

**Did Producers Get What They Asked For in the New Farm Bill?
More Results from the 2001 National Agricultural, Food,
and Public Policy Preference Survey**

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Introduction

The debate leading up to the passage of the 2002 Farm Bill was one of the most contentious in memory. Farm Bill debates are typically bipartisan, with farm state politicians from both parties working together to pass legislation that will have a beneficial impact on agriculture and rural America. This Farm Bill debate was marked not only by divisiveness between the House and Senate, but also by fighting between Democrats and Republicans over major provisions of the Farm Bill. While these divisions are uncharacteristic of typical Farm Bill debates, the political process eventually did produce the Farm Security and Rural Investment Act of 2002, which was signed by President Bush on May 13, 2002.

Did producers get what they wanted in the 2002 Farm Bill? A survey completed in 2001 provides some insight into this question. The National Agricultural, Food and Public Policy Preference Survey was sent to producers in 27 states (see Table 2) as the Farm Bill debate was beginning, with the purpose of gaining a sense of what producers wanted in the 2002 Farm Bill. Results of the survey were published in “The 2002 Farm Bill: U.S. Producer Preferences for Agricultural, Food and Public Policy”, which is available from Farm Foundation.

Economists are now analyzing the data generated from this survey across the country to provide insights into producer thoughts on a variety of agricultural policy issues. This paper specifically looks at producer preferences on safety net issues in the Commodity Title of the Farm Bill. This issues examined include who should be covered by the safety net and the marketing loan.

Procedures

Logistic regression techniques were used on survey data to estimate models that predict the probability that producers would respond yes to selected questions from the survey. Independent variables use as regressors came from demographic information collected from the survey. These variables are described in Table 1.

The probability of an average producer answering yes to a specific question was then determined by computing the value of the model at the mean values of all of the independent variables in the model. These values were then held constant while one variable was changed to determine the effect of changing that variable on the estimated probability. For example, these

Table 1. Description of Demographic Variables Used

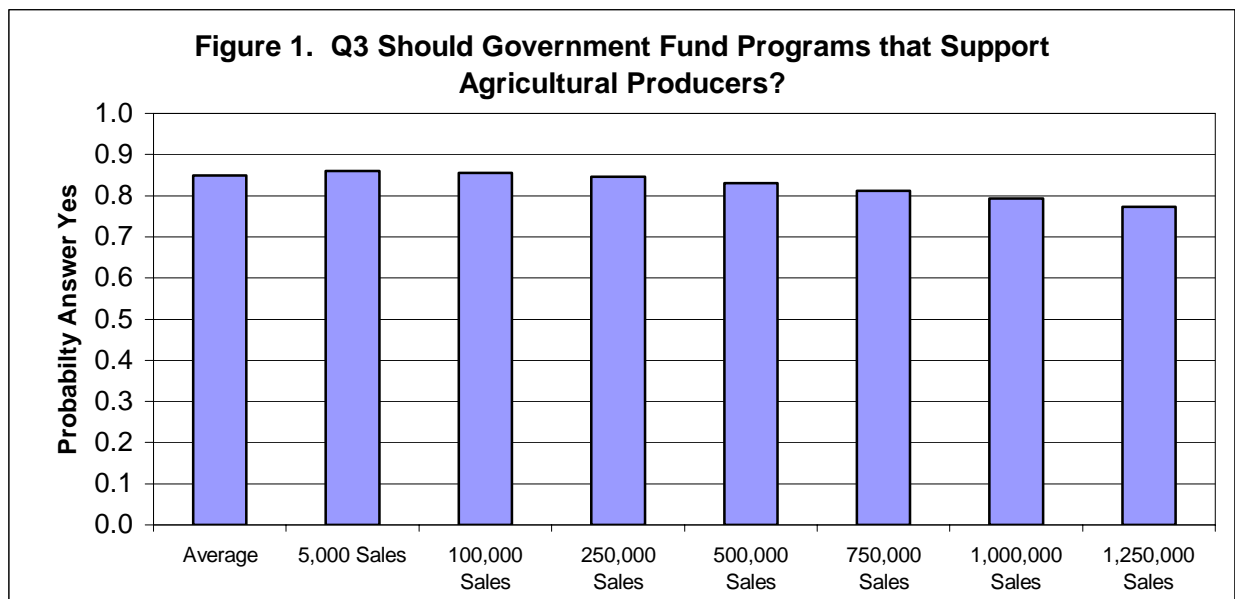
NORTHCEN	Producers from the North Central Region
NORTHEAS	Producers from the Northeast Region
WEST	Producers from the West Region
SOUTH	Producers from the South Region
AGE	Age of producer in years
SALES	Annual Sales as reported by producer (in thousand dollars)
FARMINC	Percentage of family income earned from farming and ranching
EDU	Education level of producer in years
TENURE	Percentage of farm or ranch owned by producer
GEN	Generation presently on farm or ranch
GRAIN	Percentage wheat and feedgrains produced
OILSEED	Percentage oilseeds produced
COTTON	Percentage cotton produced
FORAGE	Percentage forage produced
DAIRY	Percentage dairy produced
LIVESTOK	Percentage livestock produced
SPECIAL	Percentage fruit, vegetables, nuts and pulses produced
PEASUGTO	Percentage peanuts, sugar and tobacco produced
OTHER	Percentage other agricultural products produced
COMM PRG	Participated in traditional commodity programs
CONS PRG	Participated in conservation programs
INSURANCE	Participated in federal crop insurance programs
DISASTER PRG	Participated in federal disaster programs
OTHER PRG	Participated in other federal programs
FARM BUREAU	Member of Farm Bureau
NFO	Member of National Farmers Organization
NFU	Member of National Farmers Union
GRANGE	Member of National Grange
COMM	Member of Commodity or Trade Organization
HEDGEOUTPUT	Managed Risk by hedging produced outputs
INSURANCE	Managed risk by purchasing crop insurance
HEDGEINPUT	Managed risk by hedging input costs
GRAINSTG	Managed risk by storing grain
ENTDIVERS	Managed risk by diversifying
SAVING	Managed risk through debt equity financing or savings accounts
INTERNET	Managed risk through internet information collection
MGMTEDU	Managed risk by obtaining management education
OFFINC	Managed risk with off-farm income
ACHILD	Expect farm to be operated by children
BREL	Expect farm to be operated by relative that is not a children
CHAND	Expect farm to be operated by non-relative involved in farm
DSOL	Expect farm to be sold but still in production
ENON	Expect farm to be converted to non farm use

models are being used to examine how increasing farm size as measured in terms of gross sales effects the probability of answering yes to questions from the survey. The effects of other factors, such as farm organization membership, farm program participation and risk management tools used in the operation are also examined.

The intent of this paper is to present the results in graphical form and not get into an in-depth discussion of the statistics behind logistic regressions. However, parameters discussed in are statistically significant at the 0.05 level in most cases. In a few instances, the parameters are significant at the 0.10 level.

Should There Be Farm Programs?

When asked if the government should fund programs that provide income support for agricultural producers, 80 percent of producers agreed with that statement, and this support was apparent across all regions surveyed and demographic groups of producers. Figure 1 illustrates the probability of the average producer answering yes to this question is 85 percent, which is in line with survey results. Figure 1 also shows the effects of gross sales on the probability of answering yes to this question. At \$5,000 in sales, the probability of answering the question yes

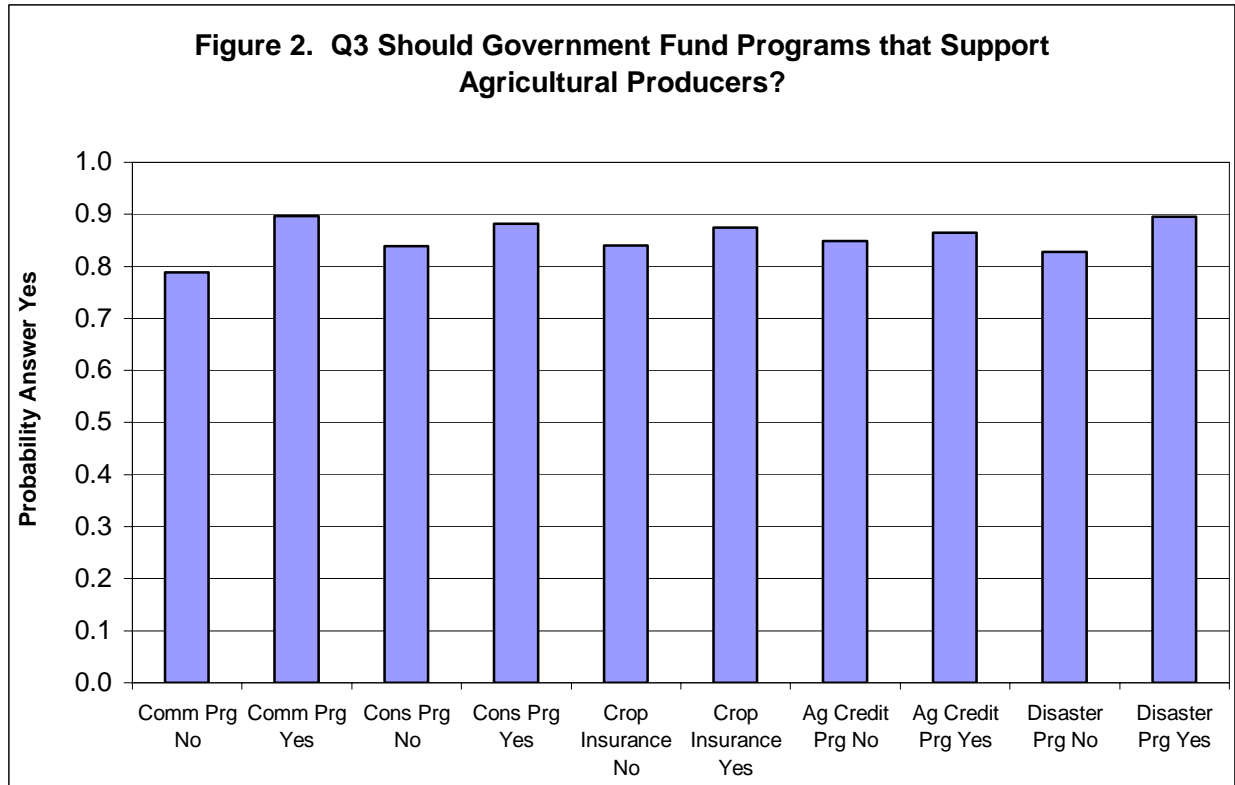


is 86 percent, and drops to 85.5 percent at \$100,000 in sales and 84.5 percent at \$250,000. The probability decreases by between 1.5 and 2.0 percent for each additional \$250,000 in sales.

While this indicates that producers are very much in favor of support programs, these results do conflict with the survey, where 77 percent of farms grossing less than \$100,000 answered the

question yes, and 88 percent of farms grossing over \$100,000 answered were in favor of support programs. This does not diminish the fact that the vast majority of producers favor farm programs.

Participation in federal programs also impact the probability of producers favoring farm programs. Figure 2 illustrates that participation in a variety of farm programs increases the



probability of producers favoring such programs. The biggest impact of program participation is in traditional commodity programs such as loans, fixed payments as seen in the first two bars in the table, and with participation in disaster relief programs, illustrated in the last two bars of the table.

Figure 3 examines the response to the question should income supports be provided to the current program crops of wheat, corn, grain sorghum, cotton, oilseeds, rice, barley and oats. In the survey, 69 percent of respondents agreed with this statement in the national survey. The “average” producer in this model had a 0.79 probability of answering this question affirmatively. Participation in government programs increased the likelihood of a yes answer. This makes sense, as a producer that has benefited from farm programs in the past would be more likely to want to see them continued. The lowest probability of answering yes in these estimations was a

Figure 3. Q2a Should Income Supports Be Provided to Current Traditional Program Crops?

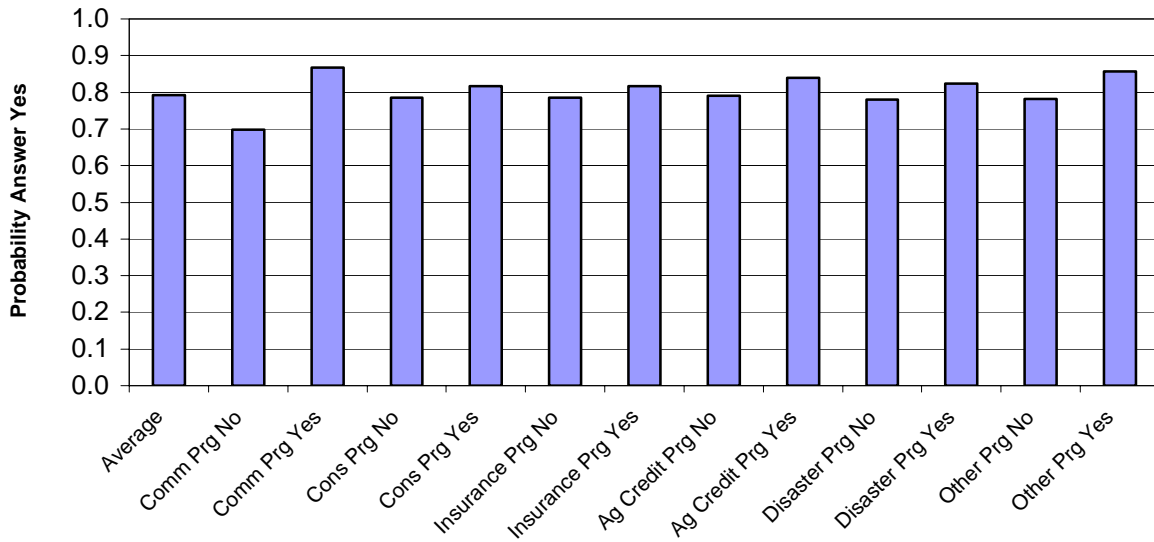
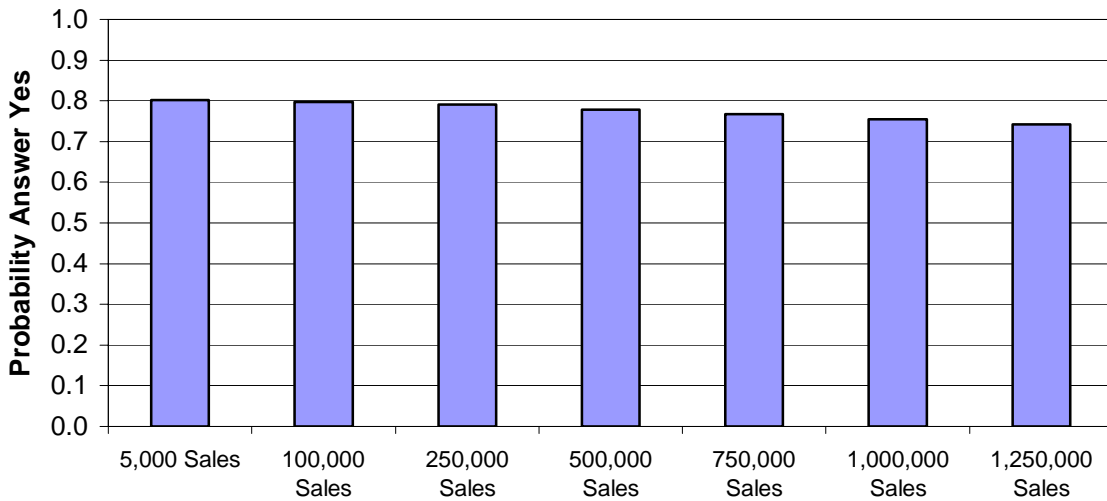


Figure 4. Q2a Should Income Supports Be Provided to Current Traditional Program Crops?

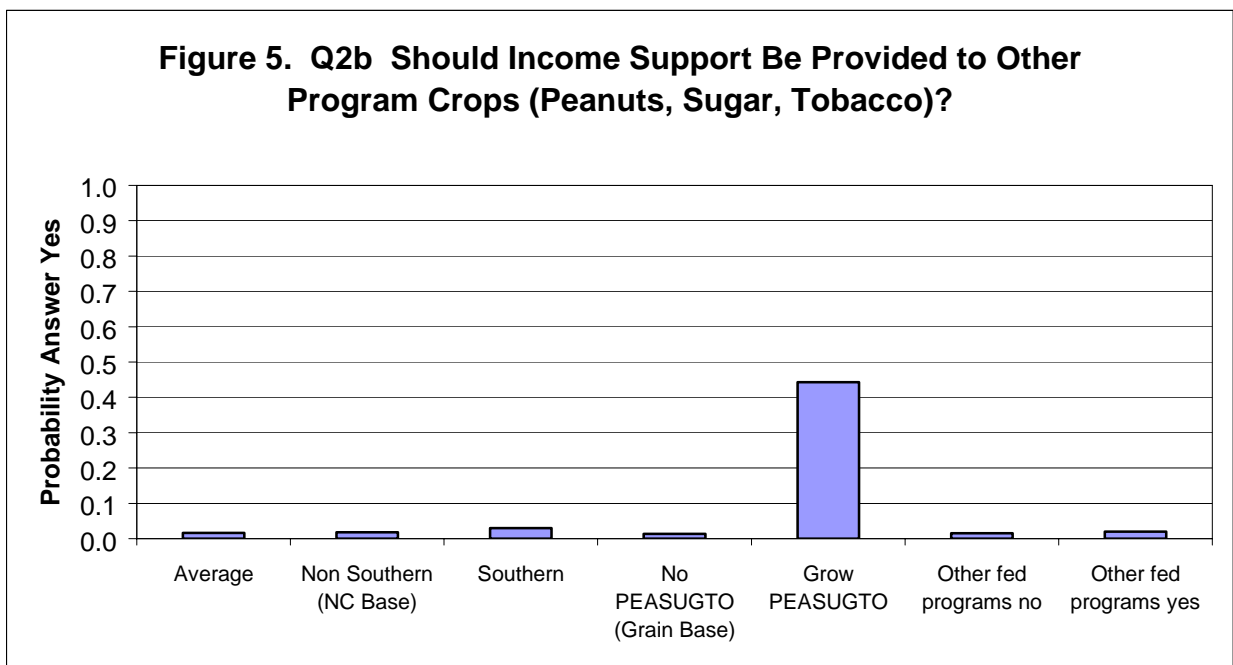


producer that did not participate in traditional commodity programs ($P = 0.70$), while the highest probability for favoring these programs were participants in traditional commodity programs ($P = 0.87$).

Figure 4 illustrates the effect of increased farm size (in terms of gross revenue) on the probability of answering yes to the continuation of support payments for traditional program

crops. Income has a negative effect on this probability, as it could be argued that while still important to their bottom line, program payments are not as large a percentage of net income on larger farms as medium sized farms. The probability of answering yes is approximately 0.80 for farms with \$5,000 in sales and farms with \$100,000 in sales. This probability drops in larger increments to a low of 0.74 for sales of \$1,250,000.

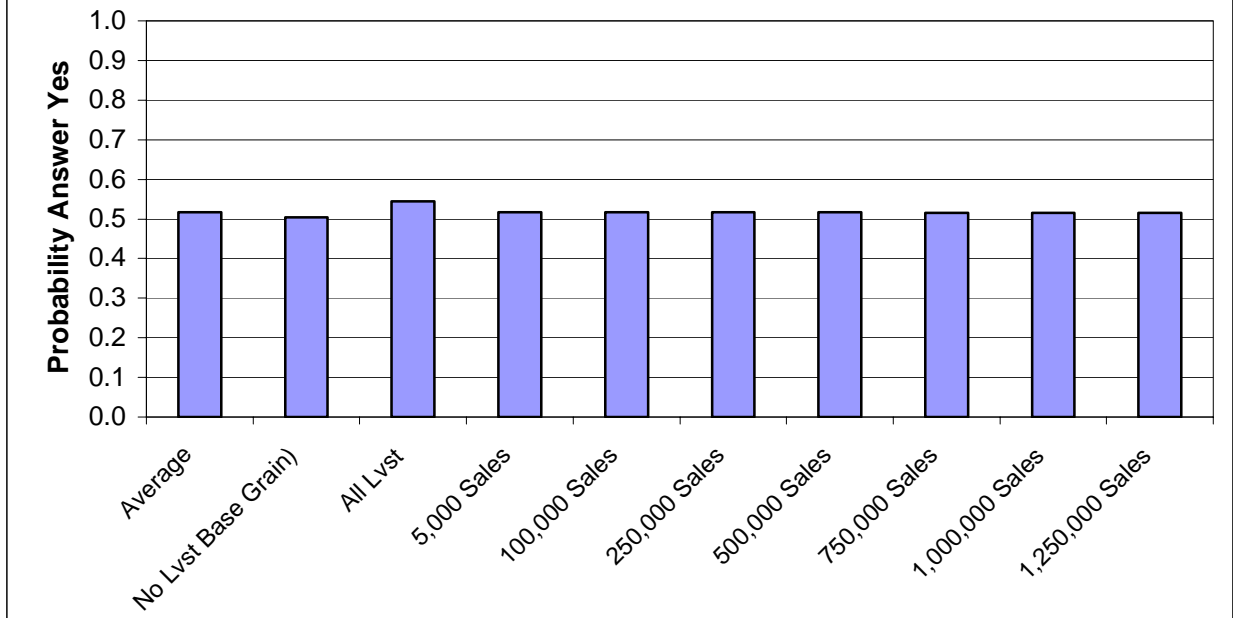
But what about the other program crops of peanuts, sugar and tobacco? Nationally, only 24 percent of producers favored continuing support of these crops. Figure 5 shows that the “average” producers had a probability of 0.016, or just over a one and a half percent probability of supporting program payments for these crops. Southern farmers as a whole were somewhat



more likely to support payments to peanuts, sugar and tobacco ($P = 0.03$), as these crops are southern crops. It is interesting to note, that when the model is set to grow no peanuts, sugar or tobacco, the probability of answering yes is 0.013, but when peanuts, sugar and tobacco are increased to 100 percent, the probability increases to 0.44. The base for this model is a grain producer in the north central region. One inference that can be made is that since none of these crops is grown in the north central region, government payments for these crops would not be supported in this area.

Figure 6 looks at the question should income support payments be extended to livestock and livestock products. Nationally, 50 percent of survey respondents favored extending

Figure 6. Q2f Should Income Supports Be Provided For Livestock and Livestock Products?



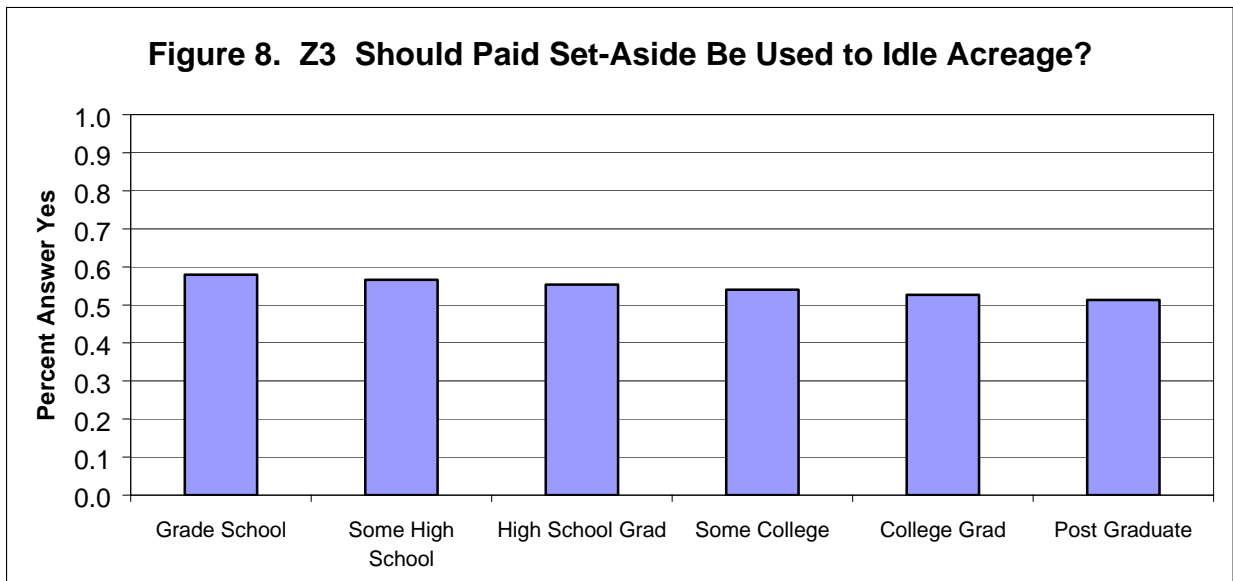
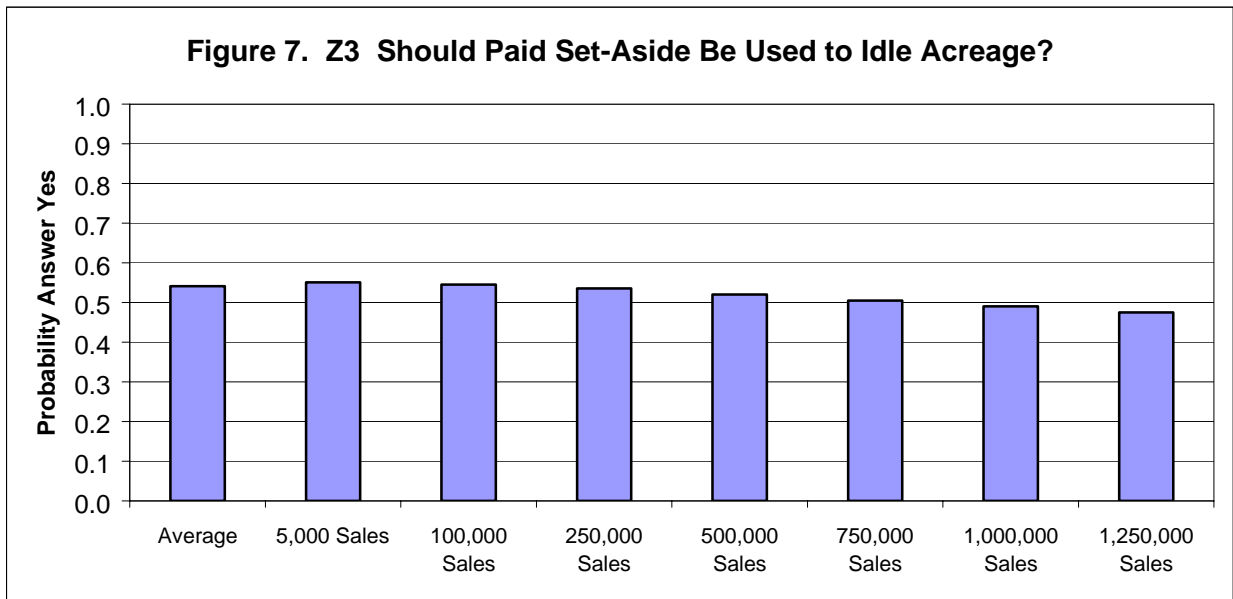
government support to livestock and livestock products. The logistic analysis shows that the “average” producer in this study will answer this question yes 51 percent of the time. This is surprising, as the major livestock associations such as the NCBA do not support direct subsidies of the livestock industry. One explanation is that many smaller livestock producers are also crop producers already receiving government payments, making them more accepting of livestock payments.

None of the parameter estimates in the model were large enough to have much effect on the probability in this model, as the probability stays in the 50 percent range of supporting livestock payments. Percentage of livestock production is positively correlated in this model, that is, the larger percentage livestock produced in an operation, the model predicted a slightly higher likelihood of answering yes to livestock support. This goes against expectations as many large livestock operations are opposed to direct government support of animal agriculture. Possibly looking at the interaction between percentage livestock produced and gross sales would produce a negative correlation that is more like the industry.

Paid Set-Aside

The next question deals with the use of paid set-aside programs to idle acreage. Producers were asked if they supported programs that would pay them to idle acreage. This question posed a different scenario from previous farm bills, where acres were idled to receive current payments. The results are summarized in Figures 7, 8, 9, and 10.

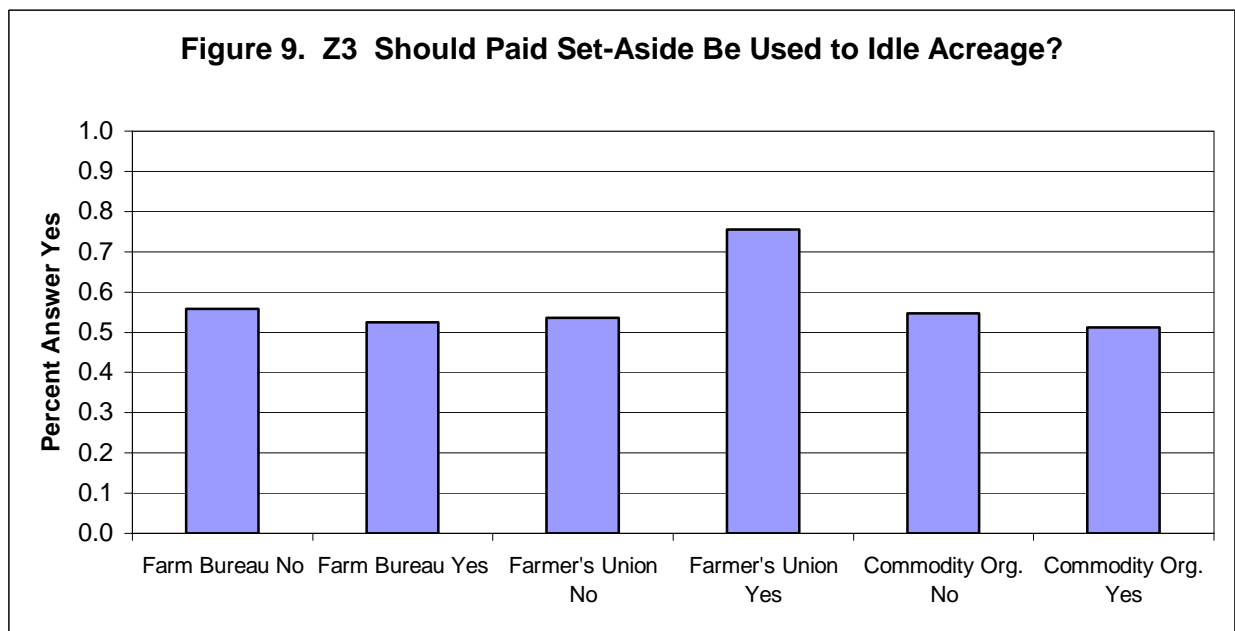
Figure 7 summarizes the “average” producer and the effect of gross sales on the probability of supporting paid set-asides, while Figure 8 examines the effects of education on this probability.



The “average” producer had a 0.54 probability of answering yes to paid set-asides. As gross sales increased, the probability of support for concept of paid set-asides decreased. At \$5,000 in sales, with all other parameters held constant, the model indicated there was a 0.55 probability of answering yes to this question, while \$100,000 in sales reduced the probability to 0.545. The probabilities continued to decrease in this model to a probability of 0.475 at a sales level of \$1,250,000. The model indicates that producers on very large farms (sales over approximately \$750,000) are more likely to answer no to the concept of paid set-asides. This could indicate that managers of larger operations are more likely to have faith in their management ability and could generate more income from the land than would be realized from a paid set aside program.

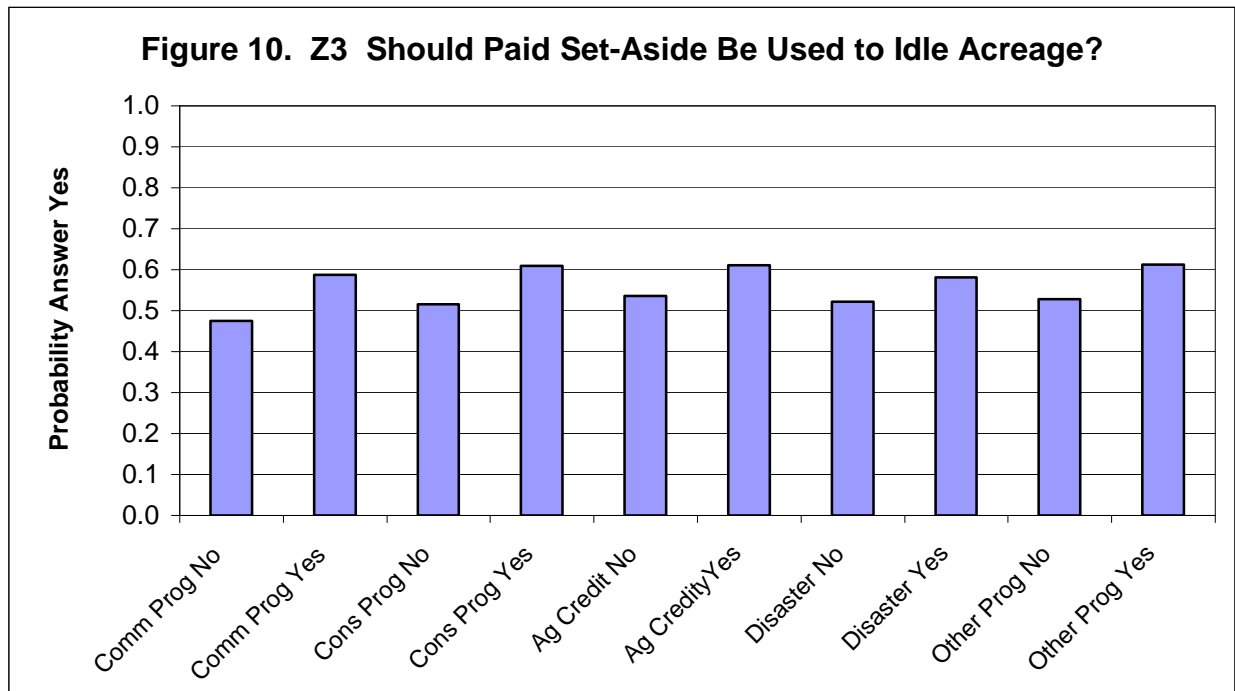
Education level is also negatively correlated with the probability of supporting paid set-asides. The model indicates that a grade school (8th grade) graduate has a probability of 0.58 of answering yes to the paid set-aside concept. The probability decreases by just over one percent for each 2 years of additional education, with a probability of 0.51 for someone educated at the post graduate level. This result is consistent with expectations, as higher education level can be equated with higher management abilities.

Figure 8 examines the effects of farm organization membership on the acceptance of paid set-asides. Farm Bureau members are less likely to support paid set asides, although the model



indicates that Farm Bureau members have a probability of 52 percent of supporting the concept of paid set-asides. Farmers Union members are 22 percent more likely to support paid set-asides, having a probability of 0.75 of answering the question yes. This could be due to a difference in philosophies between the Farm Bureau and Farmers Union. Commodity organization membership also has a negative impact on the probability of supporting the concept of paid set-asides.

The effect of participation in federal farm programs on the probability of supporting paid set-asides is detailed in Figure 10. In general, participation in federal farm programs has a

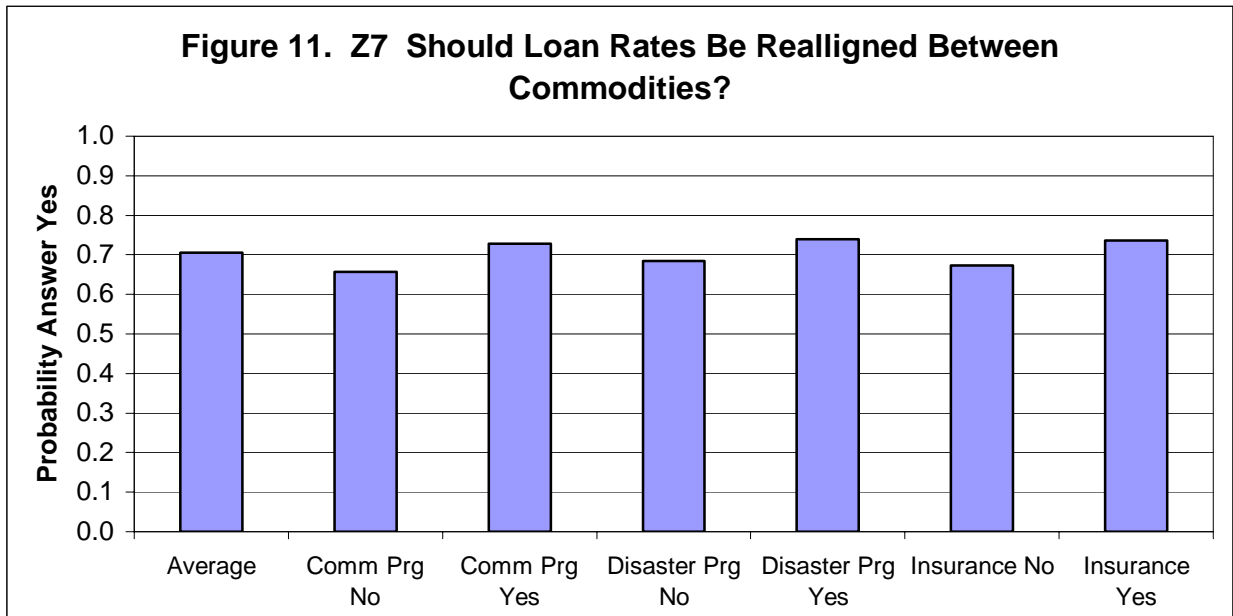


positive impact on the probability of answering yes to paid set-asides. It is interesting to note that the model indicates that producers that do not participate in programs for the eight program crops are more likely to answer no ($P = 0.47$) than producers that did participate ($P = 0.59$). This is as expected, as those producers that do not participate in commodity programs are not as likely to accept additional government programs.

Loan Issues

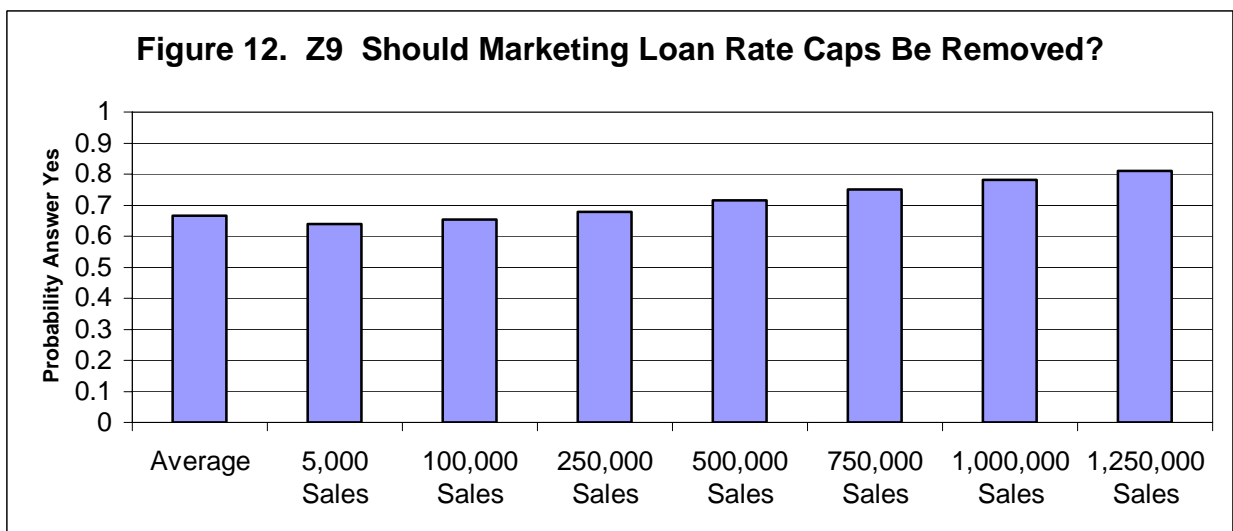
Several issues regarding the marketing loan can be examined using data from the survey. Figure 11 summarizes the analysis of the question should loan rates be realigned between commodities. Economists have long argued that the loan rate for soybeans was high relative to

the loan rate for feedgrains and thus distorted production decisions. The “average” producer in this analysis had a 71 percent probability of supporting the realignment of loan rates between



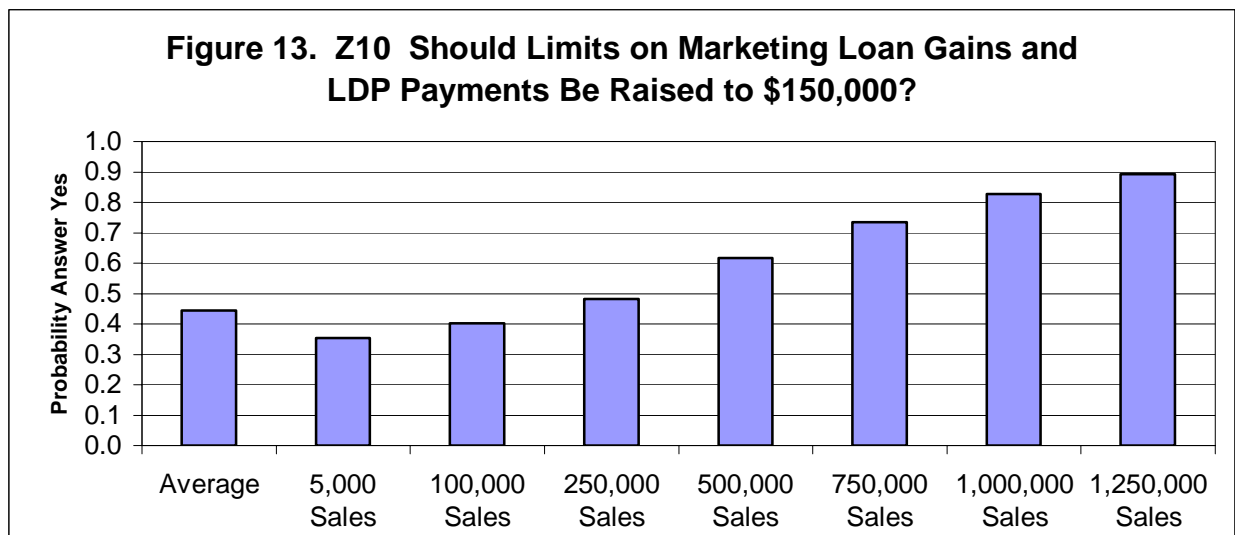
counties. This is in line with the survey results, as over 60 percent of respondents in those states that asked the question favored the realignment of loan rates between commodities. Possibly, Extension Economists have done a good job of educating producers on this issue. Participation in certain federal agricultural programs also had a positive effect on producer attitudes toward the realignment of loan rates.

In the several states that asked the question should caps on loan rates be removed, a slight minority of respondents favored the removal of loan rate caps. The relevant results of the



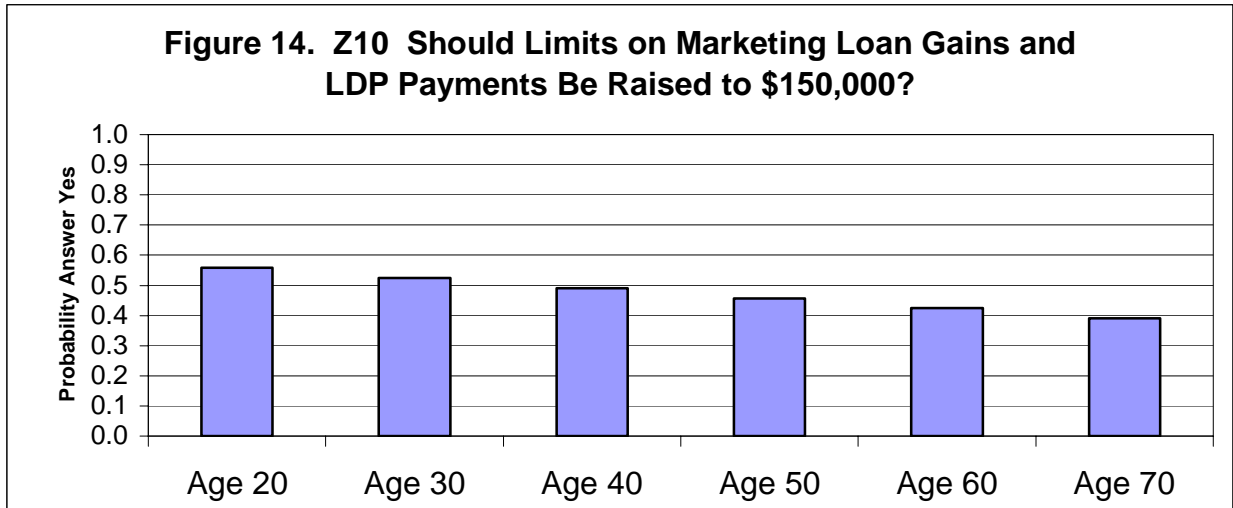
logistic analysis are summarized in Figure 12. The “average” producer in this analysis is more likely to favor the removal of loan rate caps ($P = 0.67$) than was indicated in the original survey results. There was also a positive correlation between gross sales and support of removing rate caps. This could be because operations with higher gross sales could benefit from higher loan rates more than smaller operations. Participants in commodity programs are eight percent more likely to support removing loan rate caps than those that do not participate, which is as expected.

Producers in four states were asked if limits on marketing loan gains and loan deficiency rates should be raised to \$150,000. Between 28 and 44 percent of producers responded favorably to this concept. As is shown in Figure 13, the “average” producer had a probability of 0.44 of answering the question yes. However, as sales increased, the probability of answering

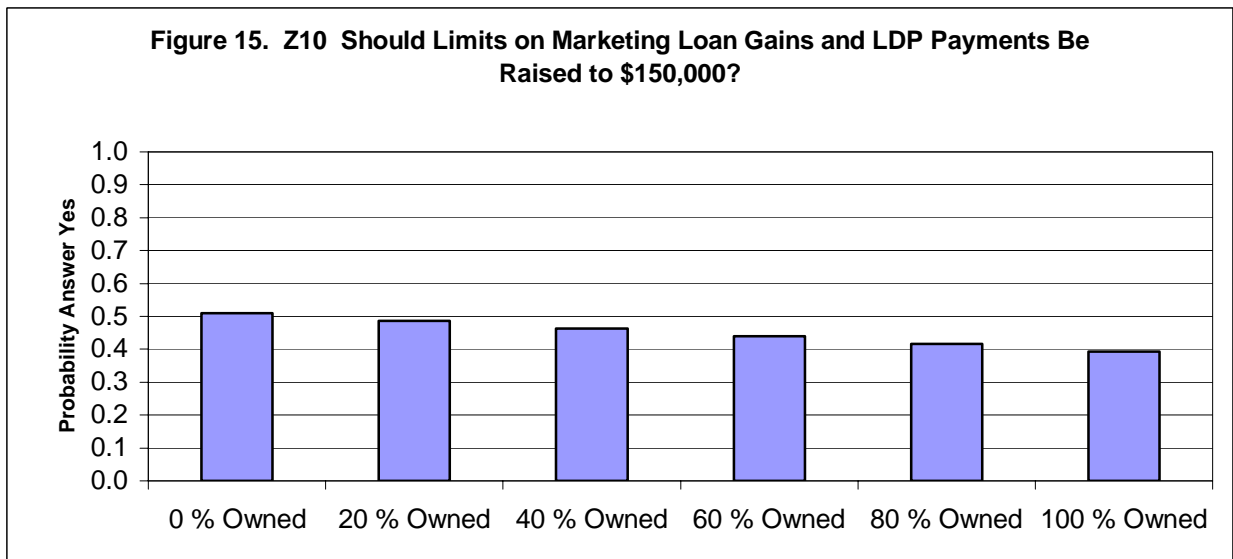


yes increase substantially, with \$5,000 in sales having a probability of 0.35 and sales of \$1,250,000 having a probability of 0.89. Producers participating in marketing loan programs with higher incomes would benefit from raising the payment limit as they could take advantage of these programs to a greater extent.

Figure 14 illustrates the effects of age on the probability of answering yes to this question. This figure illustrates the negative correlation between increasing age and the probability of supporting the increase of this payment limit. This infers that farms operated by younger managers could have more acres than those operated by older producers, and therefore would benefit by taking advantage of the marketing loan program on the additional bushels produced.



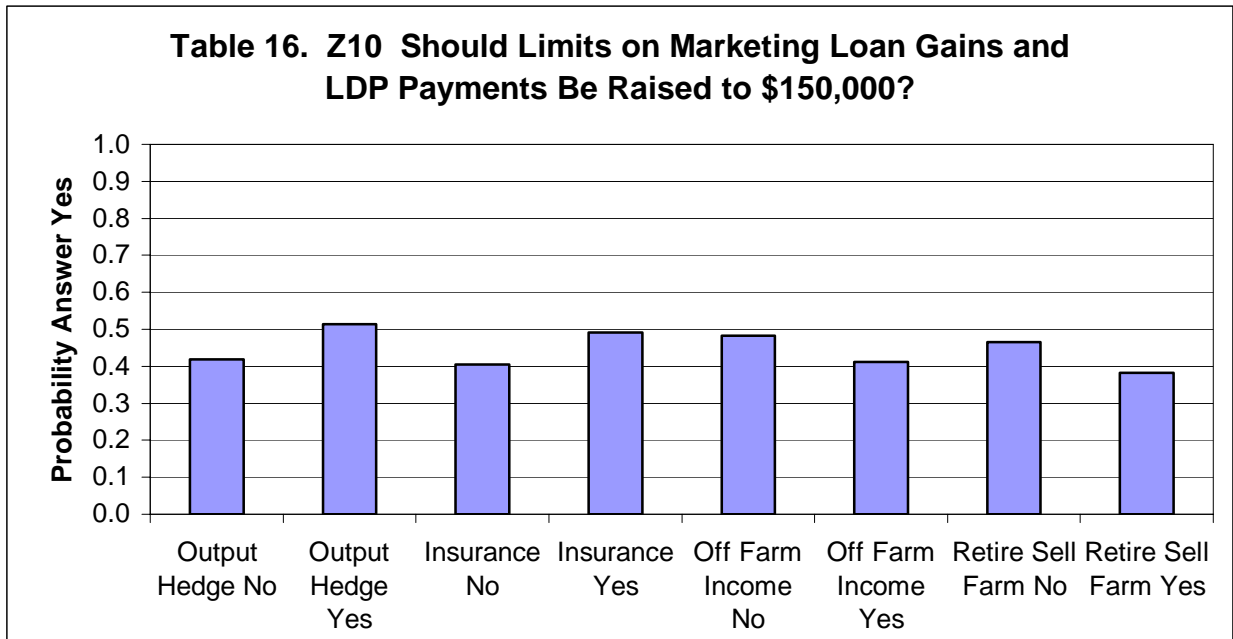
The effects of land ownership also had a negative effect on the probability to answer yes to raising this payment limit, ranging from a high probability of 0.51 when no farm ground is owned and a probability of 0.39 when 100 percent of the land is owned. This is illustrated in Figure 15. This could be because younger operators tend to increase the size of their operations



renting more land instead of buying it, thus having larger farms with more bushels to sell, but an overall lower percentage of owned ground.

Figure 16 shows how several risk management tools affected the probability of answering yes to increased loan payment limits. Producers that hedged their outputs and used crop insurance tended to have a higher probability of supporting increased payment limits. This could be because these producers more involved in managing their operations and have more bushels

to put through the marketing loan program. Off farm income was negatively correlated to the probability of supporting increase payment limits. If it is the operator that has off farm



employment, this would be as expected since this operator would have less time to manage fewer acres, and would therefore not have as many bushels to place through these programs. Finally, Selling the farm to someone not involved in the operation had a negative effect on the probability of supporting increased loan payment limits. This could possibly be because if the seller has sold the farm to someone outside of the operation, then the seller has no interest in seeing payment limits increase, as there is no benefit to the seller.

How Did Producers Fare?

Did producers get the farm bill that they wanted? In many respects they did. As producers wanted, there is a government-sponsored safety net to support farm income. Freedom to Farm was not the beginning of the end of farm programs, just another step in their evolution. In fact, the two main components of Freedom to Farm, planting flexibility and the fixed payment are part of the current safety net.

The marketing loan program is also an important part of the safety net. Survey results indicated that producers generally favored increasing or maintaining loan rates, although there was some concern on their impact on WTO obligations. Producers also supported realigning loan rates between commodities. In general, both of these occurred, with loan rates for corn and sorghum being raised to \$1.98 for 2002 – 2003, wheat raised to 2.80 for 2002 –2003, but

soybeans lowered to \$5.00 for the same period. For 2004 – 2007, corn and sorghum loan rates drop to \$1.95, wheat drops to \$2.75, while soybeans remain at \$5.00 per bushel. Although producers tended to favor the lifting of payment caps, this legislation set loan rates at these levels, and do not give the Secretary of Agriculture authority to raise or lower loan rates. Producers in this analysis favored raising the payment limit on marketing loan gains and LDP's to \$150,000, which did not happen. These payments were limited to \$75,000, with direct payments limited to \$40,000 and counter-cyclical payments limited to \$65,000. The three entity rule is still in effect, although the payment limitation issue was contentious in this debate, and will probably not go away.

The other feature of the safety net is the counter-cyclical payment. While a model pertaining to this issue has not been completed, the survey indicated that producers did prefer a counter-cyclical payment based on price to a payment based on income. A counter-cyclical price payment, where producers receive a payment if a commodities price falls below a specified target price is feature of the 2002 Farm Bill.

Conclusion

It appears that producers received much of what they wanted as a group from the safety net provisions of the new farm bill. Farm programs are very important to production agriculture, and to the bottom line of producers. Many economists think that the best farm bill is one that does not distort production decisions, and thus distorts markets the least. Certain provisions of the 2002 Farm Bill, such as raising loan rates, should distort production decisions more. However, in the political process, politics almost always wins over economics. Will the 2002 Farm Bill work as intended? Only time will tell.

Table 2. States Participating in the Survey

West: Arizona, Colorado, Idaho, and Oregon

North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota, South Dakota, and Ohio

Northeast: Maryland, New Jersey, and New York, Pennsylvania

South: Alabama, Florida, Georgia*, Louisiana, Mississippi, Oklahoma, South Carolina, Tennessee, Texas

* due to a lack of responses, Georgia was dropped from the logistic analysis

Reference

Lubben, B.D., C.J. Simons, N.L. Bills, N.L. Meyer, and J.L. Novak. **The 2002 Farm Bill: US Producer Preferences for Agricultural, Food, and Public Policy.** National Public Policy Education Committee Publication No. 2001-02. September, 2001.