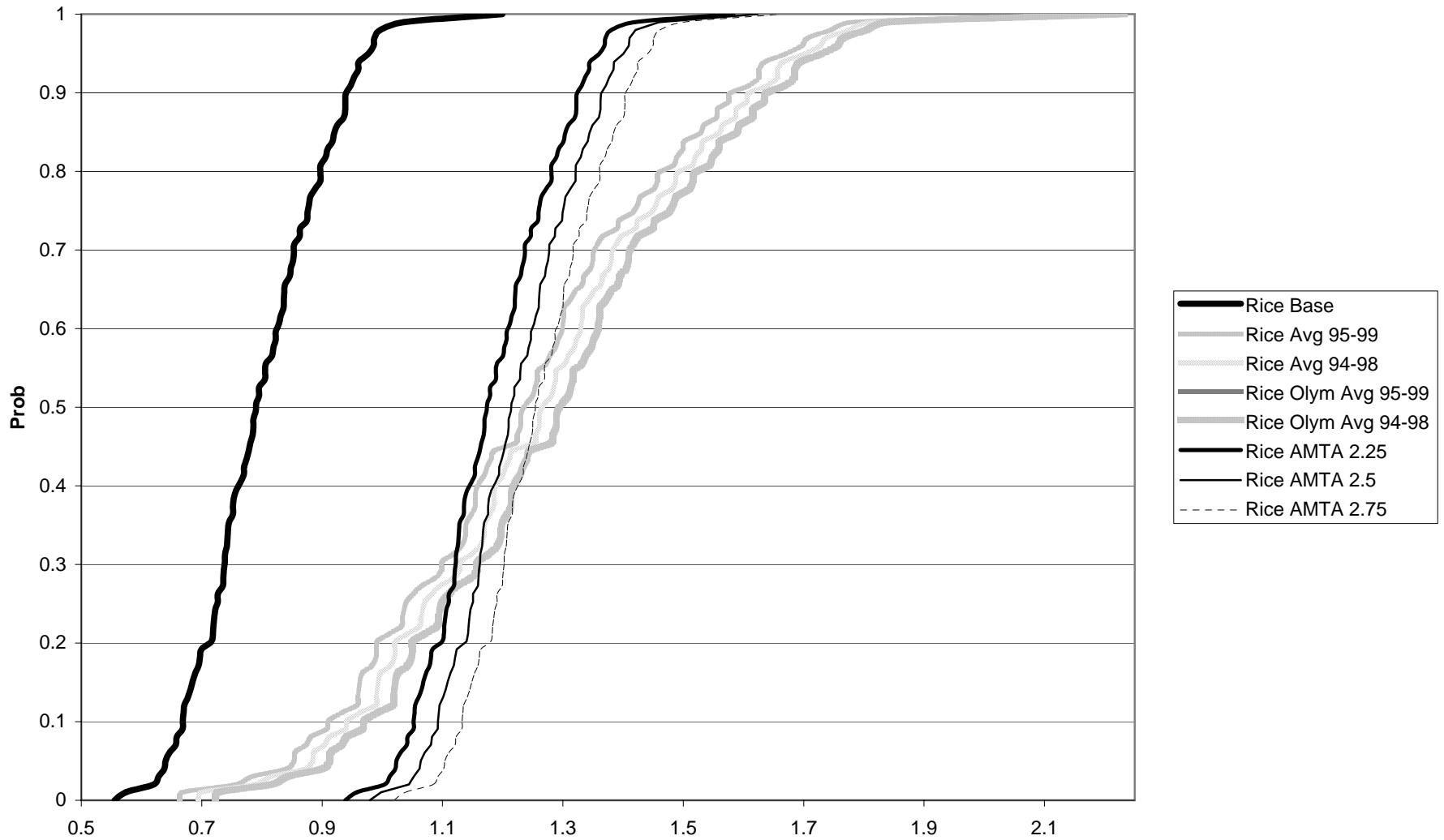


Figure 4. Cumulative Distributions of Total Receipts in 2001 for Cotton, Assuming Alternative Base Periods for Counter Cyclical Program with 100% Trigger or Added AMTA Payments (\$/lb.)

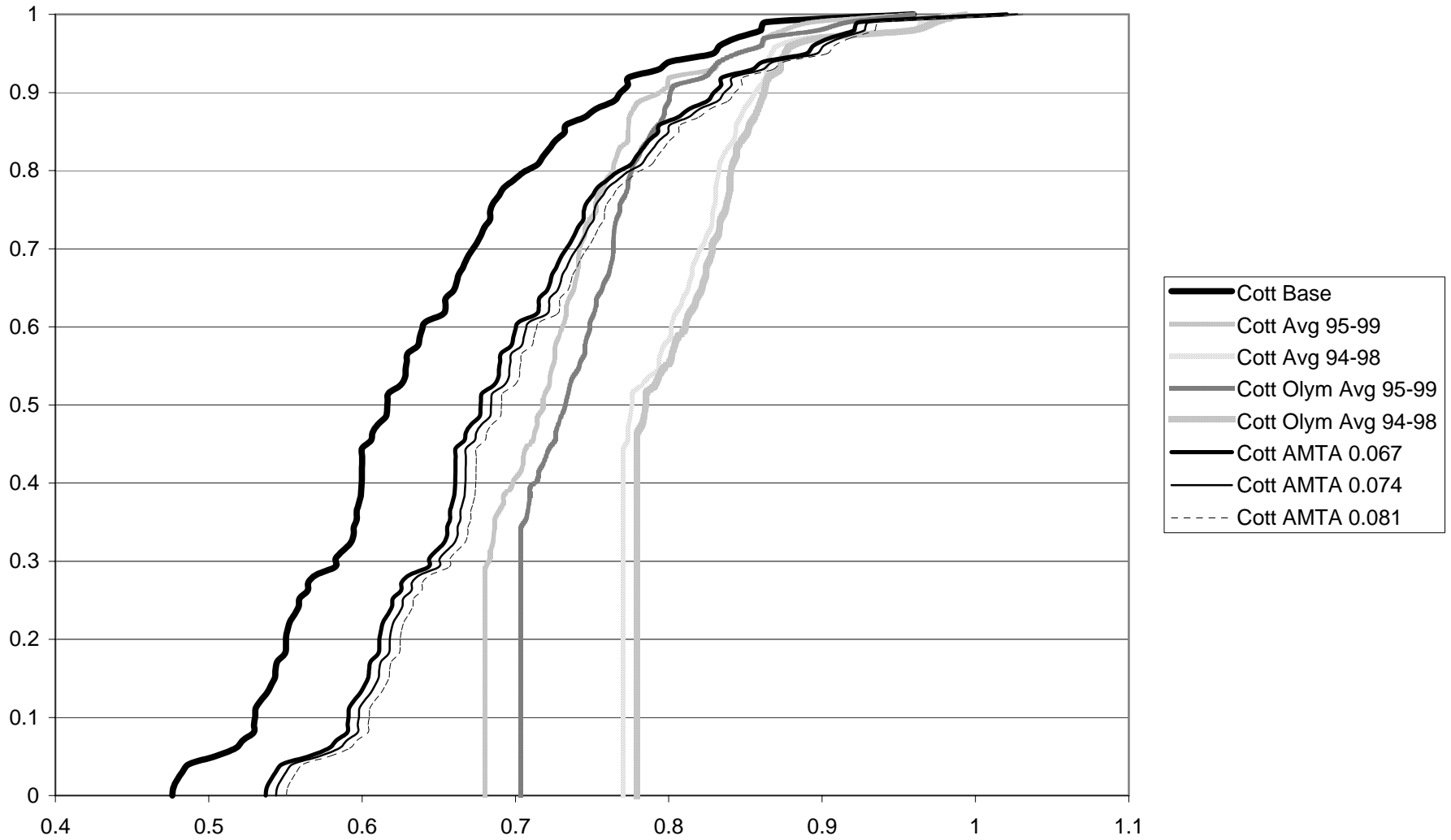


Figure 5. Cumulative Distributions of Total Receipts in 2001 for Corn, Assuming Alternative Base Periods for Counter Cyclical Program with 100% Trigger or Added AMTA Payments (\$/bu.)

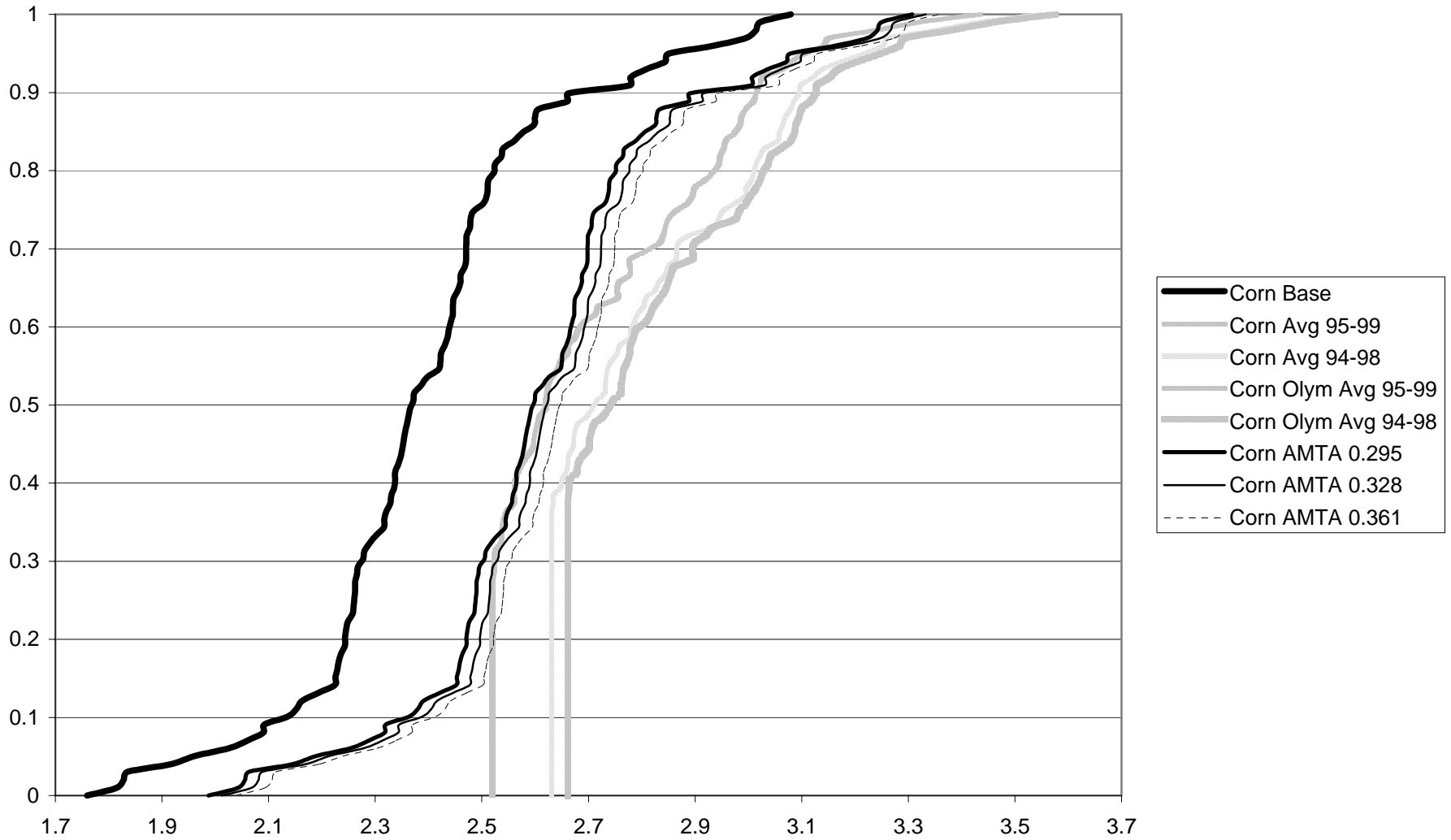


Figure 6. Cumulative Distributions of Total Receipts in 2001 for Wheat, Assuming Alternative Base Periods for Counter Cyclical Program with 100% Trigger or Added AMTA Payments (\$/bu.)

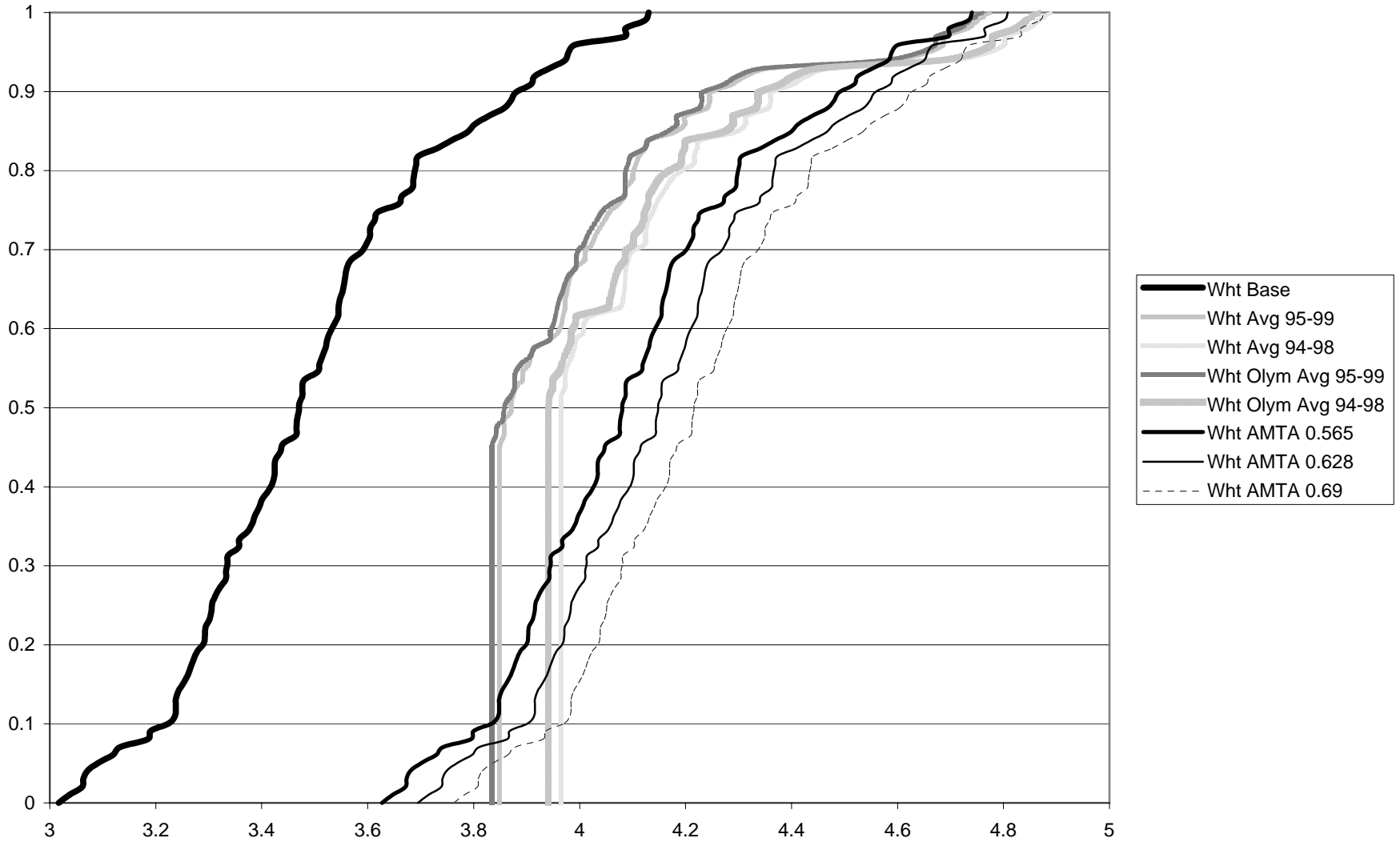
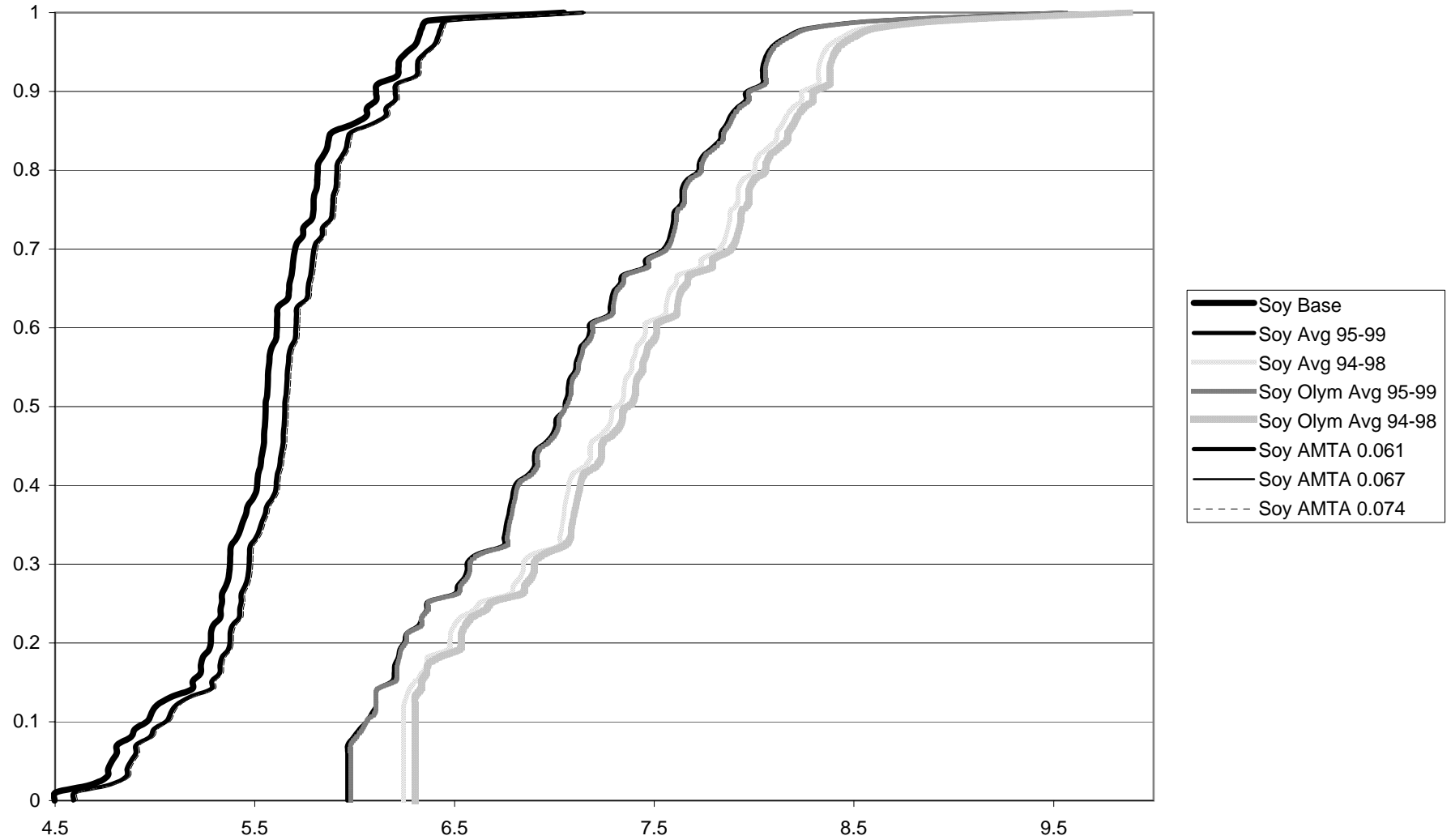


Figure 7. Cumulative Distributions of Total Receipts in 2001 for Soybeans, Assuming Alternative Base Periods for Counter Cyclical Program with 100% Trigger or Added AMTA Payments (\$/bu.)



Summary of Sensitivity Analysis of the Trigger Fraction

- Thus far in the analysis the CCP Trigger was assumed to equal 100% of the base periods average receipts. To estimate the effects of the trigger being set at a lower level, the analysis was repeated using trigger fractions of 90% and 95%. Results for the trigger fraction sensitivity were summarized in Tables 5-8.
- In the case of rice, if the CCP program triggered payments were based on a 90% or even a 95% fraction of base receipts, the preferences among the options changed dramatically. In both cases the Added AMTA options were preferred over the CCP options and the marginal value of the Added AMTAs was as much as \$0.25 to \$0.699/cwt. more than the highest ranked CCP (Table 7). The CCP payment rates associated with lower trigger fractions fell about \$0.80/cwt. for the 90% fraction and about \$0.43/cwt. for the 95% fraction (Table 5).
- Government program cost savings was relatively small for rice as a result of using a lower CCP trigger fraction (Table 8). For example, the costs savings averaged \$160 million at the 90% trigger fraction and \$80 million at the 95% trigger. For the other crops the cost savings was considerably larger, amounting to about \$1.7 billion for corn and \$1.5 billion for soybeans if the 90% trigger were used.

Table 5. Comparison of Counter Cyclical Payments per Yield Unit for Alternative Base Periods or Added AMTA Payments Across 100%, 90%, and 95% Trigger Levels

| | Counter Cyclical and Added AMTA Payments/Yield Unit | | | Difference from 100% Trigger to | |
|----------------------|---|---------------|---------------|---------------------------------|-------------|
| | 100% Trigger | 90% Trigger | 95% Trigger | 90% Trigger | 95% Trigger |
| Rice (Cwt.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 2.2887 | 1.4457 | 1.8615 | 0.8431 | 0.4272 |
| Avg 94-98 | 2.4570 | 1.5914 | 2.0211 | 0.8656 | 0.4359 |
| Olym Avg 95-99 | 2.6127 | 1.7280 | 2.1691 | 0.8848 | 0.4437 |
| Olym Avg 94-98 | 2.6127 | 1.7280 | 2.1691 | 0.8848 | 0.4437 |
| AMTA 2.25 | 1.9769 | 1.9769 | 1.9769 | 0.0000 | 0.0000 |
| AMTA 2.5 | 2.1966 | 2.1966 | 2.1966 | 0.0000 | 0.0000 |
| AMTA 2.75 | 2.4163 | 2.4163 | 2.4163 | 0.0000 | 0.0000 |
| Cotton (lb.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 0.0935 | 0.0527 | 0.0718 | 0.0408 | 0.0217 |
| Avg 94-98 | 0.1680 | 0.1073 | 0.1366 | 0.0607 | 0.0314 |
| Olym Avg 95-99 | 0.1112 | 0.0650 | 0.0865 | 0.0462 | 0.0247 |
| Olym Avg 94-98 | 0.1762 | 0.1137 | 0.1439 | 0.0625 | 0.0323 |
| AMTA 0.067 | 0.0609 | 0.0609 | 0.0609 | 0.0000 | 0.0000 |
| AMTA 0.074 | 0.0677 | 0.0677 | 0.0677 | 0.0000 | 0.0000 |
| AMTA 0.081 | 0.0744 | 0.0744 | 0.0744 | 0.0000 | 0.0000 |
| Corn (bu.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 0.3199 | 0.1676 | 0.2357 | 0.1523 | 0.0842 |
| Avg 94-98 | 0.4127 | 0.2245 | 0.3110 | 0.1882 | 0.1018 |
| Olym Avg 95-99 | 0.3176 | 0.1662 | 0.2338 | 0.1514 | 0.0838 |
| Olym Avg 94-98 | 0.4396 | 0.2428 | 0.3341 | 0.1968 | 0.1054 |
| AMTA 0.295 | 0.2277 | 0.2277 | 0.2277 | 0.0000 | 0.0000 |
| AMTA 0.328 | 0.2530 | 0.2530 | 0.2530 | 0.0000 | 0.0000 |
| AMTA 0.361 | 0.2783 | 0.2783 | 0.2783 | 0.0000 | 0.0000 |
| Wheat (bu.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 0.4988 | 0.2358 | 0.3587 | 0.2629 | 0.1401 |
| Avg 94-98 | 0.6032 | 0.3095 | 0.4492 | 0.2937 | 0.1540 |
| Olym Avg 95-99 | 0.4858 | 0.2271 | 0.3475 | 0.2587 | 0.1383 |
| Olym Avg 94-98 | 0.5811 | 0.2934 | 0.4302 | 0.2876 | 0.1509 |
| AMTA 0.565 | 0.6101 | 0.6101 | 0.6101 | 0.0000 | 0.0000 |
| AMTA 0.628 | 0.6778 | 0.6778 | 0.6778 | 0.0000 | 0.0000 |
| AMTA 0.69 | 0.7456 | 0.7456 | 0.7456 | 0.0000 | 0.0000 |
| Soybean (bu.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 1.4908 | 0.9752 | 1.2261 | 0.5156 | 0.2646 |
| Avg 94-98 | 1.7537 | 1.1881 | 1.4634 | 0.5656 | 0.2903 |
| Olym Avg 95-99 | 1.5059 | 0.9875 | 1.2397 | 0.5184 | 0.2662 |
| Olym Avg 94-98 | 1.8080 | 1.2316 | 1.5119 | 0.5764 | 0.2961 |
| AMTA 0.061 | 0.0933 | 0.0933 | 0.0933 | 0.0000 | 0.0000 |
| AMTA 0.067 | 0.1037 | 0.1037 | 0.1037 | 0.0000 | 0.0000 |
| AMTA 0.074 | 0.1140 | 0.1140 | 0.1140 | 0.0000 | 0.0000 |
| Sorghum (bu.) | | | | | |
| Base | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Avg 95-99 | 0.3551 | 0.1949 | 0.2704 | 0.1602 | 0.0847 |
| Avg 94-98 | 0.4759 | 0.2822 | 0.3741 | 0.1937 | 0.1018 |
| Olym Avg 95-99 | 0.3836 | 0.2149 | 0.2946 | 0.1686 | 0.0890 |
| Olym Avg 94-98 | 0.5929 | 0.3725 | 0.4800 | 0.2204 | 0.1130 |
| AMTA 0.248 | 0.2969 | 0.2969 | 0.2969 | 0.0000 | 0.0000 |
| AMTA 0.275 | 0.3299 | 0.3299 | 0.3299 | 0.0000 | 0.0000 |
| AMTA 0.303 | 0.3628 | 0.3628 | 0.3628 | 0.0000 | 0.0000 |

Added AMTA payments are calculated using current national farm program yield, national base acres, and a payment fraction of 0.85 per base acre. Added AMTA payments were divided by average national planted acre yields for 1996-2000 to put them on a comparable basis to the CCPs. Counter Cyclical Payments were calculated on a planted acre yield basis.

Table 6. Comparison of Average Total Receipts per Yield Unit in 2001 for Selected Crops Under Alternative Counter Cyclical and Added AMTA Programs, Across the 100%, 90%, and 95% Trigger Levels

| | Total Receipts per Yield Unit for Three Trigger Levels | | | Difference from 100% Trigger to | |
|----------------|--|---------------|---------------|---------------------------------|-------------|
| | 100% Trigger | 90% Trigger | 95% Trigger | 90% Trigger | 95% Trigger |
| Rice | | \$/Cwt. | | | |
| Base | 10.638 | 10.638 | 10.638 | 0.000 | 0.000 |
| Avg 95-99 | 12.927 | 12.084 | 12.500 | 0.843 | 0.427 |
| Avg 94-98 | 13.095 | 12.230 | 12.659 | 0.866 | 0.436 |
| Olym Avg 95-99 | 13.251 | 12.366 | 12.807 | 0.885 | 0.444 |
| Olym Avg 94-98 | 13.251 | 12.366 | 12.807 | 0.885 | 0.444 |
| AMTA 2.25 | 12.615 | 12.615 | 12.615 | 0.000 | 0.000 |
| AMTA 2.5 | 12.835 | 12.835 | 12.835 | 0.000 | 0.000 |
| AMTA 2.75 | 13.054 | 13.054 | 13.054 | 0.000 | 0.000 |
| Cotton | | \$/Lb. | | | |
| Base | 0.6347 | 0.6347 | 0.6347 | 0.0000 | 0.0000 |
| Avg 95-99 | 0.7282 | 0.6875 | 0.7066 | 0.0408 | 0.0217 |
| Avg 94-98 | 0.8027 | 0.7420 | 0.7713 | 0.0607 | 0.0314 |
| Olym Avg 95-99 | 0.7459 | 0.6997 | 0.7212 | 0.0462 | 0.0247 |
| Olym Avg 94-98 | 0.8109 | 0.7485 | 0.7787 | 0.0625 | 0.0323 |
| AMTA 0.067 | 0.6957 | 0.6957 | 0.6957 | 0.0000 | 0.0000 |
| AMTA 0.074 | 0.7024 | 0.7024 | 0.7024 | 0.0000 | 0.0000 |
| AMTA 0.081 | 0.7092 | 0.7092 | 0.7092 | 0.0000 | 0.0000 |
| Corn | | \$/Bu. | | | |
| Base | 2.392 | 2.392 | 2.392 | 0.000 | 0.000 |
| Avg 95-99 | 2.712 | 2.559 | 2.627 | 0.152 | 0.084 |
| Avg 94-98 | 2.804 | 2.616 | 2.703 | 0.188 | 0.102 |
| Olym Avg 95-99 | 2.709 | 2.558 | 2.626 | 0.151 | 0.084 |
| Olym Avg 94-98 | 2.831 | 2.635 | 2.726 | 0.197 | 0.105 |
| AMTA 0.295 | 2.620 | 2.620 | 2.620 | 0.000 | 0.000 |
| AMTA 0.328 | 2.645 | 2.645 | 2.645 | 0.000 | 0.000 |
| AMTA 0.361 | 2.670 | 2.670 | 2.670 | 0.000 | 0.000 |
| Wheat | | \$/Bu. | | | |
| Base | 3.498 | 3.498 | 3.498 | 0.000 | 0.000 |
| Avg 95-99 | 3.996 | 3.733 | 3.856 | 0.263 | 0.140 |
| Avg 94-98 | 4.101 | 3.807 | 3.947 | 0.294 | 0.154 |
| Olym Avg 95-99 | 3.983 | 3.725 | 3.845 | 0.259 | 0.138 |
| Olym Avg 94-98 | 4.079 | 3.791 | 3.928 | 0.288 | 0.151 |
| AMTA 0.565 | 4.108 | 4.108 | 4.108 | 0.000 | 0.000 |
| AMTA 0.628 | 4.175 | 4.175 | 4.175 | 0.000 | 0.000 |
| AMTA 0.69 | 4.243 | 4.243 | 4.243 | 0.000 | 0.000 |
| Soybean | | \$/Bu. | | | |
| Base | 5.549 | 5.549 | 5.549 | 0.000 | 0.000 |
| Avg 95-99 | 7.040 | 6.525 | 6.775 | 0.516 | 0.265 |
| Avg 94-98 | 7.303 | 6.737 | 7.013 | 0.566 | 0.290 |
| Olym Avg 95-99 | 7.055 | 6.537 | 6.789 | 0.518 | 0.266 |
| Olym Avg 94-98 | 7.357 | 6.781 | 7.061 | 0.576 | 0.296 |
| AMTA 0.061 | 5.643 | 5.643 | 5.643 | 0.000 | 0.000 |
| AMTA 0.067 | 5.653 | 5.653 | 5.653 | 0.000 | 0.000 |
| AMTA 0.074 | 5.663 | 5.663 | 5.663 | 0.000 | 0.000 |
| Sorghum | | \$/Bu. | | | |
| Base | 2.343 | 2.343 | 2.343 | 0.000 | 0.000 |
| Avg 95-99 | 2.698 | 2.538 | 2.614 | 0.160 | 0.085 |
| Avg 94-98 | 2.819 | 2.625 | 2.717 | 0.194 | 0.102 |
| Olym Avg 95-99 | 2.727 | 2.558 | 2.638 | 0.169 | 0.089 |
| Olym Avg 94-98 | 2.936 | 2.716 | 2.823 | 0.220 | 0.113 |
| AMTA 0.248 | 2.640 | 2.640 | 2.640 | 0.000 | 0.000 |
| AMTA 0.275 | 2.673 | 2.673 | 2.673 | 0.000 | 0.000 |
| AMTA 0.303 | 2.706 | 2.706 | 2.706 | 0.000 | 0.000 |

Total receipts includes: market receipts, LDPs, base AMTA for 2001 plus CCPs or Added AMTA.

Table 7. Comparison of Rankings of Alternative Counter Cyclical and Added AMTA Options Relative to the Base and Dollars per Yield Unit Required to Equate Alternative to the Preferred Option, Across 100%, 90%, and 95% Trigger Levels

| Preferred Rankings of Options and Their Value Relative to Lesser Options for Alternative Trigger Levels | | | | | |
|---|------------------|---------------------|------------------|---------------------|------------------|
| | 100% Trigger | | 90% Trigger | | 95% Trigger |
| Rice (\$/cwt.) | | | | | |
| Rice Olym Avg 95-99 | Preferred Option | Rice AMTA 2.75 | Preferred Option | Rice AMTA 2.75 | Preferred Option |
| Rice Olym Avg 94-98 | 0.000 | Rice AMTA 2.5 | 0.000 | Rice AMTA 2.5 | 0.000 |
| Rice Avg 94-98 | 0.156 | Rice AMTA 2.25 | 0.439 | Rice Olym Avg 95-99 | 0.259 |
| Rice AMTA 2.75 | 0.185 | Rice Olym Avg 95-99 | 0.699 | Rice Olym Avg 95-99 | 0.259 |
| Rice Avg 95-99 | 0.324 | Rice Olym Avg 94-98 | 0.699 | Rice Avg 94-98 | 0.407 |
| Rice AMTA 2.5 | 0.405 | Rice Avg 94-98 | 0.836 | Rice AMTA 2.25 | 0.439 |
| Rice AMTA 2.25 | 0.624 | Rice Avg 95-99 | 0.981 | Rice Avg 95-99 | 0.566 |
| Rice Base | 2.601 | Rice Base | 2.416 | Rice Base | 2.416 |
| Cotton (cents/lb.) | | | | | |
| Cott Olym Avg 94-98 | Preferred Option | Cott Olym Avg 94-98 | Preferred Option | Cott Olym Avg 94-98 | Preferred Option |
| Cott Avg 94-98 | 0.821 | Cott Avg 94-98 | 0.645 | Cott Avg 94-98 | 0.735 |
| Cott Olym Avg 95-99 | 6.500 | Cott AMTA 0.081 | 3.959 | Cott Olym Avg 95-99 | 5.748 |
| Cott Avg 95-99 | 8.274 | Cott AMTA 0.074 | 4.636 | Cott AMTA 0.081 | 6.982 |
| Cott AMTA 0.081 | 10.208 | Cott Olym Avg 95-99 | 4.878 | Cott Avg 95-99 | 7.217 |
| Cott AMTA 0.074 | 10.885 | Cott AMTA 0.067 | 5.313 | Cott AMTA 0.074 | 7.659 |
| Cott AMTA 0.067 | 11.562 | Cott Avg 95-99 | 6.108 | Cott AMTA 0.067 | 8.335 |
| Cott Base | 17.653 | Cott Base | 11.404 | Cott Base | 14.426 |
| Corn (\$/bu.) | | | | | |
| Corn Olym Avg 94-98 | Preferred Option | Corn AMTA 0.361 | Preferred Option | Corn Olym Avg 94-98 | Preferred Option |
| Corn Avg 94-98 | 0.027 | Corn AMTA 0.328 | 0.025 | Corn Avg 94-98 | 0.023 |
| Corn Avg 95-99 | 0.120 | Corn Olym Avg 94-98 | 0.035 | Corn AMTA 0.361 | 0.057 |
| Corn Olym Avg 95-99 | 0.122 | Corn AMTA 0.295 | 0.051 | Corn AMTA 0.328 | 0.082 |
| Corn AMTA 0.361 | 0.162 | Corn Avg 94-98 | 0.053 | Corn Avg 95-99 | 0.099 |
| Corn AMTA 0.328 | 0.187 | Corn Avg 95-99 | 0.110 | Corn Olym Avg 95-99 | 0.100 |
| Corn AMTA 0.295 | 0.213 | Corn Olym Avg 95-99 | 0.111 | Corn AMTA 0.295 | 0.107 |
| Corn Base | 0.440 | Corn Base | 0.278 | Corn Base | 0.335 |
| Wheat (\$/bu.) | | | | | |
| Wht AMTA 0.69 | Preferred Option | Wht AMTA 0.69 | Preferred Option | Wht AMTA 0.69 | Preferred Option |
| Wht AMTA 0.628 | 0.068 | Wht AMTA 0.628 | 0.068 | Wht AMTA 0.628 | 0.068 |
| Wht AMTA 0.565 | 0.136 | Wht AMTA 0.565 | 0.136 | Wht AMTA 0.565 | 0.136 |
| Wht Avg 94-98 | 0.142 | Wht Avg 94-98 | 0.436 | Wht Avg 94-98 | 0.296 |
| Wht Olym Avg 94-98 | 0.164 | Wht Olym Avg 94-98 | 0.452 | Wht Olym Avg 94-98 | 0.315 |
| Wht Avg 95-99 | 0.246 | Wht Avg 95-99 | 0.509 | Wht Avg 95-99 | 0.386 |
| Wht Olym Avg 95-99 | 0.259 | Wht Olym Avg 95-99 | 0.518 | Wht Olym Avg 95-99 | 0.398 |
| Wht Base | 0.746 | Wht Base | 0.746 | Wht Base | 0.746 |
| Soybean (\$/bu.) | | | | | |
| Soy Olym Avg 94-98 | Preferred Option | Soy Olym Avg 94-98 | Preferred Option | Soy Olym Avg 94-98 | Preferred Option |
| Soy Avg 94-98 | 0.054 | Soy Avg 94-98 | 0.043 | Soy Avg 94-98 | 0.048 |
| Soy Olym Avg 95-99 | 0.300 | Soy Olym Avg 95-99 | 0.241 | Soy Olym Avg 95-99 | 0.270 |
| Soy Avg 95-99 | 0.316 | Soy Avg 95-99 | 0.254 | Soy Avg 95-99 | 0.283 |
| Soy AMTA 0.074 | 1.675 | Soy AMTA 0.074 | 1.103 | Soy AMTA 0.074 | 1.380 |
| Soy AMTA 0.067 | 1.685 | Soy AMTA 0.067 | 1.113 | Soy AMTA 0.067 | 1.391 |
| Soy AMTA 0.061 | 1.696 | Soy AMTA 0.061 | 1.123 | Soy AMTA 0.061 | 1.401 |
| Soy Base | 1.789 | Soy Base | 1.217 | Soy Base | 1.495 |
| Sorghum (\$/bu.) | | | | | |
| GS Olym Avg 94-98 | Preferred Option | GS Olym Avg 94-98 | Preferred Option | GS Olym Avg 94-98 | Preferred Option |
| GS Avg 94-98 | 0.117 | GS AMTA 0.303 | 0.011 | GS Avg 94-98 | 0.106 |
| GS Olym Avg 95-99 | 0.210 | GS AMTA 0.275 | 0.043 | GS AMTA 0.303 | 0.118 |
| GS AMTA 0.303 | 0.231 | GS AMTA 0.248 | 0.076 | GS AMTA 0.275 | 0.151 |
| GS Avg 95-99 | 0.238 | GS Avg 94-98 | 0.090 | GS AMTA 0.248 | 0.184 |
| GS AMTA 0.275 | 0.264 | GS Olym Avg 95-99 | 0.158 | GS Olym Avg 95-99 | 0.186 |
| GS AMTA 0.248 | 0.297 | GS Avg 95-99 | 0.178 | GS Avg 95-99 | 0.210 |
| GS Base | 0.594 | GS Base | 0.373 | GS Base | 0.481 |

For example, under the 100% trigger level the Olympic Average 95-99 benefits rice producers by \$0.624/cwt more than the Added AMTA 2.25 and \$2.601/cwt more than the Base of no CCP or Added AMTA.

Table 8. Comparison of Average Total Government Costs for Base AMTA, LDP, and Counter Cyclical Payments or Added AMTA in 2001 Across the 100%, 90%, and 95% Trigger Levels

| | Government Payments for Alternative Trigger Levels | | | Difference from 100% Trigger and | |
|----------------|--|-------------|-------------|----------------------------------|-------------|
| | 100% Trigger | 90% Trigger | 95% Trigger | 90% Trigger | 95% Trigger |
| | (billions \$) | | | | |
| Rice | | | | | |
| Base | 0.80 | 0.80 | 0.80 | 0.00 | 0.00 |
| Avg 95-99 | 1.24 | 1.09 | 1.16 | 0.15 | 0.08 |
| Avg 94-98 | 1.27 | 1.11 | 1.19 | 0.16 | 0.08 |
| Olym Avg 95-99 | 1.30 | 1.14 | 1.22 | 0.16 | 0.08 |
| Olym Avg 94-98 | 1.30 | 1.14 | 1.22 | 0.16 | 0.08 |
| AMTA 2.25 | 1.18 | 1.18 | 1.18 | 0.00 | 0.00 |
| AMTA 2.5 | 1.23 | 1.23 | 1.23 | 0.00 | 0.00 |
| AMTA 2.75 | 1.27 | 1.27 | 1.27 | 0.00 | 0.00 |
| Cotton | | | | | |
| Base | 0.68 | 0.68 | 0.68 | 0.00 | 0.00 |
| Avg 95-99 | 1.48 | 1.13 | 1.30 | 0.35 | 0.19 |
| Avg 94-98 | 2.13 | 1.60 | 1.86 | 0.52 | 0.27 |
| Olym Avg 95-99 | 1.64 | 1.24 | 1.42 | 0.40 | 0.21 |
| Olym Avg 94-98 | 2.20 | 1.66 | 1.92 | 0.54 | 0.28 |
| AMTA 0.067 | 1.20 | 1.20 | 1.20 | 0.00 | 0.00 |
| AMTA 0.074 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| AMTA 0.081 | 1.32 | 1.32 | 1.32 | 0.00 | 0.00 |
| Corn | | | | | |
| Base | 3.26 | 3.26 | 3.26 | 0.00 | 0.00 |
| Avg 95-99 | 6.21 | 4.80 | 5.43 | 1.40 | 0.78 |
| Avg 94-98 | 7.06 | 5.33 | 6.13 | 1.74 | 0.94 |
| Olym Avg 95-99 | 6.19 | 4.79 | 5.41 | 1.40 | 0.77 |
| Olym Avg 94-98 | 7.31 | 5.50 | 6.34 | 1.81 | 0.97 |
| AMTA 0.295 | 5.36 | 5.36 | 5.36 | 0.00 | 0.00 |
| AMTA 0.328 | 5.59 | 5.59 | 5.59 | 0.00 | 0.00 |
| AMTA 0.361 | 5.82 | 5.82 | 5.82 | 0.00 | 0.00 |
| Wheat | | | | | |
| Base | 1.36 | 1.36 | 1.36 | 0.00 | 0.00 |
| Avg 95-99 | 2.42 | 1.86 | 2.12 | 0.56 | 0.30 |
| Avg 94-98 | 2.65 | 2.02 | 2.32 | 0.63 | 0.33 |
| Olym Avg 95-99 | 2.40 | 1.84 | 2.10 | 0.55 | 0.29 |
| Olym Avg 94-98 | 2.60 | 1.99 | 2.28 | 0.61 | 0.32 |
| AMTA 0.565 | 2.66 | 2.66 | 2.66 | 0.00 | 0.00 |
| AMTA 0.628 | 2.80 | 2.80 | 2.80 | 0.00 | 0.00 |
| AMTA 0.69 | 2.95 | 2.95 | 2.95 | 0.00 | 0.00 |
| Soybean | | | | | |
| Base | 3.00 | 3.00 | 3.00 | 0.00 | 0.00 |
| Avg 95-99 | 7.27 | 5.79 | 6.51 | 1.48 | 0.76 |
| Avg 94-98 | 8.02 | 6.40 | 7.19 | 1.62 | 0.83 |
| Olym Avg 95-99 | 7.31 | 5.83 | 6.55 | 1.48 | 0.76 |
| Olym Avg 94-98 | 8.17 | 6.52 | 7.33 | 1.65 | 0.85 |
| AMTA 0.061 | 3.27 | 3.27 | 3.27 | 0.00 | 0.00 |
| AMTA 0.067 | 3.29 | 3.29 | 3.29 | 0.00 | 0.00 |
| AMTA 0.074 | 3.32 | 3.32 | 3.32 | 0.00 | 0.00 |
| Sorghum | | | | | |
| Base | 0.29 | 0.29 | 0.29 | 0.00 | 0.00 |
| Avg 95-99 | 0.48 | 0.39 | 0.44 | 0.09 | 0.05 |
| Avg 94-98 | 0.55 | 0.44 | 0.49 | 0.11 | 0.06 |
| Olym Avg 95-99 | 0.50 | 0.40 | 0.45 | 0.09 | 0.05 |
| Olym Avg 94-98 | 0.61 | 0.49 | 0.55 | 0.12 | 0.06 |
| AMTA 0.248 | 0.45 | 0.45 | 0.45 | 0.00 | 0.00 |
| AMTA 0.275 | 0.47 | 0.47 | 0.47 | 0.00 | 0.00 |
| AMTA 0.303 | 0.49 | 0.49 | 0.49 | 0.00 | 0.00 |

Summary of an Increase in the Base Level of AMTA Payment Rates in 2001

- Increasing the base AMTA rate by 19% was analyzed for all of the options and results were reported in Tables 9-12. The 19% increase in Base AMTA was arrived at by using the average of the total AMTA rates for the history of the 1996 farm program.
- Increasing the base AMTA rates did not change the option rankings from the original analysis, because the CCP and Added AMTA payment rates and the total receipts per yield unit were all increased by about 85% of the increased base AMTA rate.

Table 9. Comparison of Average Total Receipts per Yield Unit in 2001 for Selected Crops Under Alternative Counter Cyclical and Added AMTA Programs Across Two Initial Base AMTA Rates

| | Initial Base AMTA Rate | Higher Base AMTA Rate | Difference |
|----------------------|------------------------|--------------------------|------------|
| Rice (Cwt.) | Base AMTA 2.1 | Higher AMTA 2.5 | |
| Base | 10.638 | 10.990 | 0.35 |
| Avg 95-99 | 12.927 | 13.278 | 0.35 |
| Avg 94-98 | 13.095 | 13.447 | 0.35 |
| Olym Avg 95-99 | 13.251 | 13.602 | 0.35 |
| Olym Avg 94-98 | 13.251 | 13.602 | 0.35 |
| AMTA 2.25 | 12.615 | 12.967 | 0.35 |
| AMTA 2.5 | 12.835 | 13.186 | 0.35 |
| AMTA 2.75 | 13.054 | 13.406 | 0.35 |
| Cotton (lb.) | Base AMTA 0.057 | Higher AMTA 0.068 | |
| Base | 0.6347 | 0.645 | 0.0099 |
| Avg 95-99 | 0.7282 | 0.738 | 0.0099 |
| Avg 94-98 | 0.8027 | 0.813 | 0.0099 |
| Olym Avg 95-99 | 0.7459 | 0.756 | 0.0099 |
| Olym Avg 94-98 | 0.8109 | 0.821 | 0.0099 |
| AMTA 0.067 | 0.6957 | 0.706 | 0.0099 |
| AMTA 0.074 | 0.7024 | 0.712 | 0.0099 |
| AMTA 0.081 | 0.7092 | 0.719 | 0.0099 |
| Corn (bu.) | Base AMTA 0.27 | Higher AMTA 0.321 | |
| Base | 2.392 | 2.431 | 0.04 |
| Avg 95-99 | 2.712 | 2.751 | 0.04 |
| Avg 94-98 | 2.804 | 2.844 | 0.04 |
| Olym Avg 95-99 | 2.709 | 2.749 | 0.04 |
| Olym Avg 94-98 | 2.831 | 2.871 | 0.04 |
| AMTA 0.295 | 2.620 | 2.659 | 0.04 |
| AMTA 0.328 | 2.645 | 2.684 | 0.04 |
| AMTA 0.361 | 2.670 | 2.710 | 0.04 |
| Wheat (bu.) | Base AMTA 0.472 | Higher AMTA 0.562 | |
| Base | 3.498 | 3.595 | 0.10 |
| Avg 95-99 | 3.996 | 4.093 | 0.10 |
| Avg 94-98 | 4.101 | 4.198 | 0.10 |
| Olym Avg 95-99 | 3.983 | 4.080 | 0.10 |
| Olym Avg 94-98 | 4.079 | 4.176 | 0.10 |
| AMTA 0.565 | 4.108 | 4.205 | 0.10 |
| AMTA 0.628 | 4.175 | 4.273 | 0.10 |
| AMTA 0.69 | 4.243 | 4.341 | 0.10 |
| Soybean (bu.) | Base AMTA 0 | Higher AMTA 0 | |
| Base | 5.549 | 5.549 | - |
| Avg 95-99 | 7.040 | 7.040 | - |
| Avg 94-98 | 7.303 | 7.303 | - |
| Olym Avg 95-99 | 7.055 | 7.055 | - |
| Olym Avg 94-98 | 7.357 | 7.357 | - |
| AMTA 0.061 | 5.643 | 5.642 | - |
| AMTA 0.067 | 5.653 | 5.652 | - |
| AMTA 0.074 | 5.663 | 5.663 | - |
| Sorghum (bu.) | Base AMTA 0.322 | Higher AMTA 0.383 | |
| Base | 2.343 | 2.417 | 0.07 |
| Avg 95-99 | 2.698 | 2.772 | 0.07 |
| Avg 94-98 | 2.819 | 2.893 | 0.07 |
| Olym Avg 95-99 | 2.727 | 2.800 | 0.07 |
| Olym Avg 94-98 | 2.936 | 3.010 | 0.07 |
| AMTA 0.248 | 2.640 | 2.713 | 0.07 |
| AMTA 0.275 | 2.673 | 2.746 | 0.07 |
| AMTA 0.303 | 2.706 | 2.779 | 0.07 |

Total receipts includes: market receipts, LDPs, base AMTA for 2001 plus CCPs or Added AMTA. The Base AMTA rate is the rate announced in the 1996 farm program for year 2001 and the Higher AMTA rates represent a 19% increase for 2001. The full 19% increase is not observed in increased total receipts because AMTA is paid on 85% of farm program yield times base acres.

Table 10. Comparison of the Rankings of Alternative Counter Cyclical and Added AMTA Options Relative to the Base and Dollars per Yield Unit Required to Equate Alternative to Preferred Option, Higher Base AMTA

| Rankings of Options for the Initial AMTA Rate | | Rankings of Options for a Higher Base AMTA Rate | |
|---|------------------------|---|--------------------------|
| Rice (\$/cwt.) | Base AMTA 2.1 | Rice (\$/cwt.) | Higher AMTA 2.5 |
| Rice Olym Avg 95-99 | Preferred Option | Rice Olym Avg 95-99 | Preferred Option |
| Rice Olym Avg 94-98 | 0.000 | Rice Olym Avg 94-98 | 0.000 |
| Rice Avg 94-98 | 0.156 | Rice Avg 94-98 | 0.156 |
| Rice AMTA 2.75 | 0.185 | Rice AMTA 2.75 | 0.185 |
| Rice Avg 95-99 | 0.324 | Rice Avg 95-99 | 0.324 |
| Rice AMTA 2.5 | 0.405 | Rice AMTA 2.5 | 0.405 |
| Rice AMTA 2.25 | 0.624 | Rice AMTA 2.25 | 0.624 |
| Rice Base | 2.601 | Rice Base | 2.601 |
| Cotton (cents/lb.) | Base AMTA 0.057 | Cotton (cents/lb.) | Higher AMTA 0.068 |
| Cott Olym Avg 94-98 | Preferred Option | Cott Olym Avg 94-98 | Preferred Option |
| Cott Avg 94-98 | 0.8208 | Cott Avg 94-98 | 0.8208 |
| Cott Olym Avg 95-99 | 6.4995 | Cott Olym Avg 95-99 | 6.4995 |
| Cott Avg 95-99 | 8.2741 | Cott Avg 95-99 | 8.2741 |
| Cott AMTA 0.081 | 10.2082 | Cott AMTA 0.081 | 10.2119 |
| Cott AMTA 0.074 | 10.8850 | Cott AMTA 0.074 | 10.8884 |
| Cott AMTA 0.067 | 11.5618 | Cott AMTA 0.067 | 11.5648 |
| Cott Base | 17.6529 | Cott Base | 17.6529 |
| Corn (\$/bu.) | Base AMTA 0.27 | Corn (\$/bu.) | Higher AMTA 0.321 |
| Corn Olym Avg 94-98 | Preferred Option | Corn Olym Avg 94-98 | Preferred Option |
| Corn Avg 94-98 | 0.027 | Corn Avg 94-98 | 0.027 |
| Corn Avg 95-99 | 0.120 | Corn Avg 95-99 | 0.120 |
| Corn Olym Avg 95-99 | 0.122 | Corn Olym Avg 95-99 | 0.122 |
| Corn AMTA 0.361 | 0.162 | Corn AMTA 0.361 | 0.162 |
| Corn AMTA 0.328 | 0.187 | Corn AMTA 0.328 | 0.188 |
| Corn AMTA 0.295 | 0.213 | Corn AMTA 0.295 | 0.213 |
| Corn Base | 0.440 | Corn Base | 0.440 |
| Wheat (\$/bu.) | Base AMTA 0.472 | Wheat (\$/bu.) | Higher AMTA 0.562 |
| Wht AMTA 0.69 | Preferred Option | Wht AMTA 0.69 | Preferred Option |
| Wht AMTA 0.628 | 0.068 | Wht AMTA 0.628 | 0.068 |
| Wht AMTA 0.565 | 0.136 | Wht AMTA 0.565 | 0.136 |
| Wht Avg 94-98 | 0.142 | Wht Avg 94-98 | 0.142 |
| Wht Olym Avg 94-98 | 0.164 | Wht Olym Avg 94-98 | 0.164 |
| Wht Avg 95-99 | 0.246 | Wht Avg 95-99 | 0.247 |
| Wht Olym Avg 95-99 | 0.259 | Wht Olym Avg 95-99 | 0.260 |
| Wht Base | 0.746 | Wht Base | 0.746 |
| Soybean (\$/bu.) | Base AMTA 0 | Soybean (\$/bu.) | Higher AMTA 0 |
| Soy Olym Avg 94-98 | Preferred Option | Soy Olym Avg 94-98 | Preferred Option |
| Soy Avg 94-98 | 0.054 | Soy Avg 94-98 | 0.054 |
| Soy Olym Avg 95-99 | 0.300 | Soy Olym Avg 95-99 | 0.300 |
| Soy Avg 95-99 | 0.316 | Soy Avg 95-99 | 0.316 |
| Soy AMTA 0.074 | 1.675 | Soy AMTA 0.074 | 1.676 |
| Soy AMTA 0.067 | 1.685 | Soy AMTA 0.067 | 1.686 |
| Soy AMTA 0.061 | 1.696 | Soy AMTA 0.061 | 1.696 |
| Soy Base | 1.789 | Soy Base | 1.789 |
| Sorghum (\$/bu.) | Base AMTA 0.322 | Sorghum (\$/bu.) | Higher AMTA 0.383 |
| GS Olym Avg 94-98 | Preferred Option | GS Olym Avg 94-98 | Preferred Option |
| GS Avg 94-98 | 0.117 | GS Avg 94-98 | 0.117 |
| GS Olym Avg 95-99 | 0.210 | GS Olym Avg 95-99 | 0.210 |
| GS AMTA 0.303 | 0.231 | GS AMTA 0.303 | 0.231 |
| GS Avg 95-99 | 0.238 | GS Avg 95-99 | 0.238 |
| GS AMTA 0.275 | 0.264 | GS AMTA 0.275 | 0.264 |
| GS AMTA 0.248 | 0.297 | GS AMTA 0.248 | 0.297 |
| GS Base | 0.594 | GS Base | 0.594 |

The Base AMTA rate is the rate announced in the 1996 farm program for year 2001 and the Higher AMTA rates represent a 19% increase for 2001.

Table 11. Comparison of Average Counter Cyclical Payments per Yield Unit for Alternative Base Periods or Added AMTA Payments at 100% Trigger, Across Alternative Base AMTA Rates

| | Base AMTA Rates | 19% Higher AMTA Rates | Difference |
|----------------------|------------------------|----------------------------|------------|
| | (\$/Yield Unit) | | |
| Rice (Cwt.) | Base AMTA 2.1 | Higher AMTA 2.5 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 2.289 | 2.289 | 0.000 |
| Avg 94-98 | 2.457 | 2.457 | 0.000 |
| Olym Avg 95-99 | 2.613 | 2.613 | 0.000 |
| Olym Avg 94-98 | 2.613 | 2.613 | 0.000 |
| AMTA 2.25 | 1.977 | 1.977 | 0.000 |
| AMTA 2.5 | 2.197 | 2.197 | 0.000 |
| AMTA 2.75 | 2.416 | 2.416 | 0.000 |
| Cotton (lb.) | Base AMTA 0.057 | Higher AMTA 0.068 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 0.093 | 0.093 | 0.000 |
| Avg 94-98 | 0.168 | 0.168 | 0.000 |
| Olym Avg 95-99 | 0.111 | 0.111 | 0.000 |
| Olym Avg 94-98 | 0.176 | 0.176 | 0.000 |
| AMTA 2.25 | 0.061 | 0.061 | 0.000 |
| AMTA 2.5 | 0.068 | 0.068 | 0.000 |
| AMTA 2.75 | 0.074 | 0.074 | 0.000 |
| Corn (bu.) | Base AMTA 0.27 | Higher AMTA 0.321 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 0.320 | 0.320 | 0.000 |
| Avg 94-98 | 0.413 | 0.413 | 0.000 |
| Olym Avg 95-99 | 0.318 | 0.318 | 0.000 |
| Olym Avg 94-98 | 0.440 | 0.440 | 0.000 |
| AMTA 2.25 | 0.228 | 0.228 | 0.000 |
| AMTA 2.5 | 0.253 | 0.253 | 0.000 |
| AMTA 2.75 | 0.278 | 0.278 | 0.000 |
| Wheat (bu.) | Base AMTA 0.472 | Higher AMTA 0.562 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 0.499 | 0.499 | 0.000 |
| Avg 94-98 | 0.603 | 0.603 | 0.000 |
| Olym Avg 95-99 | 0.486 | 0.486 | 0.000 |
| Olym Avg 94-98 | 0.581 | 0.581 | 0.000 |
| AMTA 2.25 | 0.610 | 0.611 | 0.000 |
| AMTA 2.5 | 0.678 | 0.678 | 0.001 |
| AMTA 2.75 | 0.746 | 0.746 | 0.000 |
| Soybean (bu.) | Base AMTA 0 | 0.000 Higher AMTA 0 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 1.491 | 1.491 | 0.000 |
| Avg 94-98 | 1.754 | 1.754 | 0.000 |
| Olym Avg 95-99 | 1.506 | 1.506 | 0.000 |
| Olym Avg 94-98 | 1.808 | 1.808 | 0.000 |
| AMTA 2.25 | 0.093 | 0.093 | 0.000 |
| AMTA 2.5 | 0.104 | 0.103 | 0.000 |
| AMTA 2.75 | 0.114 | 0.114 | 0.000 |
| Sorghum (bu.) | Base AMTA 0.322 | Higher AMTA 0.383 | |
| Base | 0.000 | 0.000 | 0.000 |
| Avg 95-99 | 0.355 | 0.355 | 0.000 |
| Avg 94-98 | 0.476 | 0.476 | 0.000 |
| Olym Avg 95-99 | 0.384 | 0.384 | 0.000 |
| Olym Avg 94-98 | 0.593 | 0.593 | 0.000 |
| AMTA 2.25 | 0.297 | 0.297 | 0.000 |
| AMTA 2.5 | 0.330 | 0.330 | 0.000 |
| AMTA 2.75 | 0.363 | 0.363 | 0.000 |

The Base AMTA rate is the rate announced in the 1996 farm program for year 2001 and the Higher AMTA rates represent a 19% increase for 2001.

Table 12. Comparison of Average Total Government Costs for Base AMTA, LDP, and Counter Cyclical Payments or Added AMTA in 2001 for a 100% Trigger and Alternative Base AMTA Rates

| | Base AMTA Rates | 19% Higher AMTA Rates | Difference |
|----------------|------------------------|--------------------------|------------|
| | | (Billions \$) | |
| Rice | Base AMTA 2.1 | Higher AMTA 2.5 | |
| Base | 0.80 | 0.87 | 0.06 |
| Avg 95-99 | 1.24 | 1.31 | 0.07 |
| Avg 94-98 | 1.27 | 1.34 | 0.07 |
| Olym Avg 95-99 | 1.30 | 1.37 | 0.07 |
| Olym Avg 94-98 | 1.30 | 1.37 | 0.07 |
| AMTA 2.25 | 1.18 | 1.25 | 0.07 |
| AMTA 2.5 | 1.23 | 1.29 | 0.07 |
| AMTA 2.75 | 1.27 | 1.33 | 0.07 |
| Cotton | Base AMTA 0.057 | Higher AMTA 0.068 | |
| Base | 0.68 | 0.76 | 0.09 |
| Avg 95-99 | 1.48 | 1.57 | 0.09 |
| Avg 94-98 | 2.13 | 2.21 | 0.09 |
| Olym Avg 95-99 | 1.64 | 1.72 | 0.09 |
| Olym Avg 94-98 | 2.20 | 2.28 | 0.09 |
| AMTA 2.25 | 1.20 | 1.29 | 0.09 |
| AMTA 2.5 | 1.26 | 1.35 | 0.09 |
| AMTA 2.75 | 1.32 | 1.40 | 0.09 |
| Corn | Base AMTA 0.27 | Higher AMTA 0.321 | |
| Base | 3.26 | 3.62 | 0.37 |
| Avg 95-99 | 6.21 | 6.57 | 0.37 |
| Avg 94-98 | 7.06 | 7.43 | 0.37 |
| Olym Avg 95-99 | 6.19 | 6.55 | 0.37 |
| Olym Avg 94-98 | 7.31 | 7.68 | 0.37 |
| AMTA 2.25 | 5.36 | 5.72 | 0.36 |
| AMTA 2.5 | 5.59 | 5.95 | 0.36 |
| AMTA 2.75 | 5.82 | 6.19 | 0.36 |
| Wheat | Base AMTA 0.472 | Higher AMTA 0.562 | |
| Base | 1.36 | 1.57 | 0.21 |
| Avg 95-99 | 2.42 | 2.63 | 0.21 |
| Avg 94-98 | 2.65 | 2.85 | 0.21 |
| Olym Avg 95-99 | 2.40 | 2.60 | 0.21 |
| Olym Avg 94-98 | 2.60 | 2.80 | 0.21 |
| AMTA 2.25 | 2.66 | 2.87 | 0.21 |
| AMTA 2.5 | 2.80 | 3.01 | 0.21 |
| AMTA 2.75 | 2.95 | 3.16 | 0.21 |
| Soybean | Base AMTA 0 | Higher AMTA 0 | |
| Base | 3.00 | 3.00 | 0.00 |
| Avg 95-99 | 7.27 | 7.27 | 0.00 |
| Avg 94-98 | 8.02 | 8.02 | 0.00 |
| Olym Avg 95-99 | 7.31 | 7.31 | 0.00 |
| Olym Avg 94-98 | 8.17 | 8.17 | 0.00 |
| AMTA 2.25 | 3.27 | 3.26 | 0.00 |
| AMTA 2.5 | 3.29 | 3.29 | 0.00 |
| AMTA 2.75 | 3.32 | 3.32 | 0.00 |
| Sorghum | Base AMTA 0.322 | Higher AMTA 0.383 | |
| Base | 0.29 | 0.33 | 0.04 |
| Avg 95-99 | 0.48 | 0.52 | 0.04 |
| Avg 94-98 | 0.55 | 0.59 | 0.04 |
| Olym Avg 95-99 | 0.50 | 0.54 | 0.04 |
| Olym Avg 94-98 | 0.61 | 0.65 | 0.04 |
| AMTA 2.25 | 0.45 | 0.49 | 0.04 |
| AMTA 2.5 | 0.47 | 0.51 | 0.04 |
| AMTA 2.75 | 0.49 | 0.53 | 0.04 |

Summary of Comparing a State Triggered CCP Program to a Nationally Triggered Program

- The analyses presented thus far assumed the CCP program was triggered by national receipts. One alternative would be for the payments to be triggered at the state level. In such a case one state could receive a CCP while other states did not receive a payment or they received a different payment rate. A state triggered program would depend on state average price and yield to calculate receipts. A state triggered CCP program was analyzed for rice and the results were reported in Table 13.
- The results of a state triggered CCP were compared to the national program by reporting the average change in the CCP rates by option and the probability that the state CCP rate would exceed the national CCP rate.
- On average Texas producers would receive a \$0.10 to 0.20/cwt. lower CCP rate if the program was triggered at the state level. A state triggered program provided Texas growers a higher CCP rate 20 to 36% of the time. Missouri and Arkansas producers experienced about the same type of results as the Texas farmers if the program was state oriented.
- California, Louisiana, and Mississippi growers received higher or about the same average CCP rates if the program was state triggered. Growers in these states received higher CCP rates 51 to 76% of the time if the program was state oriented.

Table 13. Comparison of State Triggered Counter Cyclical Payment Program to a National Triggered Counter Cyclical Payment Program for Rice, Assuming 100% Trigger and Base AMTA Rates

| | State CCP Minus National CCP | P(State CCP > National CCP) |
|--------------------|---------------------------------|--------------------------------|
| Texas | (\$/cwt.) | (percent) |
| Avg 95-99 | -0.10 | 0.36 |
| Avg 94-98 | -0.09 | 0.36 |
| Olym Avg 95-99 | -0.23 | 0.20 |
| Olym Avg 94-98 | -0.23 | 0.20 |
| Arkansas | | |
| Avg 95-99 | -0.001 | 0.404 |
| Avg 94-98 | -0.063 | 0.272 |
| Olym Avg 95-99 | -0.056 | 0.284 |
| Olym Avg 94-98 | -0.056 | 0.284 |
| California | | |
| Avg 95-99 | 0.131 | 0.661 |
| Avg 94-98 | 0.334 | 0.767 |
| Olym Avg 95-99 | 0.152 | 0.695 |
| Olym Avg 94-98 | 0.152 | 0.695 |
| Louisiana | | |
| Avg 95-99 | 0.048 | 0.599 |
| Avg 94-98 | -0.030 | 0.503 |
| Olym Avg 95-99 | -0.017 | 0.510 |
| Olym Avg 94-98 | -0.017 | 0.510 |
| Mississippi | | |
| Avg 95-99 | 0.040 | 0.579 |
| Avg 94-98 | 0.082 | 0.678 |
| Olym Avg 95-99 | 0.102 | 0.716 |
| Olym Avg 94-98 | 0.102 | 0.716 |
| Missouri | | |
| Avg 95-99 | 0.058 | 0.493 |
| Avg 94-98 | -0.061 | 0.323 |
| Olym Avg 95-99 | 0.018 | 0.434 |
| Olym Avg 94-98 | 0.018 | 0.434 |

A Counter Cyclical Program that is triggered when state level market receipts per planted acre is less than the historical base receipts per planted acre in that state is compared to a nationally triggered program using four alternative base periods.

Summary of Comparing Trigger Fractions

- The analyses presented thus far have assumed a 100% trigger for determining CCPs.
- The impacts of reducing the CCP trigger fraction to 90 or 95% are summarized in Figures 9 and 10. The CCP rates and the total receipts per cwt. of rice decline considerably if the trigger rate falls to 90%.

Figure 9. Cumulative Distributions of Counter Cyclical or Added AMTA Payments per Cwt of Rice in 2001, Assuming 90%, 95%, or 100% Trigger Levels

