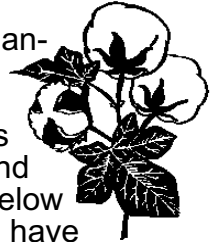


1996 Cotton Management Economic Notes

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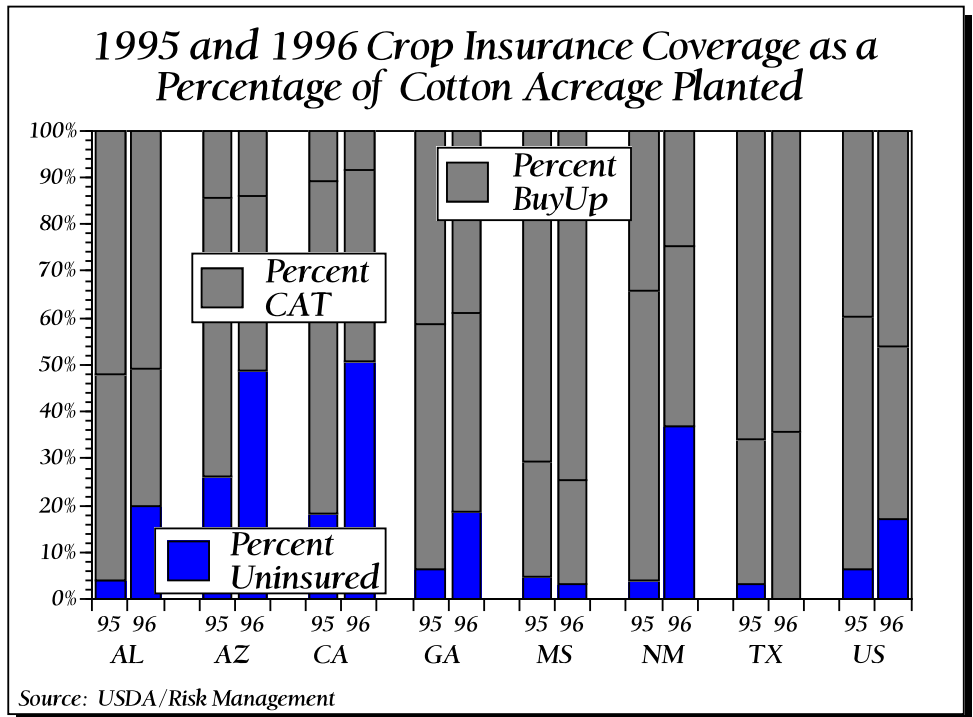


Is AZ Selling Itself Short on Crop Insurance?

In a State that relies entirely on irrigation water for cotton production, crop insurance may seem like a poor investment. After all, drought and heat related crop losses account for 47% of all crop loss insurance claims in the US. Followed by 22% for excess moisture, 13% for cold/frost, 9% for hail damage, 3% for diseases, 2% for wind, 2% for flood, and 1% for insect damage. But is rolling the dice a wise practice, even if the odds of having a production wreck are low?

In October of 1994, President Clinton signed into law the **Federal Crop Insurance Reform Act**. A key goal to the program was to replace traditional Crop Disaster Assistance with Federal Crop Insurance. With Disaster Assistance, some years would require large withdrawals from the budget due to a widespread drought while other years may require very little from the federal budget. Crop insurance reform was in-

tended to even out the flow of annual expenditures required from the federal budget by moving to annual actuarial based payments paid by government subsidy and grower premiums. The figure below shows how cotton producers have responded to crop insurance reform. Catastrophic coverage (CAT) insures for 50% of "average yield" and 60% of the expected market price established and the premium for this coverage is



Recent Prices	November 7, 1996	
	Upland (¢/lb)	Pima (ELS) (¢/lb)
Spot - uncompressed	68.29	96.00
Dec '96 Futures	71.54	
Jul '97 Futures	75.55	
Dec '97 Futures	75.55	
Adj. World Price	60.64	

Note: Upland Spot for Desert SW grade 31-3, staple 35, add 300 points for compressed bales, Pima Spot for DSW grade 03, staple 46, 10/24/96.

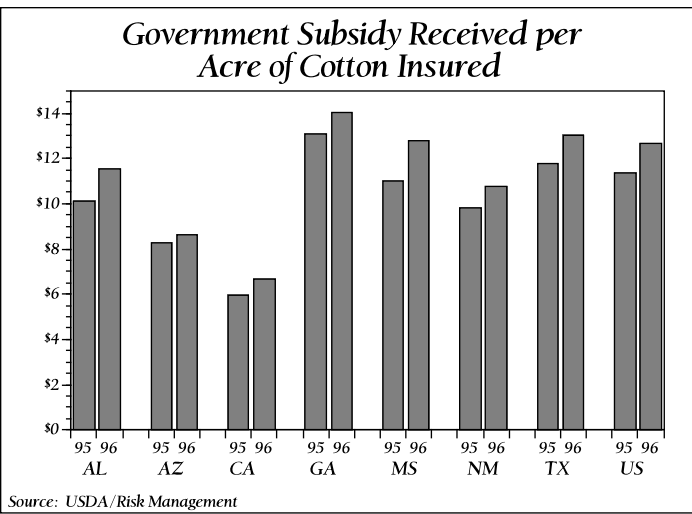
paid entirely by the government except for a \$50 processing fee. Additional coverage levels (BuyUp) can be obtained that cover up to 75% of yield and 100% of market price, but these options require a premium from the grower and a modest increase in premium subsidy from the government. CAT coverage was required in 1995 for most producers to obtain production flexibility payments, payments received as a part of the new market oriented freedom to farm bill. This requirement was dropped in 1996 if producers were willing to sign a waiver agreeing to give up eligibility for emergency crop disaster assistance.

Many cotton producers in the West chose for this option. Uninsured cotton plantings increased from 26 to 49 percent for Arizona.

The loss ratio, or payments made to Arizona cotton growers divided by premiums paid by the government and cotton growers is only .007 as of November 4, 1996. That is for each premium dollar paid out, only .7¢ has been received in claims by Arizona cotton growers. But given the recent dip in cotton prices this number may rise some from the buyup policies with 100% price protection.

In 1995, for every dollar of premium spent Arizona cotton growers received \$1.35 back. Since most of the premium was paid by government subsidy, for **every dollar that Arizona cotton producers** spent on their \$50 processing fee for CAT coverage, they obtained at least \$4.55 back in their pockets. For growers that extended their coverage with a "buyup option," they received \$3.56 back on every premium dollar they spent. The return for dollar spent drops from the CAT to buyup option because the grower pays a higher percentage of the total premium with the buyup options. However, it is very important to realize that the amount of government premium subsidy per acre increases as the level of buyup coverage increases.

The graph below gives the amount of government subsidy received per acre of cotton planted for selected states and the US. Clearly, states that had little acreage uninsured and more acres in the buyup option like Texas, Mississippi, Georgia, and Alabama (see graph on the first page) are receiving more of a subsidy than Arizona, California, and New Mexico. Of just the cotton acreage insured, the government's pre-



mium subsidy varies from a low of around \$6/acre in California to \$14/acre in Georgia. Higher subsidies are obtained by having a high percentage of producers "buying up" to more extensive coverage. In looking at just government premium subsidies, AZ cotton producers lost out on \$6.12/acre or \$2.2 million relative to the average US cotton producer. Obviously, the program favors dryland over irrigated cotton producers since the odds of falling below 50% of "average yield" is much greater with uncertain moisture. But price protection offered is not preferential to geographic location. Also, higher protection levels than CAT offer replant protection, and how many AZ fields have been planted 2 or even 3 times in recent years due to a warm and then cold spring?

In selected states and crops, Crop Revenue Coverage or Income Protection are pilot projects that could be expanded to other states in the near future. These policies have an advantage in that they provide coverage against reduced income resulting from a reduction in yield and market price combined.

Given that AZ growers appear to have done okay this year without purchasing any crop insurance one might be tempted to conclude that they made a wise investment. But this is no more logical than telling someone who won the lottery that they made a wise investment. We know that on average less than 50¢ of every dollar spent on lottery tickets is actually paid out in winnings. If you play the lottery or farm without insurance long enough, you will eventually reach the long-term odds. Because USDA has **intentionally skewed subsidies so that the more you invest in protection the more subsidy you receive**, I would conclude that AZ was underinsured in 1995 and 1996. What will 1997 bring?

