Preliminary Analysis of House of Representatives Draft Concept Paper for the 2002 Farm Bill

Briefing Paper 01-9

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Prepared by FAPRI - University of Missouri and Iowa State and AFPC – Texas A&M University System
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Scope of Analysis

- Analyzed provisions relative to impacts on wheat, feed grains, cotton, rice, oilseeds, and the conservation reserve program
- Analysis does not include provisions related to peanuts, sugar, dairy, wool, mohair, conservation, trade programs, research, nutrition, and rural development

Base Acreage Update

- Producers may update base to reflect recent planting but are not required to do so
- Producers can choose between current AMTA or average acreage planted on AMTA Contract Crops and/or oilseed for 1998-2001
- Once updated for 2002 program, base will be fixed
- Payment acreage at 85% for both
 - Fixed decoupled
 - Counter-cyclical payment

Payment Yield

- Use current AMTA payment yields
- Develop payment yields for soybeans (30 bu)
- Use these yields for fixed decoupled and counter cyclical payments

Fixed Decoupled Payments

- Set at 2002 levels
- Soybean rate established at \$0.34 per bushel
- Payment limit of \$40K for fixed decoupled payments

Counter Cyclical Payment Based on Target Prices

Payment Rate

 Target price less the (higher of either the national 12 months season averaged price or the national average loan rate) minus the fixed decoupled payment

Payment Limits

 \$75,000 for counter-cyclical payment for all crops would be established

Proposed Loan Rates, Fixed Payment Rates and Target Prices \$/unit **Fixed Rates Target Prices** Loan Rates Crop 2001 Proposed 2002 AMTA Proposed 1995 Proposed 0.46 Wheat Bu. 2.58 0.46 4.00 4.00 2.58 1.89 0.26 2.75 2.75 Corn Bu. 1.89 0.26 Sorghum 1.71 1.89 0.31 0.31 2.61 2.61 Bu. Barley Bu. 1.65# 1.65# 0.19 0.19 2.36 2.36 1.45 Bu. 1.21# 1.21# 0.02 0.02 1.45 Oats U. Cotton Lb. 0.5192 0.0554 0.0554 .7290 .7290 0.5192 10.71 Rice Cwt. 6.50 6.50 2.04 2.04 10.71 Soybeans Bu. 5.26 4.92 0.34 5.76 Minor Lb. 0.093 0.087 .006 .1018 oilseed

Proposal Spending

- Proposal spends all the available money (\$73.5 billion over 10 years, 2002-2011)
 - CBO estimates \$50.3 billion is for grains, cotton, oilseeds, and CRP
- Counter-cyclical program is price-based
 - 1995 Target Price levels for grains and upland cotton
 - \$5.76 Target Price established for soybeans
- Continues current Loan and Fixed 2002 AMTA Rates
 - Except sorghum loan rate increased to \$1.89/bushel
 - Except soybeans
 - \$4.92 Loan Rate
 - \$0.34 Fixed Payment Rate
- Producers are given option of their contract acres or average of 1998-2001 plantings as their fixed and counter-cyclical payment base area.

CBO Estimated Spending for Other Programs

Conservation (\$15.05 billion over 10 years)

Trade (\$1.0 billion over 10 years)

Research (\$700 million over 10 years)

Nutrition (\$2.3 billion over 10 years)

Rural Development (\$785 million over 10 years)

Determining Base Acreage

- Producers choose between current AMTA acres and 1998-01 planted. Farm-by-farm basis and not crop-bycrop.
- Estimates for Concept Paper are based on Crop Reporting District data.
- Decision to update based on expected program benefits.

	2002 AMTA	Concept Paper
Wheat	78.4	72.1
Corn	81.4	81.1
Sorghum	13.5	11.2
Barley	11.1	9.1
Oats	6.7	4.6
Cotton	16.4	17.9
Rice	4.2	4.2
Soybeans	NA	60.2
Sunflowers	NA	1.6
Total	211.7	262.0

Impacts on Production & Price

- Marginal increases in grain and upland cotton area with oilseed area declining from baseline levels.
- Total planted area increases by less than 1%.
- Changes in crop prices reflect shifts in acreage
 - Grain prices fall by 2-4 cents/bu
 - Soybean prices rise by 4 cents/bu
 - Cotton prices fall by less than 1 cent/lb

Impacts on Net Outlays

6

4

2

0

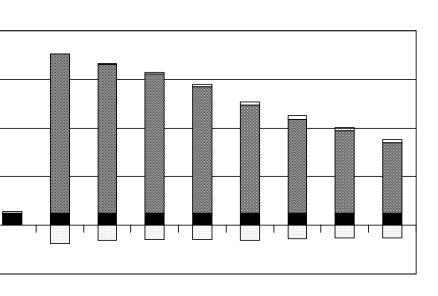
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2002

2004

3illion Dollars

- For 2003-05, net outlays increase by \$6.0 billion above baseline.
- Longer term, outlays are \$4 billion above baseline as CCPs decline.



2006

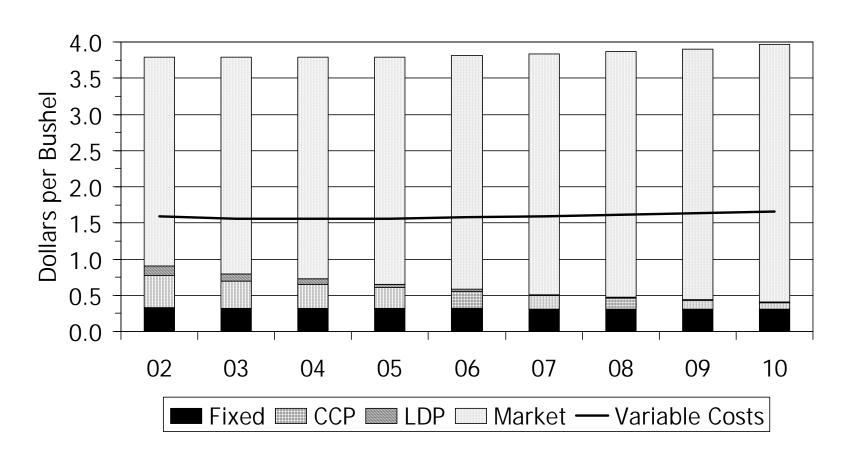
■ Fixed Pymts ■ CCPs □ Loan □ CRP

2008

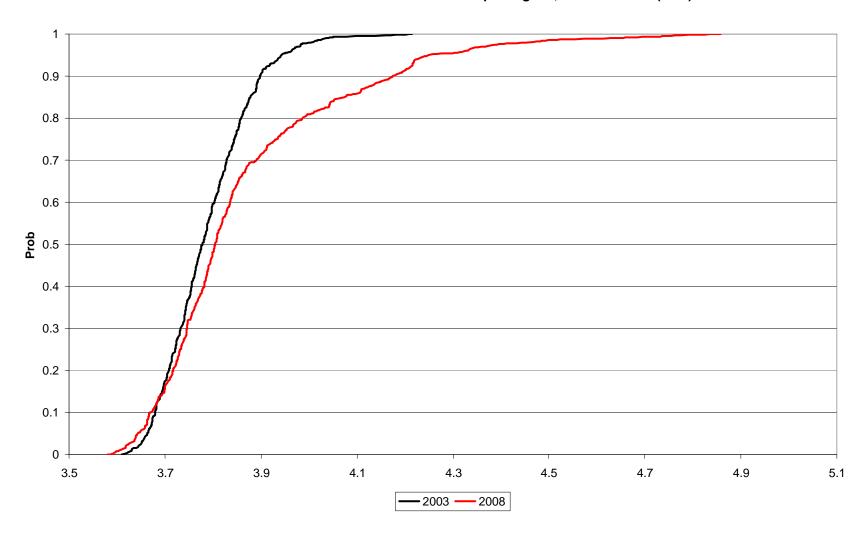
2010

Change from Baseline

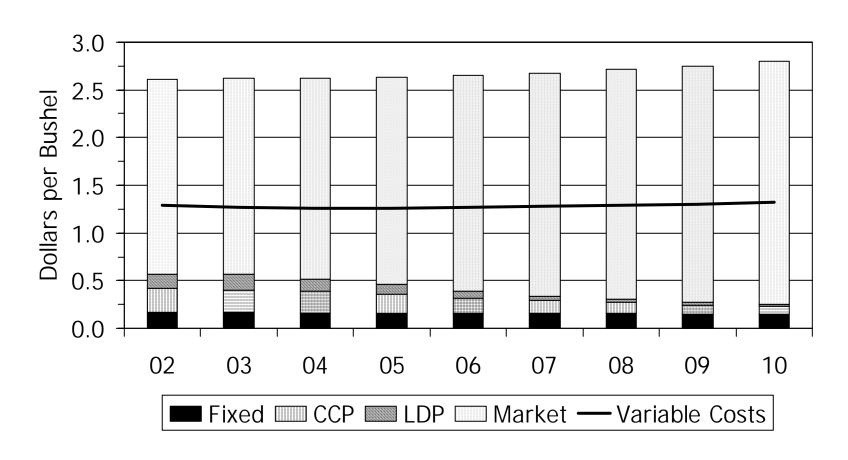
Wheat Returns & Costs Under House Concept Paper



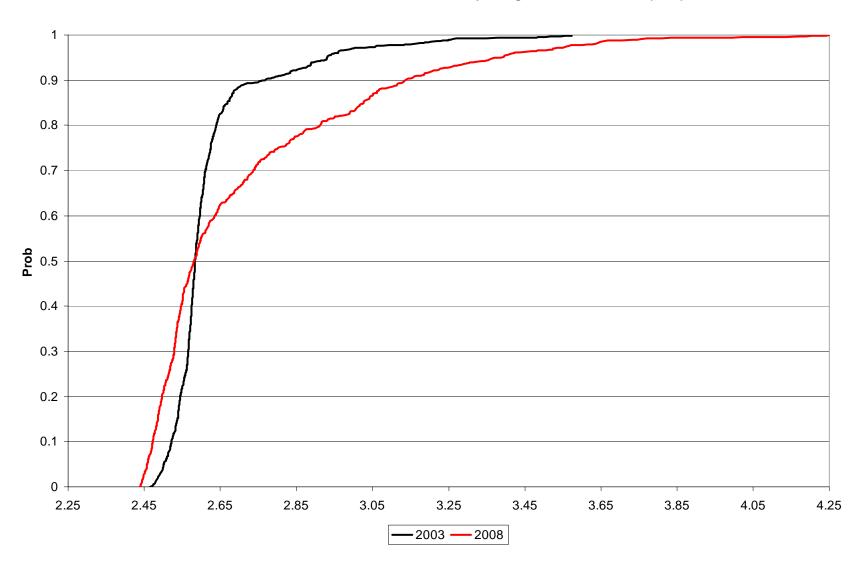
CDF of Total Returns for Wheat Under the Concept Program, 2003 and 2008 (\$/bu)



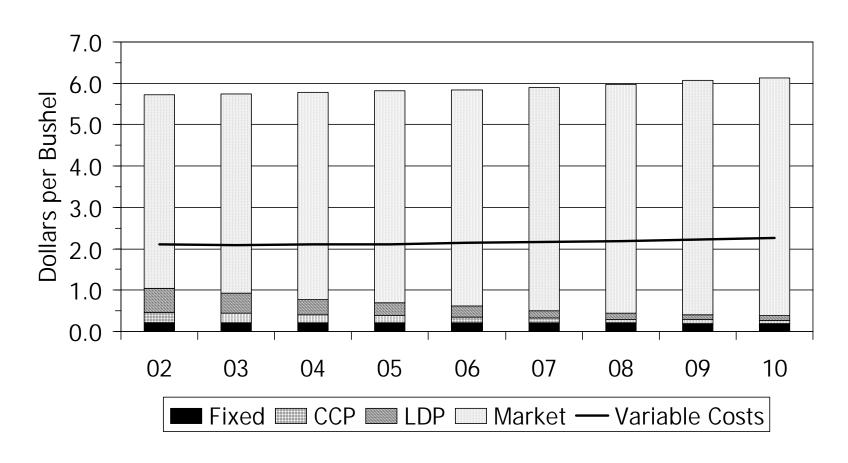
Corn Returns & Costs Under House Concept Paper



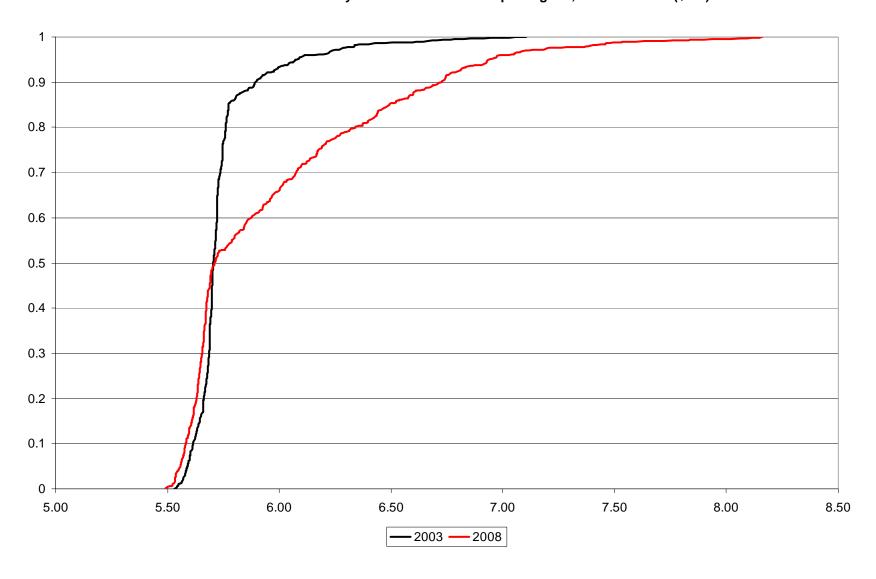
CDF of Total Returns for Corn Under the Concept Program, 2003 and 2008 (\$/bu)



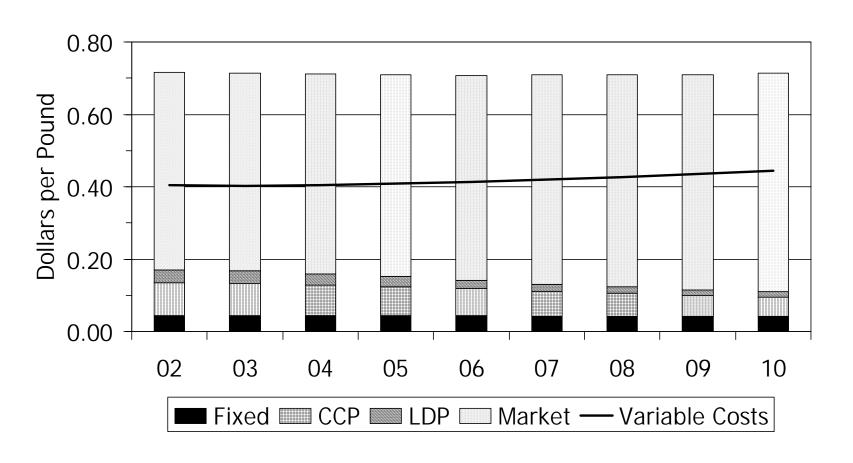
Soybean Returns & Costs Under House Concept Paper



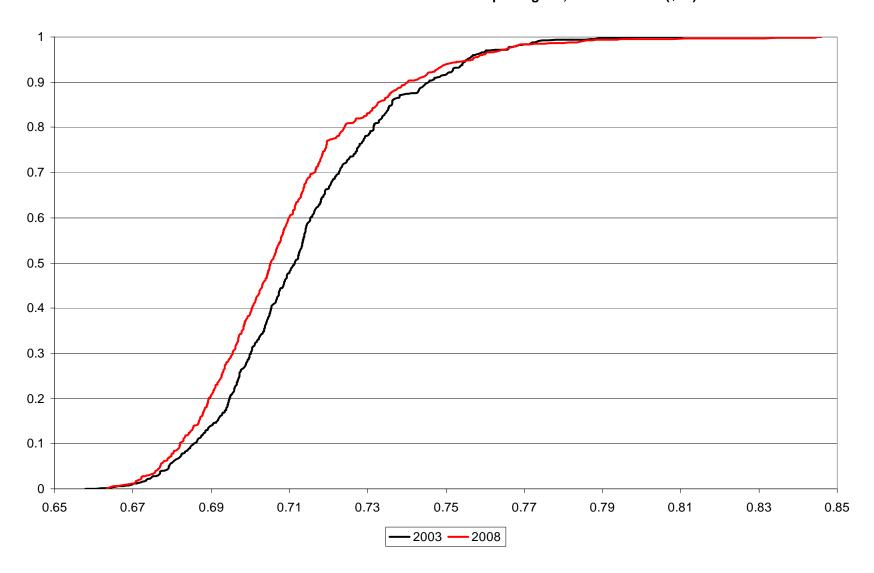
CDF of Total Returns for Soybeans Under the Concept Program, 2003 and 2008 (\$/bu)



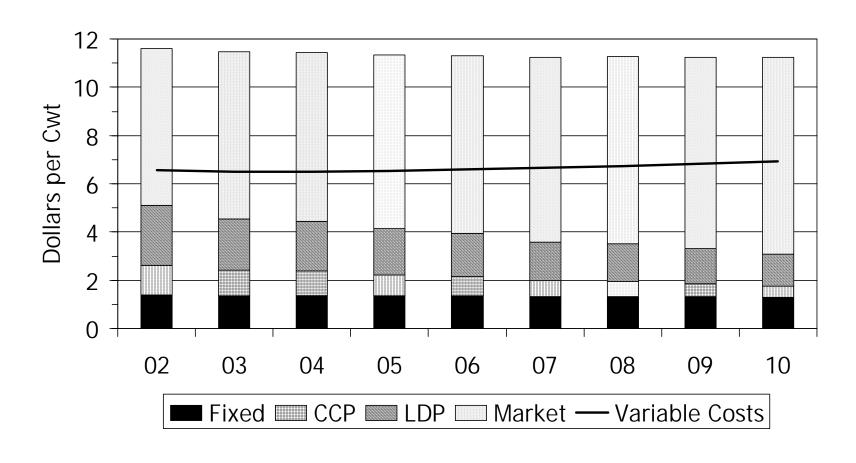
Cotton Returns & Costs Under House Concept Paper



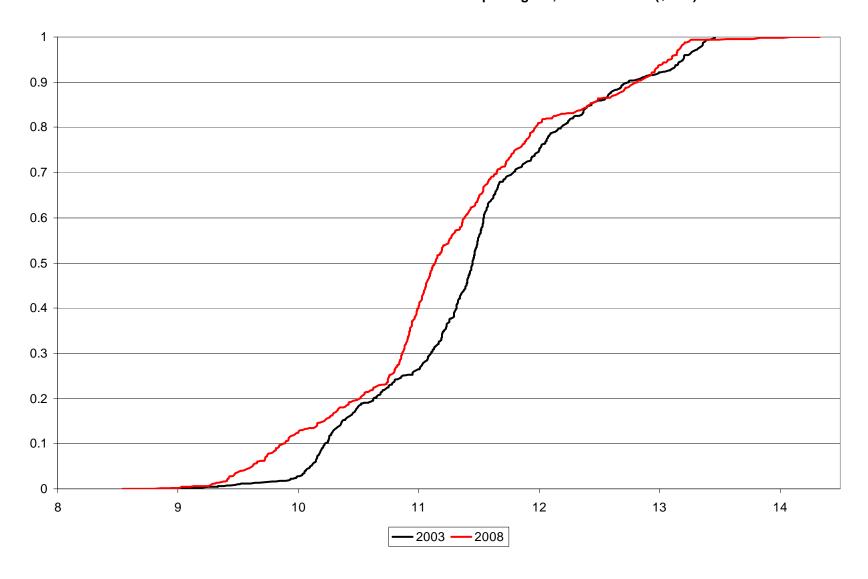
CDF of Total Returns for Cotton Under the Concept Program, 2003 and 2008 (\$/lb)



Rice Returns & Costs Under House Concept Paper



CDF of Total Returns for Rice Under the Concept Program, 2003 and 2008 (\$/cwt)



Representative Farm Assumptions

- 44 Farms Analyzed under risk 2000-2006
 - 13 Feed grains/oilseeds
 - 10 Wheat
 - 11 Cotton
 - 10 Rice
- 20% term and 100% operating debt 2000
- Base acreage chosen to maximize benefit
- MPCI 50/100
- Baseline 1996 FAIR ACT continued through 2006
 - Does not include MLA for 2001
- Concept Provisions of "Concept Draft" plus the House passed 2001 MLA
- Payment Limits assumed nonrestrictive

Table 1. Summary of How the Representative Crop Farms Would Elect to Change Base Acres Under the Draft Farm Bill Concept Proposal

Retained 1996 Base		Updated Base to 98-01 Planted Acres	
Wheat			
COW5440	X		
COW2700	X		
KSNW4300		X	
KSNW2325		X	
KSSW1385	X		
KSSW3180	X		
NDW4850		X	
NDW1760		X	
WAW1500		X	
WAW4250		X	

Table 1. Summary of How the Representative Crop Farms Would Elect to Change Base Acres Under the Draft Farm Bill Concept Proposal

	Retained 1996 Base	Updated Base to 98-01 Planted Acres
Feed Grain Farms		
TXNP1600		X
TXNP6700		X
MOCG3300		X
MOCG1700		X
MONG1400		X
IAG950		X
IAG2400		X
NEG900	X	
NEG1300	X	
TNG900		X
TNG2400		X
SCG1500		X
SCG3500		X

Table 1. Summary of How the Representative Crop Farms Would Elect to Change Base Acres Under the Draft Farm Bill Concept Proposal

Retained 1996 Base		Updated Base to 98-01 Planted Acres	
Cotton			
TXSP3697	X		
TXSP1682		X	
TXRP2500		X	
TXBC1400	X		
TXCB1720		X	
CAC2000	X		
CAC6000	X		
TNC1675		X	
TNC3800		X	
ALC3000		X	
LAC2640		X	

Table 1. Summary of How the Representative Crop Farms Would Elect to Change Base Acres Under the Draft Farm Bill Concept Proposal

Retained 1996 Base		Updated Base to 98-01 Planted Acres	
Rice			
CAR424	X		
CAR2365	X		
TXR1553	X		
TXR3774	X		
LANR2500		X	
LAR1200		X	
MOWR4000		X	
MOER4000		X	
MSR4735		X	
ARR3640		X	

Definition of Terms

- Net Cash Farm Income = Total Receipts including Govt. Payments minus all Cash Expenses
- Probability of a Cash Flow Deficit = Chance that net cash farm income is less than cash required for family living, taxes, principal payments and capital replacement
- Probability of Losing Real Net Worth = Chance that real net worth Dec 31, 2006 is less than beginning net worth Jan 1, 2000

Table 2. Comparison of the Draft Farm Bill Concept Proposal to a Continuation of the 1996 Farm Bill for Representative Crop Farms, 2000-2006

	Change in Net Cash Farm Income	% Change in Net Cash Farm Income	Change in Probability of a Deficit	Change in Probability of Decreasing Net Worth
	(\$1,000)		(% Points)	(% Points)
Wheat				
COW5440	34	20.2%	-11	-4
COW2700	15	19.4%	-18	-2
KSNW4300	57	1692.7%	-1	0
KSNW2325	26	225.3%	0	-2
KSSW1385	20	54.2%	-10	-63
KSSW3180	39	31.0%	-20	-18
NDW4850	57	34.2%	-24	-29
NDW1760	9	23.0%	-7	-17
WAW1500	36	1321.7%	0	-3
WAW4250	99	123.5%	-9	-81

KSSW3180 CDF of Average Annual Net Cash Farm Income for Base and Concept Programs, 2002-2006 (\$1,000)

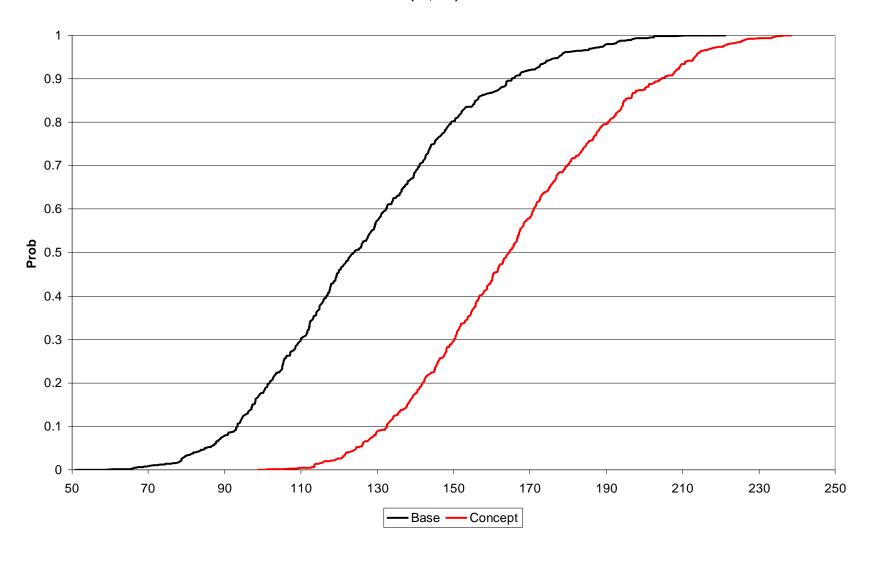


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	Change in Net Cash Farm Income	% Change in Net Cash Farm Income	Change in Probability of a Deficit	Change in Probability of Decreasing Net Worth
	(\$1,000)		(% Points)	(% Points)
Feed Grain Farms				
TXNP1600	45	77.4%	-22	-39
TXNP6700	153	110.4%	-18	-55
MOCG3300	39	20.4%	-19	-35
MOCG1700	31	28.0%	-17	-32
MONG1400	21	237.6%	0	-10
IAG950	20	31.6%	-16	-55
IAG2400	42	38.5%	-30	-33
NEG900	33	32.5%	-28	-16
NEG1300	39	29.1%	-19	-26
TNG900	16	331.9%	0	0
TNG2400	38	72.0%	-7	0
SCG1500	38	203.3%	-5	-44
SCG3500	134	64.0%	-34	-27

TXNP1600 CDF of Average Annual Net Cash Farm Income for Base and Concept Programs, 2002-2006 (\$1,000)

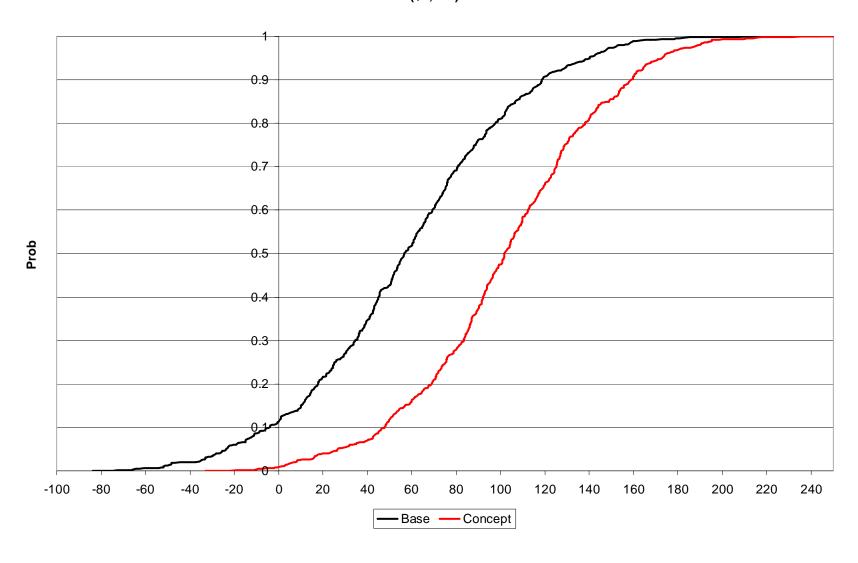


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	Change in Net Cash Farm Income	% Change in Net Cash Farm Income	Change in Probability of a Deficit	Change in Probability of Decreasing Net Worth
	(\$1,000)		(% Points)	(% Points)
Cotton				
TXSP3697	95	44.8%	-18	-5
TXSP1682	43	48.2%	-29	-27
TXRP2500	50	423.9%	-6	-29
TXBC1400	30	81.8%	-38	-88
TXCB1720	51	95.5%	-21	-44
CAC2000	165	242.8%	-5	-66
CAC6000	300	29.9%	-2	-14
TNC1675	53	9805.6%	-1	-25
TNC3800	184	207.7%	-36	-76
ALC3000	148	82.3%	-18	-44
LAC2640	100	1260.1%	-38	-49

TXCB1720 CDF of Average Annual Net Cash Farm Income for Base and Concept Programs, 2002-2006 (\$1,000)

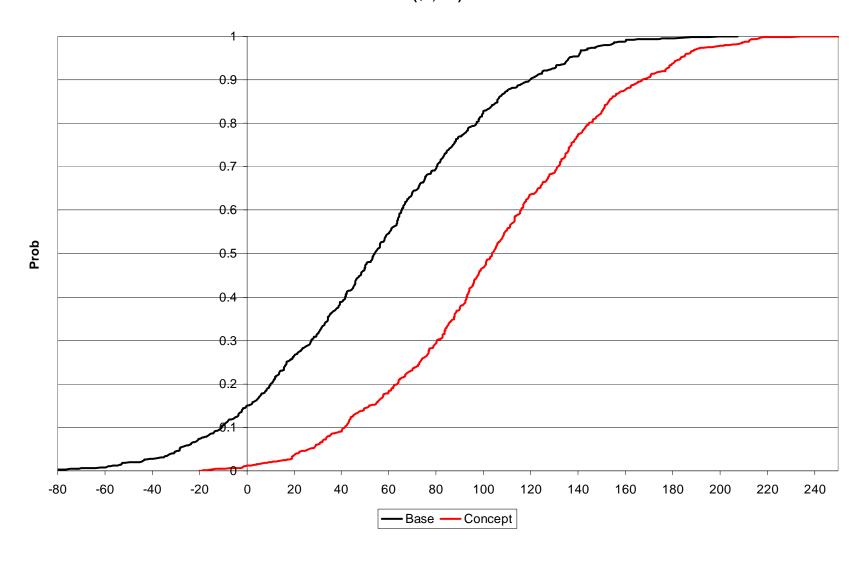
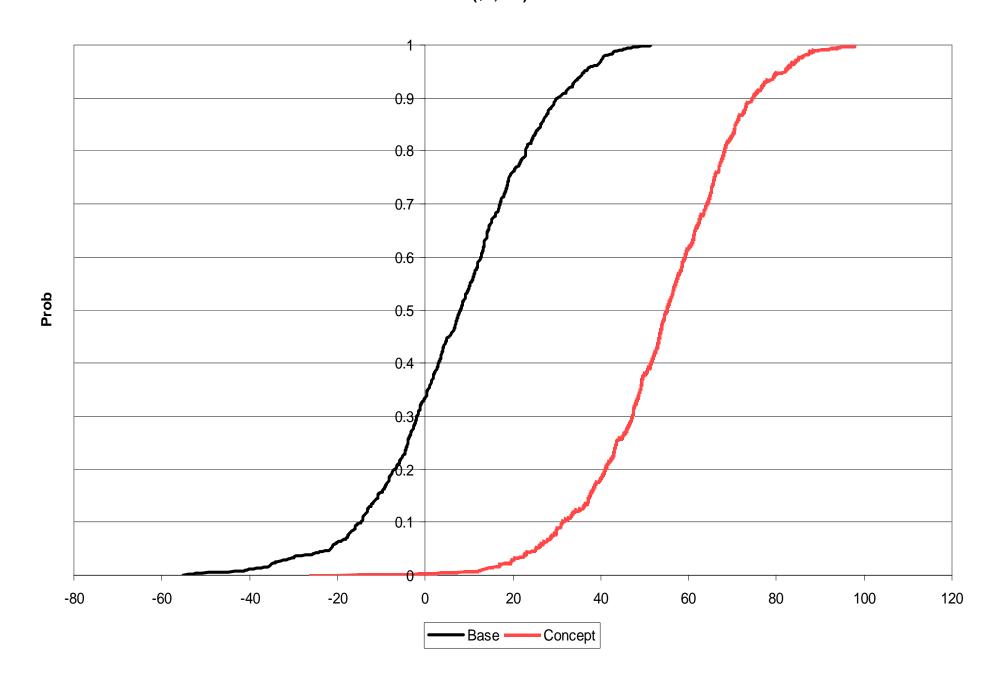


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	Change in Net Cash Farm Income	% Change in Net Cash Farm Income	Change in Probability of a Deficit	Change in Probability of Decreasing Net Worth
	(\$1,000)		(% Points)	(% Points)
Rice				
CAR424	40	613.0%	-2	-16
CAR2365	211	610.0%	-17	-28
TXR1553	47	634.2%	0	0
TXR3774	93	95.3%	-13	-54
LANR2500	96	341.2%	0	-1
LAR1200	42	992.1%	-1	-8
MOWR4000	172	90.8%	-9	-48
MOER4000	146	50.7%	-34	-77
MSR4735	156	354.0%	1	-9
ARR3640	122	38.4%	-25	-41

TXR1553 CDF of Average Annual Net Cash Farm Income for Base and Concept Programs, 2002-2006 (\$1,000)



Summary

- 14 of 44 crop farms retained current Base acres while 30 farms changed Base to their 1998-2001 average planted acres
- All crop farms benefit from Concept program, relative to continuing the 1996 Farm Program
 - Higher net cash farm incomes (44 of 44)
 - Lower probability of cash flow deficits (37 of 44)
 - Lower probability of decreasing real net worth (40 of 44)