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# THE PRESIDENT'S BUDGET: IMPLICATIONS OF SELECTED PROPOSALS FOR U.S. AGRICULTURE 

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## Executive Summary

The President's budget includes several proposals intended to reduce government spending on farm programs. This study examines two of the proposals in detail:

1) a proposal to reduce direct payments, counter-cyclical payments, and marketing loan program benefits by 5 percent, and
2) a proposal to limit the quantity of crops eligible to benefit from the loan program.

The analysis utilizes FAPRI's stochastic model of the U.S. agricultural sector. Scenarios incorporating the President's proposals are compared to a baseline reflecting a continuation of current policies. Reported results represent averages of 500 possible outcomes, consistent with FAPRI practice since 2001. Key results include:

- The 5 percent cut in payments would have only modest effects on supply, demand, and prices for major commodities, but would reduce government farm program outlays by $\$ 3.1$ billion over fiscal years 2006-2010 and net farm income by $\$ 2.2$ billion over calendar years 2006-2010.
- The loan limitation would have more noticeable effects on agricultural markets, especially in years with large crops and low prices. The loan limitation would result in slightly lower production and higher prices for cotton and rice. Average effects on production and prices of other crops are less than 1 percent.
- The loan limitation would reduce government farm program outlays by $\$ 7.2$ billion over fiscal years 2006-2010 and net farm income by $\$ 5.5$ billion over calendar years 2006-2010.
- Combining the 5 percent cut in payments with the loan limitation would reduce government farm program outlays by $\$ 9.8$ billion over fiscal years 2006-2010 and net farm income by $\$ 7.4$ billion over calendar years 2006-2010. Interactive effects of the two policies make these estimates slightly smaller than the sum of the effects of the two policies considered separately.
- The Office of Management and Budget (OMB) estimated that these and other proposals in the President's budget would reduce spending on mandatory agricultural programs by $\$ 4.0$ billion over fiscal years 2006-2010. Corresponding estimates by the Congressional Budget Office (CBO) and FAPRI are $\$ 7.5$ billion and $\$ 9.5$ billion, respectively.
- CBO and FAPRI estimates differ so markedly from OMB estimates primarily because CBO and FAPRI utilize a stochastic approach to analysis, while OMB does not. Even when expected prices exceed levels resulting in loan program benefits, there is some probability of a year like 2004, where above-average yields result in below-average prices and significant loan program expenditures that would be limited by the proposed restriction on eligible production.


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## Acronyms

| CBO | Congressional Budget Office |
| :--- | :--- |
| CCC | Commodity Credit Corporation |
| CCP | Counter-cyclical payment |
| DP | Direct payment |
| FAPRI | Food and Agricultural Policy Research Institute |
| LDP | Loan deficiency payment |
| MILC | Milk income loss compensation program |
| MLB | Marketing loan benefit (LDP or MLG) |
| MLG | Marketing loan gain |
| OMB | Office of Management and the Budget |
| PCP | Posted county price |

## Introduction

The President's budget for fiscal year 2006 includes a number of proposals that would make changes in government farm programs. Most of these proposals are intended to reduce government outlays as part of a broader effort to reduce the size of the federal budget deficit.

This study focuses on two of the provisions in the President's budget:

1) a proposal to reduce direct payments (DPs), counter-cyclical payments (CCPs), and marketing loan program benefits (MLBs) by 5 percent, and
2) a proposal to limit the quantity of crops eligible to benefit from the loan program.

According to estimates by the Congressional Budget Office (CBO), these proposals account for most of the budgetary savings in the President's agricultural budget. Other provisions of the President's budget would tighten payment limitations, impose a marketing assessment on sugar, realign relative price supports for dairy products, extend the Milk Income Loss Compensation (MILC) program for two years, and make changes in premiums and other aspects of the crop insurance program. These provisions will be discussed briefly in the final sections of the report.

The analysis is conducted using FAPRI's stochastic model of the U.S. agricultural sector. The stochastic model allows FAPRI to examine not just a single set of likely outcomes for U.S. agricultural markets, government expenditures on farm programs, farm income measures, and consumer food costs, but rather 500 alternative outcomes that take into account the inherent variability and unpredictability of agricultural markets. The approach proves to be particularly important in examining implications of the President's budget. The loan limitation, for example, has only modest impacts on government payments and producer income when crop yields and prices are at average levels, but can have very large impacts when yields are above normal and resulting prices are below average. Unless otherwise noted, all figures reported here represent averages from the stochastic analysis.

The analysis involves a comparison of a baseline and three alternative scenarios:

1) The baseline assumes a continuation of current farm policies. The stochastic baseline is built on the same assumptions as the estimates presented in the FAPRI 2005 U.S. Briefing Book, FAPRI-UMC Report \#02-05. ${ }^{1}$

[^0]2) The $\mathbf{5}$ percent cut in payments scenario assumes that, beginning with the 2006/07 crop, producer checks for DPs, CCPs, and MLBs will all be reduced by 5 percent. ${ }^{2}$
3) The loan limitation scenario assumes that, beginning with the 2006/07 crop, producers would only be able to obtain MLBs on 85 percent of the direct payment yield on harvested acres. ${ }^{3}$
4) The $\mathbf{5}$ percent cut in payments plus loan limitation scenario assumes that both provisions of the President's budget are implemented simultaneously.

The tables included in the text of the report indicate average results over the five-year period covered by the Congressional budget resolution (fiscal years 2006-2010, which roughly correspond to crop years 2006/07-2009/10 for agricultural market information and calendar years 2006-2010 for farm income statistics). More detailed tables showing annual estimates for the variables in question for a ten-year period can be found in the appendices. Appendix A provides baseline results, while Appendices B, C, and D provides estimates of absolute changes from the baseline results for the three alternative scenarios. Table 1 in the text corresponds to Appendix Tables A.1, B.1, C.1, and D.1; Table 2 corresponds to A.2, B.2, C.2, and D.2, etc.

## Impacts on Commodity Markets

In general, a 5 percent cut in payments would be expected to have only modest impacts on commodity markets. Producers can obtain DPs and CCPs without planting any particular crop or even any crop at all. As a result, any effects of DPs and CCPs on production decisions are likely to be relatively small. Furthermore, since the payments are reduced proportionally across all crops, changes in relative returns resulting from changes in DPs and CCPs are generally modest.

MLBs are more likely to have an impact on production decisions because they are available only on actual production. When examined stochastically, there are important differences across crops in the level of MLBs. In general, one would expect crops most reliant on MLBs to see reductions in production when payments are reduced, and results indicate there would be some reduction in cotton and rice acreage when payments are cut by 5 percent (Table 1). Overall, however, the average change in planted area for 10

[^1]Table 1. Impacts on acreage planted, crop year 2006/07-2009/10 averages

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5\% Cut in Payments | Loan <br> Limitation | $\begin{aligned} & \text { 5\% Cut + } \\ & \text { Loan Limit } \end{aligned}$ | 5\% Cut in <br> Payments | Loan <br> Limitation | $\begin{aligned} & \text { 5\% Cut + } \\ & \text { Loan Limit } \end{aligned}$ |
| (million acres) |  |  |  |  |  |  |  |
| Corn | 83.38 | -0.02 | -0.13 | -0.14 | 0.0\% | -0.2\% | -0.2\% |
| Soybeans | 72.13 | -0.01 | -0.07 | -0.08 | 0.0\% | -0.1\% | -0.1\% |
| Wheat | 58.40 | 0.00 | 0.22 | 0.20 | 0.0\% | 0.4\% | 0.4\% |
| Sorghum | 8.16 | -0.01 | 0.03 | 0.02 | -0.1\% | 0.3\% | 0.2\% |
| Barley | 4.38 | -0.01 | -0.02 | -0.03 | -0.2\% | -0.5\% | -0.6\% |
| Oats | 4.18 | -0.01 | -0.01 | -0.02 | -0.2\% | -0.3\% | -0.5\% |
| Rice | 3.38 | -0.01 | -0.09 | -0.10 | -0.4\% | -2.8\% | -3.0\% |
| Peanuts | 1.46 | 0.00 | 0.00 | 0.00 | -0.1\% | 0.0\% | -0.1\% |
| Sunflowers | 2.02 | 0.00 | 0.01 | 0.01 | 0.0\% | 0.4\% | 0.3\% |
| Upland Cotton | 13.42 | -0.11 | -0.47 | -0.54 | -0.8\% | -3.5\% | -4.1\% |
| 10 Major Crops | 250.92 | -0.18 | -0.54 | -0.69 | -0.1\% | -0.2\% | -0.3\% |
| Hay Area Harvested | 62.81 | 0.02 | 0.05 | 0.06 | 0.0\% | 0.1\% | 0.1\% |
| 10 Major Crops + Hay | 313.73 | -0.17 | -0.49 | -0.63 | -0.1\% | -0.2\% | -0.2\% |

major crops is just 180,000 acres out of 251 million acres planted in the baseline, or less than 0.1 percent.

In contrast to the 5 percent cut in payments, the loan limitation has significantly larger effects on production. For most crops, the direct payment yield is much less than the average yield per harvested acre. Restricting loan eligibility to 85 percent of the DP yield would leave much production ineligible for MLBs in a normal year, and even more in years when yields are above normal. For example, the national average corn yield is projected to be 148 bushels per acre in 2006, while 85 percent of the DP yield is just 87 bushels per acre, suggesting that 41 percent of corn production would be ineligible for loan program benefits in 2006, even at average yield levels. The sharp reduction in expected levels of MLBs would be expected to reduce production of crops most dependent on those benefits. The estimated 3.5 percent average reduction in upland cotton acreage and 2.8 percent reduction in rice acreage under the loan limitation are consistent with the dependence of those crops on MLBs in the baseline.

Average corn, soybean, barley, and oat acreage planted also decline marginally in the loan limitation scenario, as the effects of reduced MLBs for those commodities more than offset substitution effects of producers switching away from production of cotton and rice. For wheat, sorghum, and sunflowers, however, substitution effects dominate, and acreage increases marginally. In the case of wheat, baseline MLBs are small, so the loan limitation has a proportionally smaller impact on producer returns than it does for other commodities. Overall, average acreage planted to 10 major crops declines by 540,000 acres under the loan limitation scenario, or about 0.2 percent.

Table 2. Impacts on crop prices, crop year 2006/07-2009/10 averages

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $5 \%$ Cut in Payments | Loan Limitation | 5\% Cut + <br> Loan Limit | 5\% Cut in <br> Payments | Loan Limitation | 5\% Cut + <br> Loan Limit |
| (dollars per bushel) |  |  |  |  |  |  |  |
| Corn | 2.21 | 0.00 | 0.01 | 0.01 | 0.1\% | 0.2\% | 0.3\% |
| Soybeans | 5.26 | 0.00 | 0.01 | 0.02 | 0.1\% | 0.2\% | 0.3\% |
| Wheat | 3.32 | 0.00 | 0.00 | 0.00 | 0.0\% | -0.1\% | -0.1\% |
| Sorghum | 1.99 | 0.00 | 0.00 | 0.00 | 0.1\% | 0.1\% | 0.2\% |
| Barley | 2.52 | 0.00 | 0.01 | 0.01 | 0.1\% | 0.3\% | 0.4\% |
| Oats | 1.52 | 0.00 | 0.01 | 0.01 | 0.1\% | 0.4\% | 0.5\% |
| (dollars per hundredweight) |  |  |  |  |  |  |  |
| Rice | 7.26 | 0.02 | 0.19 | 0.20 | 0.3\% | 2.6\% | 2.7\% |
| (cents per pound) |  |  |  |  |  |  |  |
| Peanuts | 19.45 | 0.05 | -0.02 | 0.03 | 0.2\% | -0.1\% | 0.1\% |
| Sunflowers | 11.83 | 0.01 | 0.02 | 0.03 | 0.1\% | 0.2\% | 0.2\% |
| Upland Cotton | 46.39 | 0.20 | 0.89 | 1.03 | 0.4\% | 1.9\% | 2.2\% |
| (dollars per ton) |  |  |  |  |  |  |  |
| Hay | 90.75 | -0.04 | -0.11 | -0.15 | 0.0\% | -0.1\% | -0.2\% |

The combined effects of the 5 percent payment cut and the loan limitation are slightly less than the sum of the effects of the two proposals considered separately. This occurs because there is some overlap in the effects of the two proposals on loan program benefits. A 5 percent cut in MLBs is greater when compared to the baseline than when compared to a scenario with the loan limitation in place, as the latter has a much smaller base for further reduction. Likewise, the loan limitation will make a greater difference in MLBs when compared to a baseline than when compared to a scenario where payments have already been reduced by 5 percent.

In combination, the two proposals reduce average acreage planted to upland cotton by more than half a million acres ( 4.1 percent) and reduce area planted to 10 major crops by 690,000 acres ( 0.3 percent). As with the loan limitation in isolation, acreage reductions for cotton, rice, corn, soybeans, barley, and oats are partially offset by increased acreage for wheat, sorghum, and sunflowers. Peanut acreage is down fractionally under the combination of the two proposals, while it is essentially unchanged under the loan limitation scenario.

With no assumed changes in crop yields, ${ }^{4}$ changes in crop area planted result in corresponding changes in crop production. In general, crop prices would be expected to move opposite the estimated changes in production, and the results confirm this (Table 2). For most commodities, estimated changes in prices because of either the 5 percent payment cut or the loan limitation are small. Only for upland cotton and rice are the estimated average changes in prices greater than 0.5 percent. For both cotton and rice,

[^2]the reduction in production does result in a more noticeable increase in market prices. Under the combination of the two policies, rice prices increase by an average of 2.7 percent above baseline levels ( 20 cents per hundredweight), while upland cotton prices increase by 2.2 percent ( 1 cent per pound).

## Impacts on Producer Returns

The proposed farm program changes would have both direct and indirect effects on producer returns. The 5 percent cut in payments would reduce government checks to producers, and the loan limitation would limit the availability of MLBs when prices are low. In addition to these direct effects, the small shifts in production would have a modest effect on market prices and, thus, on the returns producers earn by marketing their crops.

One way to understand what the proposals might mean at the producer level is to compute average returns per acre for each crop (Table 3). Market net returns are calculated by multiplying national average market prices by national average yields, and subtracting variable production costs (USDA's definition of operating costs plus hired labor). Loan program benefits are an average of per-acre LDPs and MLGs, and the reported figures reflect any reduction in payments or limitation on the quantity eligible for benefits. Market net returns and loan program benefits can be summed to obtain an estimate of total net returns tied to production of a particular crop.

In contrast to market net returns and loan program benefits, CCPs and DPs are not tied to production of a particular crop. Someone producing corn may earn no corn CCPs or DPs if they have no corn base acreage, and at the same time, someone producing no crops at all can receive corn CCPs and DPs if they do have corn base acreage. Even at the national level, base acreages and actual planted acreages are sometimes significantly different for particular crops. For most crops, national base acreage exceeds planted area, sometimes by a wide margin (e.g., in 2004, cotton base acres exceeded planted area by more than 38 percent). However, for soybeans, national planted area exceeds base acreage.

Table 3 reports computations of CCPs and DPs per base acre, taking into account national average program yields, payment rates, and any restrictions imposed. To arrive at a measure of total returns per acre for a given crop, market net returns and loan program benefits per planted acre are added to the estimates of CCPs and DPs per base acre. Strictly speaking, the result is a measure of total returns per base acre that is planted to the crop in question. Since base acreage and planted acreage differ somewhat at the national level and often by an even greater margin at the farm level, these estimates of total returns per acre should be treated with caution. Nevertheless, they are intended to provide some indication of the likely differences in effects of the proposals on returns to producers of different crops.

Because the DP does not depend on production or prices, the 5 percent cut in payment scenario reduces DP by exactly 5 percent. Given baseline payment rates, the reduction

Table 3. Impacts on crop returns, crop year 2006/07-2009/10 averages

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5\% Cut in Payments | Loan <br> Limitation | $5 \% \text { Cut + }$ <br> Loan Limit | 5\% Cut in Payments | Loan <br> Limitation | $5 \% \text { Cut + }$ <br> Loan Limit |
| Corn | (dollars per acre planted to corn) |  |  |  |  |  |  |
| Market Net Returns | 161.99 | 0.18 | 0.86 | 0.99 | 0.1\% | 0.5\% | 0.6\% |
| Loan Program Benefits | 17.37 | -1.00 | -8.31 | -8.81 | -5.8\% | -47.9\% | -50.8\% |
| Market + Loan Net Returns | 179.36 | -0.82 | -7.45 | -7.82 | -0.5\% | -4.2\% | -4.4\% |
| (dollars per corn base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 17.90 | -0.93 | -0.16 | -1.08 | -5.2\% | -0.9\% | -6.0\% |
| Direct Payment | 24.37 | -1.22 | 0.00 | -1.22 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per corn base acre planted to corn) |  |  |  |  |  |  |  |
| Net Returns with Payments | 221.63 | -2.97 | -7.61 | -10.12 | -1.3\% | -3.4\% | -4.6\% |
| Soybeans (dollars per acre planted to soybeans) |  |  |  |  |  |  |  |
| Market Net Returns | 108.29 | 0.13 | 0.54 | 0.64 | 0.1\% | 0.5\% | 0.6\% |
| Loan Program Benefits | 14.88 | -0.83 | -5.95 | -6.44 | -5.6\% | -40.0\% | -43.3\% |
| Market + Loan Net Returns | 123.17 | -0.70 | -5.42 | -5.80 | -0.6\% | -4.4\% | -4.7\% |
| (dollars per soybean base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 5.07 | -0.26 | -0.04 | -0.30 | -5.2\% | -0.8\% | -6.0\% |
| Direct Payment | 11.52 | -0.58 | 0.00 | -0.58 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per soybean base acre planted to soybeans) |  |  |  |  |  |  |  |
| Net Returns with Payments | 139.76 | -1.54 | -5.46 | -6.67 | -1.1\% | -3.9\% | -4.8\% |
| Wheat (dollars per acre planted to wheat) |  |  |  |  |  |  |  |
| Market Net Returns | 63.54 | 0.04 | -0.12 | -0.07 | 0.1\% | -0.2\% | -0.1\% |
| Loan Program Benefits | 2.71 | -0.15 | -0.89 | -0.99 | -5.5\% | -32.8\% | -36.6\% |
| Market + Loan Net Returns | 66.25 | -0.11 | -1.01 | -1.07 | -0.2\% | -1.5\% | -1.6\% |
| (dollars per wheat base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 5.81 | -0.30 | 0.05 | -0.26 | -5.2\% | 0.8\% | -4.5\% |
| Direct Payment | 15.25 | -0.76 | 0.00 | -0.76 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per wheat base acre planted to wheat) |  |  |  |  |  |  |  |
| Net Returns with Payments | 87.31 | -1.18 | -0.96 | -2.09 | -1.4\% | -1.1\% | -2.4\% |
| Upland Cotton (dollars per acre planted to cotton) |  |  |  |  |  |  |  |
| Market Net Returns | 37.18 | 1.48 | 6.44 | 7.48 | 4.0\% | 17.3\% | 20.1\% |
| Loan Program Benefits | 79.50 | -5.02 | -26.88 | -30.02 | -6.3\% | -33.8\% | -37.8\% |
| Market + Loan Net Returns | 116.68 | -3.54 | -20.44 | -22.54 | -3.0\% | -17.5\% | -19.3\% |
| (dollars per cotton base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 70.79 | -3.69 | -0.68 | -4.31 | -5.2\% | -1.0\% | -6.1\% |
| Direct Payment | 34.23 | -1.71 | 0.00 | -1.71 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per cotton base acre planted to cotton) |  |  |  |  |  |  |  |
| Net Returns with Payments | 221.69 | -8.94 | -21.11 | -28.56 | -4.0\% | -9.5\% | -12.9\% |
| Rice (dollars per acre planted to rice) |  |  |  |  |  |  |  |
| Market Net Returns | 147.92 | 1.70 | 12.97 | 13.94 | 1.1\% | 8.8\% | 9.4\% |
| Loan Program Benefits | 81.36 | -4.43 | -35.51 | -37.92 | -5.5\% | -43.7\% | -46.6\% |
| Market + Loan Net Returns | 229.28 | -2.74 | -22.55 | -23.98 | -1.2\% | -9.8\% | -10.5\% |
| (dollars per rice base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 34.22 | -2.12 | -3.08 | -4.82 | -6.2\% | -9.0\% | -14.1\% |
| Direct Payment | 96.13 | -4.81 | 0.00 | -4.81 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per rice base acre planted to rice) |  |  |  |  |  |  |  |
| Net Returns with Payments | 359.62 | -9.67 | -25.63 | -33.61 | -2.7\% | -7.1\% | -9.3\% |

Table 3. Impacts on crop returns, crop year 2006/07-2009/10 averages, continued

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $5 \%$ Cut in Payments | Loan <br> Limitation | $5 \%$ Cut + <br> Loan Limit | 5\% Cut in Payments | Loan Limitation | $5 \%$ Cut + <br> Loan Limit |
| Sorghum | (dollars per acre planted to sorghum) |  |  |  |  |  |  |
| Market Net Returns | 20.34 | 0.08 | 0.15 | 0.23 | 0.4\% | 0.7\% | 1.1\% |
| Loan Program Benefits | 14.23 | -0.79 | -4.23 | -4.78 | -5.5\% | -29.7\% | -33.6\% |
| (dollars per sorghum base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 8.38 | -0.43 | 0.01 | -0.42 | -5.1\% | 0.1\% | -5.1\% |
| Direct Payment | 16.81 | -0.84 | 0.00 | -0.84 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per sorghum base acre planted to sorghum) |  |  |  |  |  |  |  |
| Net Returns with Payments | 59.76 | -1.97 | -4.07 | -5.81 | -3.3\% | -6.8\% | -9.7\% |
| Barley | (dollars per acre planted to barley) |  |  |  |  |  |  |
| Market Net Returns | 64.55 | 0.13 | 0.48 | 0.58 | 0.2\% | 0.7\% | 0.9\% |
| Loan Program Benefits | 7.09 | -0.44 | -2.92 | -3.16 | -6.1\% | -41.2\% | -44.6\% |
| Market + Loan Net Returns | 71.64 | -0.31 | -2.44 | -2.58 | -0.4\% | -3.4\% | -3.6\% |
| (dollars per barley base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 2.10 | -0.12 | -0.07 | -0.18 | -5.8\% | -3.2\% | -8.7\% |
| Direct Payment | 9.71 | -0.49 | 0.00 | -0.49 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per barley base acre planted to barley) |  |  |  |  |  |  |  |
| Net Returns with Payments | 83.45 | -0.91 | -2.50 | -3.25 | -1.1\% | -3.0\% | -3.9\% |
| Oats | (dollars per acre planted to oats) |  |  |  |  |  |  |
| Market Net Returns | 33.54 | 0.12 | 0.35 | 0.45 | 0.4\% | 1.1\% | 1.3\% |
| Loan Program Benefits | 6.34 | -0.39 | -2.56 | -2.78 | -6.1\% | -40.4\% | -43.9\% |
| Market + Loan Net Returns | 39.88 | -0.27 | -2.21 | -2.33 | -0.7\% | -5.5\% | -5.8\% |
| (dollars per oats base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 1.10 | -0.06 | -0.03 | -0.09 | -5.9\% | -2.7\% | -8.3\% |
| Direct Payment | 0.99 | -0.05 | 0.00 | -0.05 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per oats base acre planted to oats) |  |  |  |  |  |  |  |
| Net Returns with Payments | 41.97 | -0.38 | -2.24 | -2.47 | -0.9\% | -5.3\% | -5.9\% |
| Peanuts (dollars per acre planted to peanuts) |  |  |  |  |  |  |  |
| Market Net Returns | 166.75 | 1.38 | -0.62 | 0.76 | 0.8\% | -0.4\% | 0.5\% |
| Loan Program Benefits | 39.13 | -2.80 | -8.52 | -10.68 | -7.1\% | -21.8\% | -27.3\% |
| Market + Loan Net Returns | 205.89 | -1.42 | -9.14 | -9.91 | -0.7\% | -4.4\% | -4.8\% |
| (dollars per peanut base acre) |  |  |  |  |  |  |  |
| Counter-cyclical Payment | 80.75 | -4.71 | 0.37 | -4.40 | -5.8\% | 0.5\% | -5.4\% |
| Direct Payment | 45.73 | -2.29 | 0.00 | -2.29 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per peanut base acre planted to peanuts) |  |  |  |  |  |  |  |
| Net Returns with Payments | 332.37 | -8.42 | -8.77 | -16.60 | -2.5\% | -2.6\% | -5.0\% |
| Sunflowers | (dollars per acre planted to sunflowers) |  |  |  |  |  |  |
| Market Net Returns | 78.27 | 0.09 | 0.27 | 0.35 | 0.1\% | 0.3\% | 0.4\% |
| Loan Program Benefits | 4.68 | -0.26 | -1.49 | -1.66 | -5.6\% | -31.7\% | -35.5\% |
| Market + Loan Net Returns | (dollars per sunflower base acre) |  |  |  |  |  | -1.6\% |
| Counter-cyclical Payment | 0.00 | 0.00 | 0.00 | 0.00 | n.a. | n.a. | n.a. |
| Direct Payment | 7.37 | -0.37 | 0.00 | -0.37 | -5.0\% | 0.0\% | -5.0\% |
| (dollars per sunflower base acre planted to sunflowers) |  |  |  |  |  |  |  |
| Net Returns with Payments | 90.33 | -0.54 | -1.22 | -1.68 | -0.6\% | -1.4\% | -1.9\% |

in DPs translates to less than $\$ 1.00$ per base acre for soybeans, wheat, sorghum, barley, oats, and sunflowers, but as much as $\$ 4.81$ per base acre of rice.

Because the 5 percent payment cut scenario results in modest changes in production and market prices, payments that are tied to prices (CCPs and MLBs) do not change by exactly 5 percent. The slight increase in average prices means that payment rates per unit are slightly reduced, so the net reduction in payments per acre is slightly more than 5 percent. In the case of MLBs, the average reduction is less than $\$ 1.00$ per acre for most crops, but as much as $\$ 5.02$ per acre for upland cotton. CCP reductions are also less than $\$ 1.00$ per acre for most crops, but the change in cotton CCPs translates to $\$ 3.69$ per cotton base acre.

Adding up all the effects on market returns and payments, the average impact of the 5 percent payment cut scenario on total net returns per base acre planted to the crop in question range from less than $\$ 1.00$ per acre for barley, oats, and sunflowers to more than $\$ 8.00$ per acre for cotton, rice, and peanuts. As a proportion of total net returns with payments, the reductions are around 1 percent for most crops, but as much as 4 percent for upland cotton.

In general, the loan limitation has much larger effects on returns, especially for crops that are very reliant on MLBs in the baseline. Given the limitation on loan eligibility and the resulting impacts on market prices, MLBs are reduced by at least 22 percent for every commodity, and by more than 40 percent for corn, soybeans, rice, barley and oats. Adding changes in market returns and CCPs, the changes in total net returns per base acre planted to the crop in question range from less than $\$ 1.00$ per acre for wheat, to $\$ 5.00$ $\$ 10.00$ per acre for corn, soybeans, and peanuts, to more than $\$ 20.00$ per acre for cotton and rice.

Considering the two proposals together yields estimates of total impacts that are slightly less than the sum of the two proposals considered separately, as indicated previously. Total returns per corn base acre planted to corn fall by an average of $\$ 10.12$, while soybean returns fall by $\$ 6.67$ and wheat by $\$ 2.09$. As a proportion of baseline returns, the changes for corn and soybeans are both slightly less than 5 percent, while the reduction in wheat returns is just 2.4 percent. Wheat is less dependent on MLBs than is corn or soybeans in the baseline, so wheat returns are less affected by the policy changes than are corn and soybean returns. Also, the loan limitation has a smaller proportional change on wheat MLBs than it does for corn and soybeans because DP yields for wheat are greater relative to actual harvested yields than is the case for corn and soybeans.

Because upland cotton and rice producers receive greater average payments per acre in the baseline than do producers of other commodities, their returns are affected more in absolute terms by the two proposed policies. Total cotton net returns per base acre planted to cotton are reduced by an average of $\$ 28.56$, and rice returns are reduced by $\$ 33.61$. Even in proportional terms, the effects on cotton and rice are greater than for other crops as total net returns decline by 12.9 percent for cotton and 9.3 percent for rice.

The estimates provided in Table 3 represent averages across 500 stochastic outcomes, but the impacts can be very different depending on yields and market prices. When yields are below normal and prices are above normal, limitations on MLBs may make little or no difference in producer net returns. In contrast, when yields are high and prices are low, the net effects on producer returns may be greater than suggested by the average effects reported in Table 3.

To test the sensitivity of the estimated impacts, the 500 stochastic outcomes were sorted by the resulting market prices and placed in five equal groups of 100. In the case of corn in 2006/07, for example, in 100 outcomes the estimated baseline price was less than $\$ 1.88$ per bushel, in 100 outcomes it was between $\$ 1.88$ and $\$ 2.09$, in 100 it was between $\$ 2.09$ and $\$ 2.24$, in 100 it was between $\$ 2.24$ and $\$ 2.45$, and in 100 it was over $\$ 2.45$ per bushel. For each of those five groupings, average returns from marketings, MLBs, CCPs, and DPs were calculated (Figure 1).

Note in the baseline the pattern of gross returns per corn base acre planted to corn. As prices increase, market receipts also increase, but each 1 percent increase in market prices corresponds to a smaller proportional increase in market receipts. This occurs because higher prices tend to occur at lower national average yields and lower prices tend to occur at higher average yields. CCPs and MLBs do not occur when prices are high, but can grow quite large when prices are low.

Two factors are critical to understanding the v-shaped pattern of gross returns in Figure 1:

1) Under baseline policies, loan rates effectively place a floor under per-bushel returns, as producers can effectively assure themselves of at least the loan rate on every bushel they produce. Since lower prices generally correspond with higher yields, total national average returns actually tend to increase as market prices fall below the loan rate because producers are able to get at least the loan rate on higher levels of production.
2) There is a range of national average prices where producers tend to be doublecompensated for price reductions. The experience of the last several years suggests that producers tend to receive MLBs even when national average market prices slightly exceed the loan rate. This may occur because producers are able to take advantage of seasonal price movements to take their MLBs when prices are low and sell their grain when prices are higher, or because the average PCPs used to determine MLBs tend to be slightly below national average prices. Thus, when the season average corn price falls from $\$ 2.00$ per bushel to $\$ 1.95$ per bushel, not only do CCPs increase according to the statutory formula, but LDPs tend to increase as well. The result is an increase in total returns per acre, including all payments, when prices fall.

Under the President's budget proposals, the shape of the returns chart is altered (Figure 2). At low prices and high yields, loan program benefits are restricted by the loan limitation, and both MLBs and CCPs are reduced by the 5 percent cut in payments.

Figure 1. Gross returns per corn base acre planted to corn, 2006/07, baseline policies


Figure 2. Gross returns per corn base acre planted to corn, 2006/07, 5 percent cut in payments plus loan limitation scenario


In the 200 outcomes with the highest corn prices, the average net change in producer returns is less than $\$ 2.00$ per corn base acre planted to corn. In the 100 outcomes with the lowest corn prices, however, the combined effect of the two policies is to reduce returns by $\$ 32.39$ per acre. The $\$ 10.12$ per acre effect reported in Table 3 is an average of the 500 possible outcomes over the 2006/07-2009/10 period.

Corresponding results for wheat, soybeans, and cotton illustrate how the impacts of the proposed policy changes are dependent on the level of market prices relative to the levels that trigger MLBs and CCPs (Figures 3-8). Effects are generally smaller for wheat, where baseline prices are more likely to exceed loan rates, than for cotton, where even the average baseline price is below the loan rate in 2006/07.

Figure 3. Gross returns per wheat base acre planted to wheat, 2006/07, baseline policies


Figure 4. Gross returns per wheat base acre planted to wheat, 2006/07, 5 percent cut in payments plus loan limitation scenario


Figure 5. Gross returns per soybean base acre planted to soybeans, 2006/07, baseline policies


Figure 6. Gross returns per soybean base acre planted to soybeans, 2006/07, 5 percent cut in payments plus loan limitation scenario


For wheat, the two proposals in combination reduce producer returns by $\$ 1.03$ per base acre planted to wheat in the 100 outcomes with the highest prices, but by $\$ 7.08$ per acre in the 100 outcomes with the lowest prices. For soybeans, the effect is $\$ 0.71$ per acre in the 100 outcomes with the highest prices, but $\$ 24.64$ per acre in the 100 outcomes with the lowest prices. For cotton, the effect is $\$ 9.95$ per acre in the 100 outcomes with the highest prices, but $\$ 61.53$ in the 100 outcomes with the lowest prices.

Note that the price ranges in the charts differ slightly between the baseline and the alternative policy scenario, especially for upland cotton. Each chart sorts outcomes into groups of 100, and prices change slightly between the baseline and the alternative scenario.

Figure 7. Gross returns per upland cotton base acre planted to upland cotton, 2006/07, baseline policies


Figure 8. Gross returns per upland cotton base acre planted to upland cotton, 2006/07, 5 percent cut in payments plus loan limitation scenario


## Impacts on Government Outlays

The 5 percent cut in payments and the loan limitation would both have significant impacts on government farm program spending. Over the first four crop years the proposal is in place (2006/07 to 2009/10), the 5 percent cut in payments reduces DPs, MLBs, and CCPs by a total of $\$ 2.9$ billion (Table 4). As expected, DPs are reduced by precisely 5 percent. The reductions in spending on MLBs and CCPs are slightly larger, as the reduction in payments results in slightly less production and higher prices.

Table 4. Impacts on government payments, crop year 2006/07-2009/10 totals

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5\% Cut in <br> Payments | Loan Limitation | 5\% Cut + <br> Loan Limit | 5\% Cut in <br> Payments | Loan Limitation | $\begin{aligned} & 5 \% \text { Cut + } \\ & \text { Loan Limit } \end{aligned}$ |
| (million dollars) |  |  |  |  |  |  |  |
| Direct Payments | 21,230 | -1,060 | 0 | -1,060 | -5.0\% | 0.0\% | -5.0\% |
| Marketing Loan Benefits | 16,511 | -1,005 | -6,628 | -7,201 | -6.1\% | -40.1\% | -43.6\% |
| Counter-cyclical Payments | 15,816 | -834 | -156 | -975 | -5.3\% | -1.0\% | -6.2\% |
| Total | 53,558 | -2,900 | -6,784 | -9,236 | -5.4\% | -12.7\% | -17.2\% |

The loan limitation scenario results in a 40 percent reduction in government expenditures on MLBs. Nearly all the savings occur because a significant portion of production is made ineligible for LDPs and MLGs. Because MLBs tend to be larger when yields are above average levels, the average share of production made ineligible is actually larger than would be implied by a simple comparison of 85 percent of direct payment yields to average yield levels. In addition to the direct effect of making production ineligible for support, a small amount of additional savings occurs because the scenario results in slightly higher average commodity prices, resulting in reduced CCPs and MLBs.

When the two proposals are combined, the net reduction in payments to producers is \$9.2 billion over the first four crop years. DPs and CCPs each account for approximately \$1 billion in reductions, with MLBs accounting for the remaining $\$ 7.2$ billion.

Switching to a fiscal year basis, the 5 percent cut in payments scenario reduces net outlays by the Commodity Credit Corporation (CCC) by $\$ 3.1$ billion over fiscal years 2006-2010 (Table 5). These savings are slightly greater than the savings over crop years 2006/07-2009/10, because some expenditures associated with the 2010/11 crop are incurred during fiscal year 2010. Expenditures are reduced by similar proportions for all commodities; the slight differences relate to timing issues, ${ }^{5}$ price effects, and the level of CCC expenditures on things other than DPs, CCPs, and MLBs.

[^3]Table 5. Impacts on government outlays, FY 2006-2010 totals

|  | Baseline | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $5 \%$ Cut in Payments | Loan Limitation | $\begin{aligned} & 5 \% \text { Cut + } \\ & \text { Loan Limit } \\ & \hline \end{aligned}$ | $5 \%$ Cut in Payments | Loan Limitation | $\begin{aligned} & 5 \% \text { Cut + } \\ & \text { Loan Limit } \\ & \hline \end{aligned}$ |
| Feed Grains | (million dollars) |  |  |  |  |  |  |
| Corn | 25,587 | -1,086 | -2,651 | -3,574 | -4.2\% | -10.4\% | -14.0\% |
| Sorghum | 1,977 | -86 | -108 | -188 | -4.4\% | -5.5\% | -9.5\% |
| Barley | 751 | -36 | -87 | -118 | -4.8\% | -11.6\% | -15.7\% |
| Oats | 91 | -5 | -21 | -25 | -5.3\% | -23.3\% | -27.0\% |
| Food Grains |  |  |  |  |  |  |  |
| Wheat | 9,077 | -386 | -228 | -605 | -4.3\% | -2.5\% | -6.7\% |
| Rice | 4,543 | -217 | -775 | -949 | -4.8\% | -17.1\% | -20.9\% |
| Oilseeds |  |  |  |  |  |  |  |
| Soybeans | 10,616 | -443 | -1,630 | -1,977 | -4.2\% | -15.4\% | -18.6\% |
| Peanuts | 1,311 | -58 | -44 | -98 | -4.4\% | -3.3\% | -7.5\% |
| Other Oilseeds | 176 | -8 | -6 | -14 | -4.3\% | -3.7\% | -7.9\% |
| Upland Cotton | 16,592 | -761 | -1,633 | -2,268 | -4.6\% | -9.8\% | -13.7\% |
| Other Net Costs | 22,654 | 0 | 0 | 0 | 0.0\% | 0.0\% | 0.0\% |
| Net CCC Outlays | 93,376 | -3,086 | -7,184 | -9,815 | -3.3\% | -7.7\% | -10.5\% |

The loan limitation reduces estimated net CCC outlays by $\$ 7.2$ billion over FY 20062010. The proportional effects on spending for different crops vary significantly, depending primarily on:

1) the share of MLBs in total government spending for the commodity,
2) the proportion of the crop made ineligible for MLBs under the proposal, and
3) effects of the proposal on production and prices.

Finally, under the scenario combining the 5 percent cut in payments with the loan limitation, the net change in CCC outlays over FY 2006-2010 is $\$ 9.8$ billion. As described earlier, the net impact of the two proposals together is slightly smaller than the sum of the two proposals considered separately. Relative to baseline spending levels, government outlays on corn, soybeans, upland cotton, rice, oats, and barley are all reduced by more than 10 percent, while the reductions for wheat, sorghum, peanuts, and other oilseeds are all less than 10 percent.

Actual budgetary savings resulting from the proposals are very dependent on price and production levels. If prices are at or above average levels, the budgetary savings would be much less than when prices are below average. For example, the loan limitation would not result in any budgetary savings at all if prices for all commodities were above the levels that trigger MLBs, but the budgetary effects could be quite large if a year like 2004/05 were to be repeated. The results reported here represent an average of 500
possible outcomes, including some where the savings are small or non-existent, and some where the savings are quite large.

## Impacts on Net Farm Income

The two policy proposals would each reduce government payments to producers and net farm income (Table 6). Over calendar years 2006-2010, the 5 percent cut in payments would reduce government payments by $\$ 3.3$ billion, and the loan limitation would reduce payments by $\$ 7.5$ billion. ${ }^{6}$ Combined, the two policies would reduce payments to producers by $\$ 10.4$ billion.

In each of the scenarios, the change in net farm income is significantly less than the change in government payments. The primary reason is that the reduction in producer returns leads to a reduction in rent paid to non-operator landlords. For example, rental payments are estimated to be reduced by $\$ 2.9$ billion ( 4.6 percent) over five years under the scenario combining the 5 percent cut in payments with the loan limitation. Other production expenses also fall slightly, partially because of the estimated reduction in total acreage planted to major crops in general and the reduction in cotton and rice acreage, two crops with high production costs, in particular. Changes in cash receipts are generally modest, as changes in prices and production largely offset one another. ${ }^{7}$

Table 6. Impacts on net farm income, calendar year 2006-2010 totals

|  | Baseline (5-yr. total) | Absolute Effects of: |  |  | Percentage Effects of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5\% Cut in Payments | Loan Limitation | $5 \% \text { Cut + }$ <br> Loan Limit | 5\% Cut in Payments | Loan Limitation | 5\% Cut + <br> Loan Limit |
| (million dollars) |  |  |  |  |  |  |  |
| Crop Cash Receipts | 565,767 | -31 | -1,145 | -1,158 | 0.0\% | -0.2\% | -0.2\% |
| Livestock Cash Receipts | 549,756 | 34 | 132 | 151 | 0.0\% | 0.0\% | 0.0\% |
| Government Payments | 91,533 | -3,309 | -7,547 | -10,358 | -3.6\% | -8.2\% | -11.3\% |
| Sum of Above | 1,207,056 | -3,306 | -8,559 | -11,364 | -0.3\% | -0.7\% | -0.9\% |
| Rent to Non-Operators | 63,032 | -856 | -2,200 | -2,931 | -1.4\% | -3.5\% | -4.6\% |
| Other Production Expenses | 1,045,709 | -297 | -1,150 | -1,380 | 0.0\% | -0.1\% | -0.1\% |
| Total Production Expenses | 1,108,740 | -1,153 | -3,349 | -4,311 | -0.1\% | -0.3\% | -0.4\% |
| All Other Net Income* | 167,836 | -68 | -255 | -322 | 0.0\% | -0.2\% | -0.2\% |
| Net Farm Income | 266,151 | -2,220 | $-5,465$ | -7,375 | -0.8\% | -2.1\% | -2.8\% |

*Farm-related income, non-money income, and value of inventory change

[^4]Considering all these effects, the net effect of the 5 percent cut in payments is to reduce total net farm income over calendar years 2006-2010 by about $\$ 2.2$ billion, or 0.8 percent of baseline net farm income. The loan limitation reduces net farm income over the same period by $\$ 5.5$ billion ( 2.1 percent), and the combination of the two policies reduces net farm income by $\$ 7.4$ billion ( 2.8 percent). Note that these proportional reductions in net farm income are generally smaller than the estimated changes in crop producer returns described earlier. Affected crops account for only a modest share of national net farm income, and the measure of net returns over variable production costs does not account for any changes in rental rates.

## Comparison of Budget Estimates by OMB, CBO, and FAPRI

As indicated, FAPRI estimates that the combined effect of the loan limitation and the 5 percent cut in payments is to reduce net CCC outlays by $\$ 9.8$ billion over FY 2006-2010. The corresponding estimates by the Office of Management and the Budget (OMB) and CBO were $\$ 3.2$ billion and $\$ 7.8$ billion, respectively (Table 7). Most of the differences can be explained by different estimates of the impact of the loan limitation.

These differences can be attributed both to differences in baselines and differences in methodology. Each baseline has slightly different projected levels of production and prices, and these differences correspond to differences in estimated budgetary expenditures on farm programs, both in the baseline and in the alternative scenarios. While baseline issues are important, however, the main reason that CBO and FAPRI estimated impacts of the loan limitation are so much greater than those of OMB is that FAPRI and CBO look at the problem stochastically, while OMB does not. At FAPRI baseline-average prices, MLBs would be much smaller than the stochastic baseline

Table 7. Estimated budgetary impact of President's proposals, FY 2006-2010 totals

|  | OMB | СВо | FAPRI |
| :---: | :---: | :---: | :---: |
|  | (million dollars) |  |  |
| A. Limit LDPs and loans to no more than $85 \%$ of direct payment yield | -1,053 | -5,148 | -7,184 |
| B. Cut crop payments (DPs, CCPs, LDPs) by 5 percent | -2,140 | -2,683 | -3,086 |
| (Interaction effects of A \& B) | --- | --- | 455 |
| (Effect of A \& B together) | -3,193 | -7,831 | -9,815 |
| C. Impose sugar marketing assessment (1.2 percent) | -214 | -168 | -168 |
| D. Tighten payment limits, including \$250,000 cap* | -845 | --- | --- |
| E. Adjust support prices for different dairy products to minimize outlays* | -360 | -251 | -251 |
| F. Extend Milk Income Loss Compensation for 2 more years | 1,200 | 1,307 | 1,335 |
| Subtotal, CCC Programs | -3,412 | -6,943 | -8,899 |
| G. Crop insurance coverage change | -560 | -538 | -629 |
| Total Change in Mandatory Spending | -3,972 | -7,481 | -9,528 |

[^5]average, and therefore savings associated with the loan limitation would also be much smaller. Over crop years 2006/07 to 2009/10, for example, MLBs would total only \$6 billion at FAPRI baseline average prices, but the stochastic average of MLBs is over \$16 billion.

No attempt has been made to identify all the reasons behind the smaller differences between CBO and FAPRI estimates of the loan limitation provision. Relatively minor differences in baseline average prices and price distributions and in the specific methodology used to implement the policy change could easily account for the difference in the estimates.

Budgetary effects of other provisions in the President's budget are also reported in Table 7. FAPRI and CBO both assume that sugar marketing assessments would take effect with the 2006/07 crop, while OMB apparently assumed that assessments would be effective in FY 2006 (i.e., for the 2005/06 crop). Thus CBO and FAPRI estimates of budgetary effects for the provision are smaller than OMB estimates.

Payment limitations have been an important issue, and the President's budget proposes to place tighter limits on who can receive payments and the magnitude of those payments. However, the budget proposals do not spell out how such tighter limitations would be implemented, and both CBO and FAPRI have declined to estimate budgetary impacts until more information is available.

The budget also proposes to realign the support prices for dairy products so as to minimize expenditures under the price support program. Since nonfat dry milk accounts for most recent CCC purchases of dairy products, presumably this would imply a reduction in support prices for nonfat dry milk in exchange for an offsetting increase in butter support prices. FAPRI has not made its own estimate of the budgetary impacts of this proposal, but to facilitate comparison of total budgetary effects, Table 7 reports the CBO estimates in the FAPRI column.

The President's budget proposes to extend the MILC program for two years. If milk prices were to remain at March 2005 levels, this proposal would not have any budgetary impact. However, there is a strong probability that prices will fall to levels triggering MILC payments at some point. The OMB, CBO, and FAPRI estimates of the likely budgetary impact of this provision are all remarkably similar, as all three entities estimate the provision would increase net CCC spending by between $\$ 1.20$ and $\$ 1.34$ billion. Given recent variability in milk prices, actual outlays could prove to be far greater or smaller.

Finally, the President's budget also includes a number of proposed changes to the crop insurance program. Producers would be required to purchase at least catastrophic insurance to be eligible for other program benefits. Premium subsidy rates would be reduced, resulting in higher producer premiums. Also, fees for catastrophic coverage would be increased. The increase in crop insurance participation by program-crop producers would increase government costs, but the reductions in government costs due
to the premium subsidy reductions and other changes more than offset the increase. Our colleagues at FAPRI-Iowa State estimate these changes would reduce net spending on the crop insurance program by $\$ 629$ million, only slightly more than the estimates by CBO and OMB.

Considering all these agricultural provisions in the President's budget, OMB estimates that net CCC outlays would be reduced by $\$ 3.4$ billion over FY 2006-2010. Including the crop insurance changes, the net savings approach $\$ 4.0$ billion. The corresponding estimates by CBO are $\$ 6.9$ billion and $\$ 7.5$ billion, respectively, while FAPRI's estimates are $\$ 8.9$ billion in net CCC savings and $\$ 9.5$ billion in total mandatory agricultural program savings. Again, the loan limitation accounts for nearly all the net differences in outlay estimates.

## Payment Limitation Issues

Given uncertainties about how the President's proposed payment limitation would be implemented, no attempt is made here to estimate impacts. However, simply to illustrate one of the issues, some calculations are made to help identify the crops most likely to be affected by tighter payment limitation rules (Table 8).

With baseline policies in place, payments per corn base acre planted to corn average $\$ 59.64$ over crop years 2006/07-2009/10. For other crops, the corresponding payments

Table 8. Payments per acre and acreage required to obtain $\mathbf{\$ 2 5 0 , 0 0 0}$ in payments, given 2006/07-2009/10 average payment levels

|  | Direct | Counter- <br> Payment | Loan <br> cyclical | Total <br> Benefits | Area Resulting in <br> Payments |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{\$ 2 5 0 , 0 0 0}$ in Paym'ts |  |  |  |  |  |

range from $\$ 8.43$ per acre for oats to $\$ 211.70$ for rice. Suppose a payment limitation made no distinction among the various payments, but limited total payments to $\$ 250,000$. At average prices under current policies, it would take 4,192 acres of corn to reach such a limit, assuming no other crops are produced. While even more acres of wheat, soybeans and several other crops would be required to reach such a limit, it would take less than 1,510 acres to reach such a limit for rice, peanuts, and upland cotton.

Under the President's budget proposal, projected payments are reduced, so the number of acres required to reach this hypothetical limit would be increased.

Again, it should be stressed that these calculations do not purport to reflect the President's or any other particular payment limitation proposal. Furthermore, while the calculations indicate how many acres would be required to reach $\$ 250,000$ in payments at projected average payment levels, the actual average number of acres required in any given year would depend on market prices and corresponding payment levels. In addition, the number of acres required by a particular producer would depend on the mix of crops produced, program and actual yields for those crops, how the farm is legally organized, and a number of other factors.

## Concluding Comments

The paper examines possible impacts of the President's budget proposals for agricultural programs, focusing on provisions to limit production eligible for loan program benefits and to make a 5 percent cut in payments to crop producers. Results of the analysis indicate the loan limitation is likely to have larger impacts on agricultural markets, government outlays, and farm income than is the 5 percent cut in payments. Stochastic analysis indicates that the impacts are especially likely to be large when yields are above average and prices are below average.

The President's budget proposals are just the beginning of this year's federal budget process. If past experience is a guide, many of the President's proposals will be modified or discarded by Congress. If a deficit reduction bill is approved by Congress this year, it may well look very different than the President's proposals.

FAPRI stands ready to analyze additional proposals that may be considered as part of the budget process. FAPRI reports on the agricultural outlook and policy analyses can be found at www.fapri.missouri.edu.

Table A.1. U.S. crop area planted under baseline policies

| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | $2006-09$ <br> Average |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  | (million acres) |  |  |  |
| Average |  |  |  |  |  |  |  |  |  |  |  |

Table A.2. U.S. crop prices under baseline policies

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $2006-14$ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (dollars per bushel) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 2.14 | 2.18 | 2.21 | 2.22 | 2.25 | 2.27 | 2.29 | 2.31 | 2.32 | 2.32 | 2.21 | 2.26 |
| Soybeans | 4.76 | 5.01 | 5.24 | 5.37 | 5.41 | 5.42 | 5.42 | 5.41 | 5.41 | 5.43 | 5.26 | 5.35 |
| Wheat | 3.21 | 3.24 | 3.30 | 3.35 | 3.41 | 3.46 | 3.50 | 3.55 | 3.60 | 3.63 | 3.32 | 3.45 |
| Sorghum | 1.97 | 1.96 | 1.98 | 2.00 | 2.03 | 2.06 | 2.10 | 2.15 | 2.18 | 2.20 | 1.99 | 2.07 |
| Barley | 2.46 | 2.52 | 2.53 | 2.52 | 2.52 | 2.53 | 2.53 | 2.54 | 2.56 | 2.57 | 2.52 | 2.54 |
| Oats | 1.47 | 1.49 | 1.51 | 1.53 | 1.55 | 1.57 | 1.58 | 1.60 | 1.60 | 1.60 | 1.52 | 1.56 |
|  | (dollars per hundredweight) |  |  |  |  |  |  |  |  |  |  |  |
| Rice | 7.00 | 6.98 | 7.25 | 7.34 | 7.46 | $\begin{gathered} 7.58 \\ \text { (cents } \end{gathered}$ | $7.69$ <br> pound | 7.84 | 7.95 | 8.06 | 7.26 | 7.57 |
| Peanuts | 19.69 | 19.32 | 19.45 | 19.51 | 19.51 | 19.62 | 19.72 | 19.80 | 19.82 | 19.97 | 19.45 | 19.64 |
| Sunflowers | 11.23 | 11.64 | 11.87 | 11.86 | 11.93 | 11.92 | 11.89 | 11.81 | 11.80 | 11.80 | 11.83 | 11.84 |
| Upland Cotton | 43.62 | 45.57 | 45.80 | 46.26 | 47.95 | $\begin{aligned} & 49.71 \\ & \text { (dolla } \end{aligned}$ | 50.64 per ton) | 51.34 | 52.63 | 54.06 | 46.39 | 49.33 |
| Hay | 87.61 | 88.92 | 90.13 | 91.62 | 92.33 | 93.42 | 94.24 | 95.81 | 96.50 | 97.22 | 90.75 | 93.35 |

Table A.3. U.S. crop returns under baseline policies

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2006-14 \\ & \text { Average } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corn |  |  |  |  |  | (doll | per ac |  |  |  |  |  |
| Market Gross Returns | 310.86 | 320.55 | 329.18 | 334.29 | 344.14 | 351.61 | 360.51 | 367.91 | 374.23 | 378.55 | 332.04 | 351.22 |
| - Variable Costs | 171.87 | 171.24 | 170.26 | 168.62 | 170.06 | 173.03 | 175.84 | 179.36 | 181.75 | 185.70 | 170.04 | 175.10 |
| = Market Net Returns | 138.99 | 149.31 | 158.92 | 165.67 | 174.07 | 178.58 | 184.66 | 188.54 | 192.48 | 192.85 | 161.99 | 176.12 |
| + Loan Program Benefits | 18.26 | 17.96 | 17.74 | 18.03 | 15.73 | 14.34 | 13.25 | 12.50 | 12.42 | 12.58 | 17.37 | 14.95 |
| (dollars per corn base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 20.99 | 18.82 | 18.40 | 17.93 | 16.46 | 16.15 | 14.66 | 14.21 | 13.53 | 13.38 | 17.90 | 15.95 |
| + Direct Payment | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 | 24.37 |
| (dollars per corn base acre planted to corn) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 202.62 | 210.46 | 219.43 | 226.00 | 230.63 | 233.45 | 236.95 | 239.62 | 242.80 | 243.18 | 221.63 | 231.39 |
| Soybeans |  |  |  |  |  | (dolla | s per acre |  |  |  |  |  |
| Market Gross Returns | 185.61 | 197.29 | 208.49 | 214.94 | 218.88 | 220.94 | 222.91 | 224.27 | 226.41 | 228.54 | 209.90 | 218.07 |
| - Variable Costs | 100.26 | 100.60 | 101.36 | 101.67 | 102.81 | 104.38 | 105.92 | 107.94 | 109.30 | 111.23 | 101.61 | 105.02 |
| = Market Net Returns | 85.35 | 96.68 | 107.13 | 113.27 | 116.07 | 116.56 | 116.99 | 116.34 | 117.11 | 117.31 | 108.29 | 113.05 |
| + Loan Program Benefits | 25.62 | 20.17 | 15.08 | 13.31 | 10.96 | 10.91 | 11.45 | 12.04 | 10.82 | 11.28 | 14.88 | 12.89 |
| (dollars per soybean base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 7.53 | 6.20 | 5.18 | 4.58 | 4.31 | 4.30 | 4.70 | 4.40 | 4.22 | 4.32 | 5.07 | 4.69 |
| (dollars per soybean base acre planted to soybeans) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 130.02 | 134.57 | 138.91 | 142.69 | 142.86 | 143.29 | 144.66 | 144.29 | 143.66 | 144.43 | 139.76 | 142.15 |
| Wheat |  |  |  |  |  | (doll | s per acre |  |  |  |  |  |
| Market Gross Returns | 133.18 | 136.01 | 139.49 | 142.49 | 146.21 | 149.44 | 152.51 | 155.93 | 158.81 | 161.46 | 141.05 | 149.15 |
| - Variable Costs | 76.49 | 76.72 | 77.33 | 77.46 | 78.52 | 79.99 | 81.48 | 83.30 | 84.61 | 86.38 | 77.51 | 80.64 |
| = Market Net Returns | 56.68 | 59.28 | 62.16 | 65.03 | 67.68 | 69.45 | 71.03 | 72.64 | 74.20 | 75.07 | 63.54 | 68.51 |
| + Loan Program Benefits | 2.97 | 3.41 | 2.67 | 2.61 | 2.16 | 1.88 | 1.33 | 1.00 | 0.82 | 0.88 | 2.71 | 1.86 |
| (dollars per wheat base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 7.18 | 7.06 | 5.92 | 5.54 | 4.72 | 4.15 | 3.68 | 3.15 | 2.57 | 2.35 | 5.81 | 4.35 |
| + Direct Payment | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 | 15.25 |
| (dollars per wheat base acre planted to wheat) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 82.08 | 85.00 | 85.99 | 88.44 | 89.82 | 90.73 | 91.29 | 92.05 | 92.85 | 93.55 | 87.31 | 89.97 |
| Upland Cotton | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 364.84 | 381.12 | 384.99 | 390.99 | 405.76 | 420.87 | 430.47 | 438.34 | 450.93 | 464.49 | 390.72 | 418.66 |
| - Variable Costs | 354.25 | 353.37 | 352.83 | 352.06 | 355.89 | 362.81 | 368.75 | 376.81 | 381.63 | 391.11 | 353.54 | 366.14 |
| = Market Net Returns | 10.59 | 27.75 | 32.16 | 38.93 | 49.87 | 58.06 | 61.73 | 61.53 | 69.30 | 73.38 | 37.18 | 52.52 |
| + Loan Program Benefits | 89.69 | 85.03 | 85.42 | 80.25 | 67.30 | 59.00 | 57.58 | 54.69 | 48.90 | 44.26 | 79.50 | 64.72 |
| $=$ Market + Loan Net Returns | 100.28 | 112.78 | 117.59 | 119.18 | $\begin{aligned} & 117.17 \\ & \text { (dollar: } \end{aligned}$ | $117.06$ <br> per upla | 119.31 <br> nd cotton | $116.22$ <br> base acre) | $118.20$ | 117.64 | 116.68 | 117.24 |
| + Counter-cyclical Payment | 73.89 | 72.54 | 71.32 | 70.89 | 68.41 | 64.62 | 62.50 | 61.70 | 57.13 | 52.50 | 70.79 | 64.62 |
| + Direct Payment | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 | 34.23 |
| (dollars per upland cotton base acre planted to upland cotton) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 208.40 | 219.54 | 223.13 | 224.29 | 219.81 | 215.91 | 216.03 | 212.14 | 209.55 | 204.37 | 221.69 | 216.09 |
| Rice |  |  |  |  |  | (dollar | s per acre |  |  |  |  |  |
| Market Gross Returns | 478.71 | 482.04 | 505.69 | 515.96 | 528.78 | 542.51 | 554.80 | 570.63 | 583.74 | 597.33 | 508.12 | 542.39 |
| - Variable Costs | 359.13 | 358.43 | 359.15 | 359.31 | 363.88 | 370.49 | 376.62 | 384.66 | 390.27 | 398.59 | 360.20 | 373.49 |
| = Market Net Returns | 119.58 | 123.61 | 146.54 | 156.64 | 164.90 | 172.02 | 178.18 | 185.96 | 193.47 | 198.74 | 147.92 | 168.90 |
| + Loan Program Benefits | 91.26 | 92.33 | 80.76 | 78.73 | 73.61 | 68.10 | 70.31 | 65.01 | 62.51 | 61.19 | 81.36 | 72.51 |
| $=$ Market + Loan Net Returns | 210.84 | 215.94 | 227.29 | 235.37 | $238.51$ | $240.12$ <br> ollars per | 248.49 rice base | $\begin{aligned} & 250.97 \\ & \text { acre) } \end{aligned}$ | 255.98 | 259.93 | 229.28 | 241.40 |
| + Counter-cyclical Payment | 38.91 | 38.96 | 33.69 | 33.06 | 31.16 | 28.42 | 28.65 | 26.08 | 25.45 | 24.95 | 34.22 | 30.05 |
| + Direct Payment | 96.13 | 96.13 | 96.13 | 96.13 | $96.13$ <br> (dollars | $96.13$ <br> er rice ba | 96.13 <br> se acre p | $96.13$ <br> anted to | $96.13$ <br> ce) | 96.13 | 96.13 | 96.13 |
| $=$ Net Returns w/ Payments | 345.88 | 351.02 | 357.11 | 364.57 | 365.80 | 364.66 | 373.27 | 373.17 | 377.55 | 381.00 | 359.62 | 367.57 |

Table A.3. U.S. crop returns under baseline policies, continued

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $2006-14$ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sorghum |  |  |  |  |  | (dollar | per acr |  |  |  |  |  |
| Market Gross Returns | 123.82 | 123.51 | 126.05 | 127.71 | 130.88 | 134.40 | 137.80 | 141.38 | 144.41 | 146.99 | 127.04 | 134.79 |
| - Variable Costs | 108.18 | 107.38 | 106.65 | 105.89 | 106.89 | 109.03 | 110.84 | 113.33 | 114.88 | 117.99 | 106.70 | 110.32 |
| = Market Net Returns | 15.65 | 16.14 | 19.40 | 21.82 | 23.99 | 25.37 | 26.95 | 28.05 | 29.54 | 29.00 | 20.34 | 24.47 |
| + Loan Program Benefits | 13.35 | 15.33 | 14.48 | 14.33 | 12.77 | 11.46 | 9.85 | 8.56 | 7.69 | 7.05 | 14.23 | 11.28 |
| (dollars per sorghum base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 8.90 | 8.85 | 8.50 | 8.37 | 7.81 | 7.50 | 6.68 | 6.00 | 5.46 | 4.86 | 8.38 | 7.12 |
| (dollars per sorghum base acre planted to sorghum) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 54.70 | 57.13 | 59.20 | 61.33 | 61.39 | 61.15 | 60.30 | 59.42 | 59.49 | 57.71 | 59.76 | 59.68 |
| Barley |  |  |  |  |  | (dollar | per acr |  |  |  |  |  |
| Market Gross Returns | 151.51 | 157.05 | 159.10 | 159.37 | 161.60 | 163.37 | 165.19 | 167.32 | 169.79 | 171.96 | 159.28 | 163.86 |
| - Variable Costs | 94.57 | 94.48 | 94.67 | 94.45 | 95.34 | 96.91 | 98.51 | 100.64 | 102.14 | 104.58 | 94.73 | 97.97 |
| = Market Net Returns | 56.94 | 62.57 | 64.43 | 64.92 | 66.27 | 66.45 | 66.68 | 66.68 | 67.65 | 67.38 | 64.55 | 65.89 |
| + Loan Program Benefits | 8.00 | 7.16 | 6.95 | 7.54 | 6.72 | 6.65 | 6.10 | 5.85 | 5.58 | 5.47 | 7.09 | 6.45 |
| $=$ Market + Loan Net Returns | 64.94 | 69.73 | 71.38 | 72.46 | 72.99 | 73.10 | 72.78 | 72.52 | 73.23 | 72.85 | 71.64 | 72.34 |
| (dollars per barley base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 2.64 | 2.14 | 2.17 | 2.14 | 1.94 | 2.03 | 1.76 | 1.60 | 1.60 | 1.55 | 2.10 | 1.88 |
| + Direct Payment | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 | 9.71 |
| (dollars per barley base acre planted to barley) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 77.29 | 81.58 | 83.26 | 84.31 | 84.64 | 84.84 | 84.25 | 83.84 | 84.55 | 84.11 | 83.45 | 83.93 |
| Oats | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 91.71 | 93.17 | 95.26 | 96.16 | 98.40 | 99.79 | 101.21 | 102.31 | 103.38 | 103.16 | 95.75 | 99.20 |
| - Variable Costs | 60.94 | 61.40 | 62.04 | 62.25 | 63.15 | 64.40 | 65.69 | 67.27 | 68.42 | 70.05 | 62.21 | 64.96 |
| = Market Net Returns | 30.77 | 31.77 | 33.22 | 33.91 | 35.25 | 35.38 | 35.51 | 35.04 | 34.97 | 33.11 | 33.54 | 34.24 |
| + Loan Program Benefits | 6.84 | 6.94 | 6.41 | 6.62 | 5.41 | 4.95 | 4.57 | 4.33 | 4.14 | 4.18 | 6.34 | 5.28 |
| $=$ Market + Loan Net Returns | 37.61 | 38.71 | 39.62 | 40.53 | 40.66 | 40.33 | 40.08 | 39.37 | 39.11 | 37.29 | 39.88 | 39.52 |
| (dollars per oats base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 1.28 | 1.21 | 1.11 | 1.16 | 0.92 | 0.85 | 0.80 | 0.72 | 0.70 | 0.67 | 1.10 | 0.90 |
| + Direct Payment | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| (dollars per oats base acre planted to oats) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 39.88 | 40.91 | 41.72 | 42.68 | 42.56 | 42.17 | 41.87 | 41.08 | 40.80 | 38.95 | 41.97 | 41.41 |
| Peanuts | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 565.20 | 559.46 | 568.32 | 574.18 | 579.59 | 587.82 | 596.33 | 604.34 | 611.75 | 620.56 | 570.39 | 589.15 |
| - Variable Costs | 404.94 | 402.98 | 402.33 | 402.42 | 406.80 | 411.90 | 417.90 | 423.86 | 429.12 | 434.75 | 403.63 | 414.67 |
| = Market Net Returns | 160.27 | 156.48 | 165.99 | 171.76 | 172.79 | 175.93 | 178.44 | 180.49 | 182.63 | 185.81 | 166.75 | 174.48 |
| + Loan Program Benefits | 32.27 | 37.54 | 38.70 | 39.77 | 40.53 | 37.83 | 40.85 | 40.21 | 40.93 | 38.72 | 39.13 | 39.45 |
| (dollars per peanut base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 76.07 | 84.85 | 79.33 | 79.00 | 79.84 | 78.62 | 75.43 | 72.80 | 72.97 | 72.45 | 80.75 | 77.25 |
| + Direct Payment | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 | 45.73 |
| (dollars per peanut base acre planted to peanuts) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 314.33 | 324.60 | 329.74 | 336.27 | 338.88 | 338.10 | 340.45 | 339.23 | 342.26 | 342.71 | 332.37 | 336.91 |
| Sunflowers | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 133.69 | 140.65 | 144.89 | 146.22 | 148.37 | 149.88 | 150.78 | 151.47 | 152.94 | 154.54 | 145.03 | 148.86 |
| - Variable Costs | 66.77 | 66.54 | 66.62 | 66.55 | 67.33 | 68.47 | 69.68 | 71.25 | 72.36 | 73.87 | 66.76 | 69.19 |
| = Market Net Returns | 66.92 | 74.11 | 78.26 | 79.67 | 81.04 | 81.40 | 81.10 | 80.22 | 80.58 | 80.67 | 78.27 | 79.67 |
| + Loan Program Benefits | 6.59 | 5.24 | 4.56 | 4.72 | 4.21 | 3.69 | 4.39 | 5.45 | 4.54 | 5.58 | 4.68 | 4.71 |
| (dollars per sunflower base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| + Direct Payment | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 | 7.37 |
| (dollars per sunflower base acre planted to sunflowers) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 80.88 | 86.72 | 90.20 | 91.77 | 92.62 | 92.47 | 92.86 | 93.04 | 92.49 | 93.62 | 90.33 | 91.76 |

Table A.4. Selected government payments under baseline policies

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 Total | 2006-14 Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | Total | Total |
|  | (million dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Direct Payments | 5,310 | 5,309 | 5,307 | 5,307 | 5,307 | 5,306 | 5,304 | 5,304 | 5,304 | 5,304 | 21,230 | 47,753 |
| Marketing Loan Benefits | 5,122 | 4,682 | 4,239 | 4,080 | 3,511 | 3,229 | 3,126 | 3,043 | 2,840 | 2,815 | 16,511 | 31,565 |
| Counter-cyclical Payments | 4,540 | 4,254 | 4,019 | 3,905 | 3,639 | 3,481 | 3,282 | 3,147 | 2,942 | 2,822 | 15,816 | 31,490 |
| Total | 14,972 | 14,245 | 13,565 | 13,292 | 12,456 | 12,016 | 11,713 | 11,495 | 11,086 | 10,941 | 53,558 | 110,808 |

Table A.5. Government costs under baseline policies

| Fiscal Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $2006-10$ | $2006-15$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |  |  |
| Feed Grains | (million dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 5,745 | 5,218 | 4,649 | 5,114 | 4,862 | 4,665 | 4,515 | 4,367 | 4,316 | 4,264 | 25,587 | 47,714 |
| Sorghum | 417 | 412 | 372 | 396 | 380 | 364 | 347 | 329 | 316 | 304 | 1,977 | 3,636 |
| Barley | 156 | 148 | 150 | 150 | 147 | 147 | 143 | 140 | 137 | 135 | 751 | 1,452 |
| Oats | 20 | 19 | 19 | 18 | 15 | 14 | 13 | 13 | 12 | 12 | 91 | 155 |
| Food Grains |  |  |  |  |  |  |  |  |  |  |  |  |
| Wheat | 1,938 | 1,902 | 1,804 | 1,756 | 1,677 | 1,606 | 1,552 | 1,502 | 1,459 | 1,415 | 9,077 | 16,611 |
| Rice | 960 | 959 | 894 | 879 | 852 | 811 | 823 | 795 | 783 | 770 | 4,543 | 8,526 |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybeans | 2,829 | 2,407 | 1,909 | 1,821 | 1,651 | 1,643 | 1,690 | 1,737 | 1,641 | 1,545 | 10,616 | 18,872 |
| Peanuts | 293 | 312 | 234 | 235 | 237 | 232 | 231 | 226 | 228 | 229 | 1,311 | 2,457 |
| Other Oilseeds | 41 | 35 | 33 | 34 | 32 | 31 | 33 | 36 | 33 | 30 | 176 | 338 |
| Other Commodities |  |  |  |  |  |  |  |  |  |  |  |  |
| Upland Cotton | 3,429 | 3,385 | 3,380 | 3,300 | 3,099 | 2,944 | 2,911 | 2,878 | 2,726 | 2,575 | 16,592 | 30,627 |
| Sugar | 5 | 2 | 80 | 103 | 37 | 51 | 36 | 35 | 34 | 33 | 227 | 416 |
| Dairy | 264 | 251 | 253 | 244 | 222 | 187 | 174 | 179 | 148 | 118 | 1,234 | 2,040 |
| CCC Conservation |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservation Reserve | 2,027 | 2,123 | 2,267 | 2,275 | 2,257 | 2,299 | 2,322 | 2,318 | 2,328 | 2,337 | 10,948 | 22,552 |
| Other CCC Conservation | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Disaster Payments, NAP | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 1,625 | 3,250 |
| Other Net Costs | 1,586 | 1,651 | 1,684 | 1,807 | 1,889 | 1,927 | 1,913 | 1,897 | 1,883 | 1,869 | 8,617 | 18,107 |
| Net CCC Outlays | 20,036 | 19,149 | 18,053 | 18,455 | 17,683 | 17,246 | 17,028 | 16,776 | 16,369 | 15,962 | 93,376 | 176,756 |

Table A.6. Net farm income under baseline policies

| Calendar Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $2006-10$ | $2006-15$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (billion dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Crop Cash Receipts | 107.30 | 110.57 | 113.34 | 116.04 | 118.51 | 120.82 | 123.16 | 125.48 | 127.63 | 129.78 | 565.77 | 1,192.63 |
| Livestock Cash Receipts | 109.39 | 109.60 | 110.30 | 110.50 | 109.97 | 109.50 | 109.71 | 112.04 | 114.89 | 117.74 | 549.76 | 1,113.62 |
| Government Payments | 19.43 | 17.78 | 18.70 | 18.12 | 17.51 | 17.14 | 16.85 | 16.56 | 16.28 | 16.01 | 91.53 | 174.37 |
| Sum of Above | 236.12 | 237.95 | 242.34 | 244.66 | 245.99 | 247.46 | 249.72 | 254.07 | 258.80 | 263.52 | 1,207.06 | 2,480.62 |
| Rent to Non-Operators | 12.88 | 12.28 | 12.30 | 12.67 | 12.90 | 13.01 | 13.09 | 13.24 | 13.45 | 13.66 | 63.03 | 129.48 |
| Other Production Expenses | 203.33 | 206.60 | 209.12 | 211.66 | 215.00 | 218.10 | 221.26 | 224.51 | 228.03 | 231.56 | 1,045.71 | 2,169.17 |
| Total Production Expenses | 216.21 | 218.88 | 221.42 | 224.32 | 227.90 | 231.11 | 234.36 | 237.74 | 241.48 | 245.22 | 1,108.74 | 2,298.64 |
| All Other Net Income* | 32.25 | 32.84 | 33.53 | 34.25 | 34.98 | 35.59 | 36.14 | 36.82 | 37.54 | 38.25 | 167.84 | 352.18 |
| Net Farm Income | 52.15 | 51.91 | 54.45 | 54.59 | 53.06 | 51.94 | 51.50 | 53.15 | 54.86 | 56.56 | 266.15 | 534.16 |

*Farm-related income, non-money income, and value of inventory change

Table B.1. U.S. crop area planted under the $5 \%$ cut in payments, change from baseline

| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | $2006-09$ <br> Average | $2006-14$ <br> Average |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  | (million acres) |  |  |  |  |  |
| Corn | 0.00 | -0.01 | -0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.03 |
| Soybeans | 0.00 | -0.05 | -0.02 | 0.00 | 0.01 | 0.01 | -0.01 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 |
| Wheat | 0.00 | 0.00 | -0.01 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | -0.01 | 0.00 | 0.00 | 0.00 |
| Sorghum | 0.00 | 0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.00 | -0.01 | -0.01 |
| Barley | 0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Oats | 0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 | -0.01 |
| Rice | 0.00 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Peanuts | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sunflowers | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Upland Cotton | 0.00 | -0.12 | -0.11 | -0.10 | -0.10 | -0.08 | -0.07 | -0.06 | -0.06 | -0.06 | -0.11 | -0.08 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 Major Crops | 0.00 | -0.21 | -0.19 | -0.17 | -0.16 | -0.14 | -0.13 | -0.12 | -0.12 | -0.11 | -0.18 | -0.15 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hay Area Harvested | 0.00 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 Major Crops + Hay | 0.00 | -0.20 | -0.17 | -0.15 | -0.14 | -0.13 | -0.12 | -0.11 | -0.11 | -0.10 | -0.17 | -0.14 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table B.2. U.S. crop prices under the 5\% cut in payments, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $2006-14$ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (dollars per bushel) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Soybeans | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wheat | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sorghum | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Barley | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Oats | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (dollars per hundredweight) |  |  |  |  |  |  |  |  |  |  |  |  |
| Rice | 0.00 | 0.03 | 0.03 | 0.02 | 0.02 | $\begin{gathered} 0.02 \\ \text { (cents } \end{gathered}$ | $\begin{gathered} 0.02 \\ \text { er poun } \end{gathered}$ | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 |
| Peanuts | 0.00 | 0.03 | 0.05 | 0.05 | 0.06 | 0.06 | 0.05 | 0.08 | 0.06 | 0.07 | 0.05 | 0.06 |
| Sunflowers | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 |
| Upland Cotton | 0.00 | 0.22 | 0.22 | 0.20 | 0.18 | $\begin{aligned} & 0.12 \\ & \text { (dolla } \end{aligned}$ | $\begin{gathered} 0.10 \\ \text { per ton } \end{gathered}$ | 0.09 | 0.12 | 0.11 | 0.20 | 0.15 |
| Hay | 0.00 | -0.03 | -0.05 | -0.05 | -0.05 | -0.06 | -0.05 | -0.04 | -0.04 | -0.02 | -0.04 | -0.04 |

Table B.3. Crop returns under the $5 \%$ cut in payments, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 Average | 2006-14 Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corn | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.08 | 0.19 | 0.23 | 0.23 | 0.09 | 0.13 | -0.10 | -0.01 | -0.07 | 0.18 | 0.09 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 | -0.06 | 0.02 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.08 | 0.19 | 0.23 | 0.23 | 0.09 | 0.12 | -0.12 | 0.05 | -0.09 | 0.18 | 0.09 |
| + Loan Program Benefits | 0.00 | -0.99 | -1.02 | -1.06 | -0.95 | -0.87 | -0.83 | -0.75 | -0.73 | -0.74 | -1.00 | -0.88 |
| = Market + Loan Net Returns | 0.00 | -0.90 | -0.83 | -0.83 | -0.72 | -0.79 | -0.71 | -0.87 | -0.68 | -0.83 | -0.82 | -0.80 |
| (dollars per corn base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.95 | -0.96 | -0.95 | -0.87 | -0.85 | -0.80 | -0.73 | -0.70 | -0.71 | -0.93 | -0.84 |
| + Direct Payment | 0.00 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 |
| (dollars per corn base acre planted to corn) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -3.08 | -3.01 | -3.00 | -2.81 | -2.85 | -2.73 | -2.82 | -2.60 | -2.76 | -2.97 | -2.85 |
| Soybeans | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.29 | 0.13 | 0.06 | 0.04 | -0.16 | 0.13 | 0.02 | 0.07 | -0.05 | 0.13 | 0.06 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | 0.00 | -0.03 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.29 | 0.13 | 0.06 | 0.04 | -0.16 | 0.14 | 0.02 | 0.10 | -0.06 | 0.13 | 0.06 |
| + Loan Program Benefits | 0.00 | -1.19 | -0.85 | -0.70 | -0.58 | -0.57 | -0.69 | -0.68 | -0.57 | -0.61 | -0.83 | -0.72 |
| = Market + Loan Net Returns | 0.00 | -0.90 | -0.72 | -0.64 | -0.53 | -0.73 | -0.55 | -0.66 | -0.47 | -0.66 | -0.70 | -0.65 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.33 | -0.28 | -0.24 | -0.22 | -0.21 | -0.28 | -0.25 | -0.22 | -0.24 | -0.26 | -0.25 |
| + Direct Payment | 0.00 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 |
| (dollars per soybean base acre planted to soybeans) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -1.81 | -1.57 | -1.45 | -1.32 | -1.52 | -1.41 | -1.49 | -1.27 | $-1.48$ | -1.54 | -1.48 |
| Wheat | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.01 | 0.04 | 0.05 | 0.05 | 0.08 | -0.02 | -0.08 | 0.04 | -0.10 | 0.04 | 0.01 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.02 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.01 | 0.04 | 0.05 | 0.05 | 0.08 | -0.01 | -0.09 | 0.06 | -0.11 | 0.04 | 0.01 |
| + Loan Program Benefits | 0.00 | -0.18 | -0.15 | -0.15 | -0.13 | -0.11 | -0.08 | -0.06 | -0.05 | -0.05 | -0.15 | -0.10 |
| $=$ Market + Loan Net Returns | 0.00 | -0.17 | -0.11 | -0.10 | -0.08 | -0.03 | -0.09 | -0.15 | 0.02 | -0.15 | -0.11 | -0.10 |
| (dollars per wheat base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.36 | -0.31 | -0.29 | -0.25 | -0.23 | -0.20 | -0.17 | -0.15 | -0.12 | -0.30 | -0.23 |
| + Direct Payment | 0.00 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 |
| (dollars per wheat base acre planted to wheat) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -1.29 | -1.18 | -1.16 | -1.09 | -1.03 | -1.05 | -1.08 | -0.90 | -1.04 | -1.18 | -1.09 |
| Upland Cotton | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 1.59 | 1.61 | 1.45 | 1.29 | 0.92 | 0.84 | 0.75 | 0.99 | 0.66 | 1.48 | 1.12 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | -0.08 | 0.03 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 1.59 | 1.61 | 1.45 | 1.29 | 0.92 | 0.83 | 0.74 | 1.07 | 0.63 | 1.48 | 1.12 |
| + Loan Program Benefits | 0.00 | -5.62 | -5.43 | -4.96 | -4.08 | -3.40 | -3.23 | -3.11 | -3.17 | -2.62 | -5.02 | -3.96 |
| $=$ Market + Loan Net Returns | 0.00 | -4.03 | -3.82 | -3.51 | -2.80 | -2.48 | -2.39 | -2.37 | -2.10 | -1.99 | -3.54 | -2.83 |
| (dollars per upland cotton base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -3.77 | -3.71 | -3.65 | -3.62 | -3.34 | -3.20 | -3.15 | -3.00 | -2.86 | -3.69 | -3.37 |
| + Direct Payment | 0.00 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 | -1.71 |
| (dollars per upland cotton base acre planted to upland cotton) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -9.51 | -9.25 | -8.88 | -8.12 | -7.54 | -7.31 | $-7.23$ | -6.82 | -6.56 | -8.94 | -7.91 |
| Rice | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 1.88 | 1.93 | 1.51 | 1.47 | 1.51 | 1.45 | 1.00 | 1.47 | 0.91 | 1.70 | 1.46 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | -0.08 | 0.03 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 1.88 | 1.93 | 1.51 | 1.47 | 1.51 | 1.45 | 0.95 | 1.55 | 0.87 | 1.70 | 1.46 |
| + Loan Program Benefits | 0.00 | -5.19 | -4.46 | -4.21 | -3.88 | -3.67 | -3.89 | -3.43 | -3.68 | -3.37 | -4.43 | -3.97 |
| $=$ Market + Loan Net Returns | 0.00 | -3.32 | -2.53 | -2.70 | -2.41 | -2.16 | -2.43 | -2.49 | -2.13 | -2.49 | -2.74 | -2.52 |
| (dollars per rice base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -2.49 | -2.13 | -1.98 | -1.89 | -1.77 | -1.73 | -1.56 | -1.66 | -1.55 | -2.12 | -1.86 |
| + Direct Payment | 0.00 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 |
| (dollars per rice base acre planted to rice) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -10.62 | -9.47 | -9.49 | -9.10 | -8.73 | -8.98 | -8.86 | -8.59 | -8.86 | -9.67 | -9.19 |

Table B.3. Crop returns under the 5\% cut in payments, change from baseline, continued

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2006-14 \\ & \text { Average } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sorghum | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.03 | 0.09 | 0.11 | 0.11 | 0.07 | 0.05 | -0.03 | 0.07 | -0.02 | 0.08 | 0.05 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | -0.03 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.03 | 0.09 | 0.11 | 0.11 | 0.07 | 0.04 | -0.04 | 0.09 | -0.03 | 0.08 | 0.05 |
| + Loan Program Benefits | 0.00 | -0.80 | -0.80 | -0.80 | -0.73 | -0.65 | -0.60 | -0.49 | -0.44 | -0.40 | -0.79 | -0.64 |
| (dollars per sorghum base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.44 | -0.44 | -0.43 | -0.41 | -0.38 | -0.34 | -0.29 | -0.28 | -0.26 | -0.43 | -0.36 |
| (dollars per sorghum base acre planted to sorghum) |  |  |  |  |  |  |  |  |  |  |  | -0.84 |
| = Net Returns w/ Payments | 0.00 | -2.06 | -1.99 | -1.97 | -1.87 | -1.81 | -1.74 | -1.67 | -1.46 | -1.52 | -1.97 | -1.79 |
| Barley | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.09 | 0.13 | 0.14 | 0.15 | 0.10 | 0.11 | 0.06 | 0.06 | 0.03 | 0.13 | 0.10 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.03 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.09 | 0.13 | 0.14 | 0.15 | 0.10 | 0.11 | 0.05 | 0.09 | 0.02 | 0.13 | 0.10 |
| + Loan Program Benefits | 0.00 | -0.42 | -0.43 | -0.47 | -0.43 | -0.42 | -0.40 | -0.37 | -0.35 | -0.34 | -0.44 | -0.40 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.12 | -0.13 | -0.13 | -0.11 | -0.12 | -0.11 | -0.09 | -0.09 | -0.09 | -0.12 | -0.11 |
| + Direct Payment | 0.00 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 |
| (dollars per barley base acre planted to barley) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -0.93 | -0.91 | -0.93 | -0.87 | -0.93 | -0.88 | -0.90 | -0.84 | -0.89 | -0.91 | -0.90 |
| Oats | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.07 | 0.12 | 0.14 | 0.14 | 0.10 | 0.08 | 0.10 | -0.01 | 0.06 | 0.12 | 0.09 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.02 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.07 | 0.12 | 0.14 | 0.14 | 0.10 | 0.08 | 0.09 | 0.01 | 0.05 | 0.12 | 0.09 |
| + Loan Program Benefits | 0.00 | -0.39 | -0.39 | -0.42 | -0.35 | -0.32 | -0.29 | -0.29 | -0.26 | -0.28 | -0.39 | -0.33 |
| $=$ Market + Loan Net Returns | 0.00 | -0.32 | -0.27 | -0.28 | -0.20 | -0.22 | -0.22 | -0.19 | -0.24 | -0.23 | -0.27 | -0.24 |
| (dollars per oats base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.07 | -0.06 | -0.07 | -0.05 | -0.06 | -0.05 | -0.05 | -0.04 | -0.05 | -0.06 | -0.06 |
| + Direct Payment | 0.00 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| (dollars per oats base acre planted to oats) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -0.44 | -0.39 | -0.40 | -0.31 | -0.33 | -0.32 | -0.29 | -0.34 | -0.33 | -0.38 | -0.35 |
| Peanuts | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.88 | 1.44 | 1.49 | 1.70 | 1.79 | 1.58 | 2.21 | 2.01 | 2.12 | 1.38 | 1.69 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.88 | 1.44 | 1.49 | 1.70 | 1.79 | 1.58 | 2.21 | 2.01 | 2.12 | 1.38 | 1.69 |
| + Loan Program Benefits | 0.00 | -2.44 | -2.78 | -2.92 | -3.04 | -2.84 | -3.02 | -3.59 | -3.22 | -3.19 | -2.80 | -3.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -4.75 | -4.69 | -4.66 | -4.76 | -4.89 | -4.39 | -4.71 | -4.60 | -4.85 | -4.71 | -4.70 |
| + Direct Payment | 0.00 | -2.29 | -2.29 | -2.29 | -2.29 | -2.29 | -2.29 | -2.29 | $-2.29$ | -2.29 | -2.29 | -2.29 |
| (dollars per peanut base acre planted to peanuts) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -8.59 | -8.32 | -8.38 | -8.39 | -8.23 | -8.12 | -8.38 | -8.10 | -8.21 | -8.42 | -8.30 |
| Sunflowers | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.16 | 0.10 | 0.06 | 0.05 | -0.03 | 0.13 | 0.14 | 0.06 | 0.12 | 0.09 | 0.09 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.02 | 0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.16 | 0.10 | 0.06 | 0.05 | -0.03 | 0.13 | 0.14 | 0.08 | 0.11 | 0.09 | 0.09 |
| + Loan Program Benefits | 0.00 | -0.31 | -0.25 | -0.25 | -0.23 | -0.20 | -0.27 | -0.30 | -0.24 | -0.34 | -0.26 | -0.27 |
| (dollars per sunflower base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| + Direct Payment | 0.00 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 |
| (dollars per sunflower base acre planted to sunflowers) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -0.52 | -0.52 | -0.56 | -0.54 | -0.60 | -0.50 | -0.53 | -0.53 | -0.60 | -0.54 | -0.55 |

Table B.4. Selected government payments under the 5\% cut in payments, change from baseline

| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | $2006-09$ | Total |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | | 2006-14 |
| :--- |
| Total |

Table B.5. Government costs under the 5\% cut in payments, change from baseline

| Fiscal Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $\begin{array}{r} \hline 2006-10 \\ \text { Total } \end{array}$ | $\begin{array}{r} \hline 2006-15 \\ \text { Total } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feed Grains | (million dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | -65 | -242 | -246 | -273 | -261 | -268 | -249 | -232 | -226 | -219 | -1,086 | -2,281 |
| Sorghum | -7 | -19 | -19 | -21 | -20 | -20 | -18 | -17 | -16 | -15 | -86 | -173 |
| Barley | -4 | -8 | -8 | -8 | -8 | -8 | -8 | -7 | -7 | -7 | -36 | -74 |
| Oats | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -5 | -9 |
| Food Grains |  |  |  |  |  |  |  |  |  |  |  |  |
| Wheat | -36 | -93 | -89 | -86 | -82 | -82 | -75 | -72 | -71 | -70 | -386 | -756 |
| Rice | -24 | -53 | -48 | -47 | -45 | -42 | -44 | -41 | -42 | -43 | -217 | -429 |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybeans | -32 | -129 | -103 | -95 | -84 | -87 | -95 | -94 | -85 | -76 | -443 | -881 |
| Peanuts | -2 | -14 | -14 | -14 | -15 | -15 | -14 | -15 | -14 | -14 | -58 | -130 |
| Other Oilseeds | -1 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -1 | -8 | -16 |
| Other Commodities |  |  |  |  |  |  |  |  |  |  |  |  |
| Upland Cotton | -69 | -183 | -179 | -172 | -158 | -142 | -137 | -135 | -131 | -128 | -761 | -1,434 |
| Sugar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dairy | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| CCC Conservation |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservation Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other CCC Conservation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Disaster Payments, NAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Net Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net CCC Outlays | -239 | -743 | -709 | -719 | -676 | -667 | -641 | -617 | -596 | -575 | -3,086 | -6,181 |

Table B.6. Net farm income under the 5\% cut in payments, change from baseline

| Calendar Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $2006-10$ <br> Total | $\begin{array}{r} 2006-15 \\ \text { Total } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (million dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Crop Cash Receipts | -15 | -1 | 0 | -1 | -14 | -2 | -16 | -21 | -28 | -35 | -31 | -134 |
| Livestock Cash Receipts | 1 | 6 | 6 | 7 | 14 | 2 | 1 | -18 | -7 | 4 | 34 | 16 |
| Government Payments | -532 | -690 | -731 | -696 | -661 | -657 | -626 | -603 | -588 | -574 | -3,309 | -6,357 |
| Sum of Above | -546 | -685 | -725 | -690 | -660 | -657 | -641 | -643 | -624 | -605 | -3,306 | -6,475 |
| Rent to Non-Operators | -54 | -139 | -199 | -227 | -237 | -238 | -235 | -229 | -223 | -218 | -856 | -1,999 |
| Other Production Expenses | -66 | -57 | -59 | -61 | -54 | -64 | -60 | -97 | -77 | -58 | -297 | -653 |
| Total Production Expenses | -120 | -196 | -257 | -289 | -291 | -302 | -295 | -325 | -301 | -276 | -1,153 | -2,652 |
| All Other Net Income* | -32 | -3 | -9 | -16 | -9 | -20 | $-34$ | -33 | -47 | -60 | -68 | -261 |
| Net Farm Income | -458 | -491 | -477 | -417 | -378 | -375 | -379 | -351 | -370 | -389 | -2,220 | -4,084 |

Table C.1. U.S. crop area planted under the loan limitation, change from baseline

| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | $2006-09$ <br> Average | $2006-14$ <br> Average |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  | (million acres) |  |  |  |  |  |
| Corn | 0.00 | -0.02 | -0.16 | -0.16 | -0.18 | -0.17 | -0.15 | -0.12 | -0.11 | -0.12 | -0.13 | -0.13 |
| Soybeans | 0.00 | -0.29 | -0.05 | 0.01 | 0.06 | 0.05 | 0.02 | 0.01 | 0.00 | 0.01 | -0.07 | -0.02 |
| Wheat | 0.00 | 0.30 | 0.20 | 0.19 | 0.20 | 0.16 | 0.17 | 0.17 | 0.15 | 0.14 | 0.22 | 0.19 |
| Sorghum | 0.00 | 0.06 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.02 | 0.02 | 0.03 | 0.02 |
| Barley | 0.00 | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Oats | 0.00 | -0.01 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.00 | -0.01 | -0.01 | -0.01 |
| Rice | 0.00 | -0.13 | -0.09 | -0.07 | -0.08 | -0.07 | -0.06 | -0.07 | -0.06 | -0.06 | -0.09 | -0.08 |
| Peanuts | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sunflowers | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| Upland Cotton | 0.00 | -0.54 | -0.46 | -0.46 | -0.42 | -0.33 | -0.29 | -0.29 | -0.27 | -0.23 | -0.47 | -0.36 |
| 10 Major Crops |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 0.00 | -0.65 | -0.57 | -0.49 | -0.44 | -0.38 | -0.34 | -0.31 | -0.29 | -0.27 | -0.54 | -0.42 |
| Hay Area Harvested |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 0.00 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.05 | 0.04 |
| 10 Major Crops + Hay |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 0.00 | -0.60 | -0.51 | -0.45 | -0.40 | -0.35 | -0.31 | -0.28 | -0.27 | -0.25 | -0.49 | -0.38 |

Table C.2. U.S. crop prices under the loan limitation, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 <br> Average | $2006-14$ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (dollars per bushel) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| Soybeans | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | -0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 |
| Wheat | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sorghum | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Barley | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 |
| Oats | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| (dollars per hundredweight) |  |  |  |  |  |  |  |  |  |  |  |  |
| Rice | 0.00 | 0.21 | 0.21 | 0.16 | 0.16 | $\begin{gathered} 0.16 \\ \text { (cents } \end{gathered}$ | $0.14$ <br> pound | 0.15 | 0.13 | 0.14 | 0.19 | 0.16 |
| Peanuts | 0.00 | -0.07 | -0.02 | -0.01 | 0.01 | 0.04 | 0.04 | 0.07 | 0.08 | 0.08 | -0.02 | 0.03 |
| Sunflowers | 0.00 | 0.06 | 0.02 | 0.01 | 0.00 | -0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 |
| Upland Cotton | 0.00 | 0.97 | 0.93 | 0.87 | 0.78 | $\begin{aligned} & 0.59 \\ & \text { (dolla } \end{aligned}$ | $\begin{gathered} 0.53 \\ \text { per ton) } \end{gathered}$ | 0.54 | 0.50 | 0.43 | 0.89 | 0.68 |
| Hay | 0.00 | -0.10 | -0.13 | -0.12 | -0.11 | -0.11 | -0.11 | $-0.10$ | -0.09 | -0.10 | -0.11 | -0.11 |

Table C.3. Crop returns under the loan limitation, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 <br> Average | 2006-14 <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corn | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.26 | 0.93 | 1.10 | 1.14 | 0.93 | 0.81 | 0.63 | 0.59 | 0.48 | 0.86 | 0.76 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.02 | -0.04 | -0.02 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 0.26 | 0.93 | 1.10 | 1.14 | 0.93 | 0.80 | 0.65 | 0.63 | 0.50 | 0.86 | 0.77 |
| + Loan Program Benefits | 0.00 | -8.22 | -8.40 | -8.77 | -7.85 | -7.21 | -6.72 | -6.48 | -6.44 | -6.62 | -8.31 | -7.41 |
| = Market + Loan Net Returns | 0.00 | -7.96 | -7.48 | -7.67 | -6.71 | -6.28 | -5.92 | -5.84 | -5.81 | -6.12 | -7.45 | -6.64 |
| (dollars per corn base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | 0.01 | -0.19 | -0.23 | -0.22 | -0.24 | -0.14 | -0.15 | -0.18 | -0.11 | -0.16 | -0.16 |
| + Direct Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (dollars per corn base acre planted to corn) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -7.95 | -7.67 | -7.90 | -6.92 | -6.52 | -6.06 | -5.99 | -6.00 | -6.23 | -7.61 | -6.80 |
| Soybeans | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 1.59 | 0.44 | 0.13 | -0.01 | -0.18 | 0.25 | 0.28 | 0.22 | 0.21 | 0.54 | 0.33 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 | -0.02 | -0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 1.59 | 0.44 | 0.13 | -0.01 | -0.18 | 0.25 | 0.29 | 0.24 | 0.22 | 0.54 | 0.33 |
| + Loan Program Benefits | 0.00 | -8.18 | -6.02 | -5.29 | -4.33 | -4.34 | -4.69 | -5.02 | -4.51 | -4.78 | -5.95 | -5.24 |
| = Market + Loan Net Returns | 0.00 | -6.59 | -5.58 | -5.16 | -4.34 | -4.52 | -4.44 | -4.73 | -4.27 | -4.56 | -5.42 | -4.91 |
| (dollars per soybean base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.13 | -0.05 | -0.02 | 0.03 | 0.05 | -0.05 | -0.06 | -0.06 | -0.03 | -0.04 | -0.04 |
| (dollars per soybean base acre planted to soybeans) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -6.72 | -5.63 | -5.18 | -4.30 | -4.47 | -4.49 | -4.79 | -4.34 | -4.60 | -5.46 | -4.95 |
| Wheat | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | -0.29 | -0.12 | -0.04 | -0.03 | 0.03 | -0.04 | -0.10 | -0.09 | -0.09 | -0.12 | -0.09 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | -0.29 | -0.12 | -0.04 | -0.03 | 0.03 | -0.03 | -0.10 | -0.07 | -0.10 | -0.12 | -0.08 |
| + Loan Program Benefits | 0.00 | -1.05 | -0.86 | -0.90 | -0.75 | -0.67 | -0.48 | -0.36 | -0.30 | -0.32 | -0.89 | -0.63 |
| = Market + Loan Net Returns | 0.00 | -1.34 | -0.98 | -0.93 | -0.79 | -0.64 | -0.51 | -0.46 | -0.37 | -0.42 | -1.01 | -0.72 |
| (dollars per wheat base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | 0.12 | 0.05 | 0.03 | 0.00 | -0.02 | -0.01 | 0.01 | 0.02 | 0.02 | 0.05 | 0.02 |
| + Direct Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (dollars per wheat base acre planted to wheat) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -1.22 | -0.94 | -0.91 | -0.79 | -0.66 | -0.52 | -0.45 | -0.35 | -0.40 | -0.96 | -0.69 |
| Upland Cotton | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 6.94 | 6.75 | 6.33 | 5.74 | 4.36 | 4.01 | 4.04 | 3.82 | 3.22 | 6.44 | 5.02 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.03 | -0.07 | -0.03 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 6.94 | 6.75 | 6.33 | 5.74 | 4.36 | 4.00 | 4.07 | 3.90 | 3.25 | 6.44 | 5.04 |
| + Loan Program Benefits | 0.00 | -28.91 | -28.63 | -27.09 | -22.89 | -20.03 | -19.65 | -19.02 | -17.35 | -15.67 | -26.88 | -22.14 |
| = Market + Loan Net Returns | 0.00 | -21.97 | -21.88 | -20.76 | -17.15 | -15.67 | -15.65 | -14.96 | -13.46 | -12.42 | -20.44 | -17.10 |
| (dollars per upland cotton base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.68 | -0.63 | -0.48 | -0.91 | -0.72 | -0.89 | -1.01 | -1.04 | -0.92 | -0.68 | -0.81 |
| + Direct Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (dollars per upland cotton base acre planted to upland cotton) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -22.65 | -22.51 | -21.24 | -18.06 | -16.39 | -16.54 | -15.97 | -14.50 | -13.33 | -21.11 | -17.91 |
| Rice | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 14.68 | 14.32 | 11.42 | 11.44 | 11.11 | 10.54 | 11.08 | 9.85 | 10.08 | 12.97 | 11.61 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.07 | -0.01 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 14.68 | 14.32 | 11.42 | 11.44 | 11.11 | 10.54 | 11.10 | 9.92 | 10.09 | 12.97 | 11.62 |
| + Loan Program Benefits | 0.00 | -40.29 | -35.19 | -34.28 | -32.29 | -30.03 | -31.36 | -29.30 | -28.37 | -28.07 | -35.51 | -32.13 |
| = Market + Loan Net Returns | 0.00 | -25.61 | -20.87 | -22.86 | -20.85 | -18.92 | -20.82 | -18.20 | -18.45 | -17.99 | -22.55 | -20.51 |
|  | (dollars per rice base acre) |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -4.18 | -3.14 | -2.54 | -2.46 | -2.04 | -1.87 | -1.74 | -1.30 | -1.62 | -3.08 | -2.32 |
| + Direct Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | (dollars per rice base acre planted to rice) |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -29.79 | -24.01 | -25.40 | -23.31 | -20.95 | -22.69 | -19.94 | -19.75 | -19.60 | -25.63 | -22.83 |

Table C.3. Crop returns under the loan limitation, change from baseline, continued


Table C.4. Selected government payments under the loan limitation, change from baseline

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | Total | 2006-14 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |

Table C.5. Government costs under the loan limitation, change from baseline

| Fiscal Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $2006-10$ | $2006-15$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total | Total |  |  |  |  |  |  |  |  |  |  |  |

Table C.6. Net farm income under the loan limitation, change from baseline

|  |  |  |  |  |  |  |  |  | $2006-10$ | $2006-15$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total |  |  |  |  |  |  |  |  |  |  |

Table D.1. U.S. crop area planted under the combination of the $5 \%$ cut and the loan limitation, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | $2006-14$ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (million acres) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 0.00 | -0.03 | -0.17 | -0.17 | -0.20 | -0.19 | -0.16 | -0.13 | -0.12 | -0.13 | -0.14 | -0.15 |
| Soybeans | 0.00 | -0.32 | -0.06 | 0.01 | 0.06 | 0.05 | 0.01 | 0.01 | -0.01 | 0.00 | -0.08 | -0.03 |
| Wheat | 0.00 | 0.29 | 0.18 | 0.17 | 0.18 | 0.14 | 0.15 | 0.16 | 0.14 | 0.13 | 0.20 | 0.17 |
| Sorghum | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 |
| Barley | 0.00 | -0.03 | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 |
| Oats | 0.00 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 | -0.01 |
| Rice | 0.00 | -0.14 | -0.10 | -0.08 | -0.08 | -0.07 | -0.07 | -0.07 | -0.06 | -0.06 | -0.10 | -0.08 |
| Peanuts | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sunflowers | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| Upland Cotton | 0.00 | -0.63 | -0.53 | -0.53 | -0.49 | -0.38 | -0.34 | -0.34 | -0.31 | -0.27 | -0.54 | -0.42 |
| 10 Major Crops | 0.00 | -0.83 | -0.72 | -0.63 | -0.57 | -0.50 | -0.45 | -0.41 | -0.39 | -0.36 | -0.69 | -0.54 |
| Hay Area Harvested | 0.00 | 0.06 | 0.07 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.06 | 0.05 |
| 10 Major Crops + Hay | 0.00 | -0.77 | -0.65 | -0.57 | -0.52 | -0.45 | -0.41 | -0.37 | -0.35 | -0.33 | -0.63 | -0.49 |

Table D.2. U.S. crop prices under the combination of the $5 \%$ cut and the loan limitation, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | $\begin{aligned} & \hline 2006-09 \\ & \text { Average } \\ & \hline \end{aligned}$ | 2006-14 Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (dollars per bushel) |  |  |  |  |  |  |  |  |  |  |  |
| Corn | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |
| Soybeans | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 |
| Wheat | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sorghum | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Barley | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Oats | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 |
| (dollars per hundredweight) |  |  |  |  |  |  |  |  |  |  |  |  |
| Rice | 0.00 | 0.23 | 0.22 | 0.17 | 0.17 | $\begin{gathered} 0.17 \\ \text { (cents } \end{gathered}$ | $\begin{gathered} 0.16 \\ \text { er pound } \end{gathered}$ | 0.16 | 0.14 | 0.15 | 0.20 | 0.17 |
| Peanuts | 0.00 | -0.04 | 0.03 | 0.04 | 0.07 | 0.09 | 0.09 | 0.12 | 0.13 | 0.13 | 0.03 | 0.07 |
| Sunflowers | 0.00 | 0.07 | 0.02 | 0.01 | 0.01 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 |
| Upland Cotton | 0.00 | 1.14 | 1.08 | 1.00 | 0.90 | (dolla | $\begin{gathered} 0.61 \\ \text { per ton) } \end{gathered}$ | 0.63 | 0.58 | 0.50 | 1.03 | 0.79 |
| Hay | 0.00 | -0.12 | -0.17 | -0.16 | -0.15 | -0.15 | -0.14 | -0.13 | -0.12 | -0.12 | -0.15 | -0.14 |

Table D.3. Crop returns under the combination of the $5 \%$ cut and the loan limitation, change from baseline

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 Average | 2006-14 <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corn | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.34 | 1.08 | 1.26 | 1.29 | 1.07 | 0.92 | 0.73 | 0.68 | 0.58 | 0.99 | 0.88 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.02 | -0.04 | -0.02 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 0.34 | 1.08 | 1.26 | 1.29 | 1.07 | 0.92 | 0.75 | 0.72 | 0.60 | 0.99 | 0.89 |
| + Loan Program Benefits | 0.00 | -8.75 | -8.92 | -9.29 | -8.29 | -7.61 | -7.09 | -6.82 | -6.77 | -6.94 | -8.81 | -7.83 |
| = Market + Loan Net Returns | 0.00 | -8.41 | -7.85 | -8.03 | -7.00 | -6.55 | -6.17 | -6.07 | -6.05 | -6.35 | -7.82 | -6.94 |
| (dollars per corn base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.95 | -1.14 | -1.16 | -1.06 | -1.07 | -0.89 | -0.88 | -0.87 | -0.80 | -1.08 | -0.98 |
| + Direct Payment | 0.00 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 | -1.22 |
| (dollars per corn base acre planted to corn) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -10.58 | -10.21 | -10.40 | -9.29 | -8.84 | -8.28 | -8.17 | -8.14 | -8.36 | -10.12 | -9.14 |
| Soybeans | (dollars per |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 1.80 | 0.53 | 0.20 | 0.04 | -0.12 | 0.31 | 0.35 | 0.28 | 0.27 | 0.64 | 0.41 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 | -0.02 | -0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 1.80 | 0.53 | 0.20 | 0.04 | -0.12 | 0.32 | 0.36 | 0.30 | 0.28 | 0.64 | 0.41 |
| + Loan Program Benefits | 0.00 | -8.86 | -6.51 | -5.71 | -4.67 | -4.68 | -5.05 | -5.39 | -4.84 | -5.12 | -6.44 | -5.65 |
| = Market + Loan Net Returns | 0.00 | -7.06 | -5.98 | -5.51 | -4.63 | -4.80 | -4.73 | -5.03 | -4.54 | -4.84 | -5.80 | -5.24 |
| (dollars per soybean base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.44 | -0.32 | -0.26 | -0.19 | -0.17 | -0.29 | -0.29 | -0.28 | -0.25 | -0.30 | -0.28 |
| + Direct Payment | 0.00 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 | -0.58 |
| (dollars per soybean base acre planted to soybeans) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -8.08 | -6.88 | -6.35 | -5.39 | -5.55 | -5.60 | -5.90 | -5.39 | -5.66 | -6.67 | -6.09 |
| Wheat |  |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | -0.27 | -0.07 | 0.02 | 0.02 | 0.08 | 0.01 | -0.06 | -0.05 | -0.06 | -0.07 | -0.04 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | -0.27 | -0.07 | 0.02 | 0.02 | 0.08 | 0.01 | -0.06 | -0.03 | -0.06 | -0.07 | -0.04 |
| + Loan Program Benefits | 0.00 | -1.17 | -0.97 | -0.99 | -0.83 | -0.74 | -0.53 | -0.40 | -0.33 | -0.35 | -0.99 | -0.70 |
| = Market + Loan Net Returns | 0.00 | -1.44 | -1.03 | -0.97 | -0.82 | -0.66 | -0.51 | -0.45 | -0.36 | -0.41 | -1.07 | -0.74 |
| (dollars per wheat base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.25 | -0.27 | -0.27 | -0.26 | -0.24 | -0.20 | -0.16 | -0.12 | -0.11 | -0.26 | -0.21 |
| + Direct Payment | 0.00 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 | -0.76 |
| (dollars per wheat base acre planted to wheat) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -2.46 | -2.07 | -2.01 | -1.84 | -1.66 | -1.48 | -1.37 | -1.25 | -1.28 | -2.09 | -1.71 |
| Upland Cotton | (dolars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 8.15 | 7.82 | 7.30 | 6.63 | 5.09 | 4.68 | 4.69 | 4.46 | 3.78 | 7.48 | 5.85 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.03 | -0.07 | -0.03 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 8.15 | 7.82 | 7.30 | 6.63 | 5.09 | 4.66 | 4.72 | 4.53 | 3.82 | 7.48 | 5.86 |
| + Loan Program Benefits | 0.00 | -32.44 | -32.00 | -30.18 | -25.44 | -22.23 | -21.76 | -21.03 | -19.12 | -17.26 | -30.02 | -24.61 |
| = Market + Loan Net Returns | 0.00 | -24.28 | -24.18 | -22.88 | -18.81 | -17.14 | -17.10 | -16.31 | -14.59 | -13.44 | -22.54 | -18.75 |
| (dollars per upland cotton base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -4.41 | -4.28 | -4.11 | -4.45 | -4.07 | -4.15 | -4.24 | -4.06 | -3.69 | -4.31 | -4.16 |
| (dollars per upland cotton base acre planted to upland cotton) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -30.41 | -30.17 | -28.70 | -24.97 | -22.92 | -22.96 | -22.26 | -20.36 | -18.84 | -28.56 | -24.62 |
| Rice | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 15.84 | 15.36 | 12.25 | 12.29 | 11.92 | 11.28 | 11.87 | 10.55 | 10.78 | 13.94 | 12.46 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.07 | -0.01 | 0.00 | -0.01 |
| = Market Net Returns | 0.00 | 15.84 | 15.36 | 12.25 | 12.29 | 11.92 | 11.28 | 11.88 | 10.62 | 10.79 | 13.94 | 12.47 |
| + Loan Program Benefits | 0.00 | -43.08 | -37.59 | -36.58 | -34.42 | -31.98 | -33.36 | -31.14 | -30.12 | -29.77 | -37.92 | -34.23 |
| = Market + Loan Net Returns | 0.00 | -27.24 | -22.22 | -24.33 | -22.13 | -20.07 | -22.07 | -19.25 | -19.50 | -18.99 | -23.98 | -21.76 |
| (dollars per rice base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -6.20 | -4.85 | -4.21 | -4.04 | -3.47 | -3.32 | -3.06 | -2.59 | -2.87 | -4.82 | -3.84 |
| + Direct Payment | 0.00 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 | -4.81 |
| (dollars per rice base acre planted to rice) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -38.24 | -31.88 | -33.35 | -30.97 | -28.35 | -30.20 | -27.12 | -26.89 | -26.66 | -33.61 | -30.41 |

Table D.3. Crop returns under the combination of the $5 \%$ cut and the loan limitation, change from baseline, continued

| Crop Year | 05/06 | 06/07 | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 2006-09 <br> Average | 2006-14 <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sorghum | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | -0.10 | 0.27 | 0.35 | 0.38 | 0.34 | 0.29 | 0.14 | 0.16 | 0.10 | 0.23 | 0.22 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | -0.01 | -0.03 | -0.01 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | -0.10 | 0.27 | 0.35 | 0.38 | 0.34 | 0.29 | 0.15 | 0.19 | 0.11 | 0.23 | 0.22 |
| + Loan Program Benefits | 0.00 | -4.90 | -4.88 | -4.89 | -4.43 | -4.02 | -3.52 | -3.14 | -2.89 | -2.68 | -4.78 | -3.93 |
| $=$ Market + Loan Net Returns | 0.00 | -4.99 | -4.61 | -4.54 | -4.05 | -3.67 | -3.23 | -2.99 | -2.70 | -2.57 | -4.55 | -3.71 |
| (dollars per sorghum base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.38 | -0.43 | -0.45 | -0.43 | -0.39 | -0.33 | -0.31 | -0.31 | -0.29 | -0.42 | -0.37 |
| + Direct Payment | 0.00 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 | -0.84 |
| (dollars per sorghum base acre planted to sorghum) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -6.21 | -5.89 | -5.83 | -5.32 | -4.91 | -4.40 | -4.14 | -3.85 | -3.70 | -5.81 | -4.92 |
| Barley | per acre |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.37 | 0.58 | 0.66 | 0.72 | 0.64 | 0.62 | 0.52 | 0.51 | 0.40 | 0.58 | 0.56 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.02 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.37 | 0.58 | 0.66 | 0.72 | 0.64 | 0.62 | 0.53 | 0.52 | 0.41 | 0.58 | 0.56 |
| + Loan Program Benefits | 0.00 | -3.07 | -3.08 | -3.41 | -3.11 | -3.10 | -2.86 | -2.79 | -2.66 | -2.63 | -3.16 | -2.97 |
| $=$ Market + Loan Net Returns | 0.00 | -2.70 | -2.50 | -2.74 | -2.39 | -2.46 | -2.24 | -2.26 | -2.13 | -2.22 | -2.58 | -2.41 |
| (dollars per barley base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.15 | -0.20 | -0.20 | -0.17 | -0.21 | -0.17 | -0.14 | -0.14 | -0.13 | -0.18 | -0.17 |
| + Direct Payment | 0.00 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 |
| (dollars per barley base acre planted to barley) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -3.34 | -3.18 | -3.43 | -3.05 | -3.15 | -2.89 | -2.89 | -2.76 | -2.84 | -3.25 | -3.06 |
| Oats | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.22 | 0.47 | 0.55 | 0.56 | 0.48 | 0.38 | 0.36 | 0.32 | 0.28 | 0.45 | 0.40 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.22 | 0.47 | 0.55 | 0.56 | 0.48 | 0.38 | 0.37 | 0.33 | 0.28 | 0.45 | 0.40 |
| + Loan Program Benefits | 0.00 | -2.92 | -2.80 | -2.96 | -2.44 | -2.26 | -2.07 | -1.97 | -1.86 | -1.90 | -2.78 | -2.35 |
| $=$ Market + Loan Net Returns | 0.00 | -2.71 | -2.33 | -2.41 | -1.88 | -1.78 | -1.69 | -1.60 | -1.53 | -1.62 | -2.33 | -1.95 |
| (dollars per oats base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -0.08 | -0.09 | -0.12 | -0.08 | -0.10 | -0.09 | -0.06 | -0.06 | -0.08 | -0.09 | -0.08 |
| + Direct Payment | 0.00 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| (dollars per oats base acre planted to oats) |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -2.83 | -2.46 | -2.58 | -2.01 | -1.93 | -1.83 | -1.71 | -1.64 | -1.75 | -2.47 | -2.08 |
| Peanuts | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | -1.07 | 0.92 | 1.25 | 1.96 | 2.69 | 2.98 | 3.72 | 4.08 | 4.27 | 0.76 | 2.31 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | -1.07 | 0.92 | 1.25 | 1.96 | 2.69 | 2.98 | 3.72 | 4.08 | 4.27 | 0.76 | 2.31 |
| + Loan Program Benefits | 0.00 | -8.79 | -10.73 | -11.31 | -11.87 | -11.34 | -12.95 | -13.65 | -13.79 | -13.30 | -10.68 | -11.97 |
| = Market + Loan Net Returns | 0.00 | -9.86 | -9.81 | -10.07 | -9.92 | -8.65 | -9.97 | -9.94 | -9.71 | -9.04 | -9.91 | -9.66 |
| (dollars per peanut base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | -3.87 | -4.41 | -4.50 | -4.82 | -5.47 | -5.28 | -5.38 | -5.60 | -5.89 | -4.40 | -5.03 |
| (dollars per peanut base acre planted to peanuts) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| = Net Returns w/ Payments | 0.00 | -16.02 | -16.51 | -16.85 | -17.02 | -16.41 | -17.53 | -17.61 | -17.60 | -17.22 | -16.60 | -16.97 |
| Sunflowers | (dollars per acre) |  |  |  |  |  |  |  |  |  |  |  |
| Market Gross Returns | 0.00 | 0.84 | 0.32 | 0.16 | 0.07 | -0.03 | 0.19 | 0.29 | 0.27 | 0.32 | 0.35 | 0.27 |
| - Variable Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 | -0.01 | 0.00 | 0.00 | 0.00 |
| = Market Net Returns | 0.00 | 0.84 | 0.32 | 0.16 | 0.07 | -0.03 | 0.20 | 0.30 | 0.28 | 0.33 | 0.35 | 0.27 |
| + Loan Program Benefits | 0.00 | -1.90 | -1.57 | -1.63 | -1.54 | -1.35 | -1.63 | -2.05 | -1.67 | -2.19 | -1.66 | -1.73 |
| = Market + Loan Net Returns | 0.00 | -1.06 | -1.25 | -1.47 | -1.47 | -1.38 | -1.43 | -1.75 | -1.38 | -1.86 | -1.31 | -1.45 |
| (dollars per sunflower base acre) |  |  |  |  |  |  |  |  |  |  |  |  |
| + Counter-cyclical Payment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| + Direct Payment | 0.00 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 | -0.37 |
| (dollars per sunflower base acre planted to sunflowers) |  |  |  |  |  |  |  |  |  |  |  |  |
| $=$ Net Returns w/ Payments | 0.00 | -1.43 | -1.62 | -1.84 | -1.84 | -1.75 | -1.80 | -2.12 | -1.75 | -2.23 | -1.68 | -1.82 |

Table D.4. Selected government payments under the combination of the 5\% cut and the loan limitation, change from baseline

| Crop Year | $05 / 06$ | $06 / 07$ | $07 / 08$ | $08 / 09$ | $09 / 10$ | $10 / 11$ | $11 / 12$ | $12 / 13$ | $13 / 14$ | $14 / 15$ | 2006-09 <br> Total | 2006-14 <br> Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  | (million dollars) |  |  |  |  |  |
| Direct Payments | 0 | -265 | -265 | -265 | -265 | -265 | -264 | -263 | -263 | -263 | $-1,060$ | $-2,379$ |
| Marketing Loan Benefits | -106 | $-2,020$ | $-1,845$ | $-1,780$ | $-1,556$ | $-1,434$ | $-1,413$ | $-1,387$ | $-1,309$ | $-1,306$ | $-7,201$ | $-14,051$ |
| Counter-cyclical Payments | 3 | -246 | -251 | -243 | -236 | -225 | -212 | -208 | -199 | -184 | -975 | $-2,003$ |
| Total | -103 | $-2,531$ | $-2,361$ | $-2,288$ | $-2,056$ | $-1,924$ | $-1,890$ | $-1,858$ | $-1,771$ | $-1,754$ | $-9,236$ | $-18,433$ |

Table D.5. Government costs under the combination of the $5 \%$ cut and the loan limitation, change from baseline

| Fiscal Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $\begin{array}{r} \hline 2006-10 \\ \text { Total } \end{array}$ | $\begin{array}{r} \hline 2006-15 \\ \text { Total } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feed Grains |  |  |  |  |  | (millio | dollars) |  |  |  |  |  |
| Corn | -115 | -833 | -866 | -917 | -843 | -786 | -749 | -726 | -721 | -715 | -3,574 | -7,271 |
| Sorghum | -13 | -44 | -44 | -45 | -42 | -39 | -35 | -32 | -30 | -29 | -188 | -353 |
| Barley | -14 | -25 | -26 | -27 | -26 | -26 | -25 | -25 | -23 | -22 | -118 | -240 |
| Oats | -3 | -6 | -6 | -5 | -5 | -4 | -4 | -4 | -3 | -3 | -25 | -43 |
| Food Grains |  |  |  |  |  |  |  |  |  |  |  |  |
| Wheat | -113 | -129 | -128 | -121 | -114 | -103 | -93 | -87 | -85 | -83 | -605 | -1,056 |
| Rice | -157 | -243 | -193 | -184 | -172 | -157 | -163 | -154 | -149 | -144 | -949 | -1,717 |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybeans | -63 | -650 | -483 | -423 | -357 | -357 | -390 | -410 | -379 | -349 | -1,977 | -3,862 |
| Peanuts | -2 | -20 | -24 | -25 | -27 | -26 | -28 | -30 | -30 | -30 | -98 | -242 |
| Other Oilseeds | -6 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -14 | -23 |
| Other Commodities |  |  |  |  |  |  |  |  |  |  |  |  |
| Upland Cotton | -111 | -578 | -564 | -537 | -479 | -428 | -421 | -413 | -382 | -352 | -2,268 | -4,264 |
| Sugar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dairy | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 |
| CCC Conservation |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservation Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other CCC Conservation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Disaster Payments, NAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Net Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net CCC Outlays | -597 | -2,530 | -2,336 | $-2,285$ | -2,067 | $-1,928$ | $-1,911$ | -1,882 | -1,805 | -1,728 | -9,815 | -19,069 |

Table D.6. Net farm income under the combination of the $5 \%$ cut and the loan limitation, change from baseline

| Calendar Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | $\begin{array}{r} 2006-10 \\ \text { Total } \\ \hline \end{array}$ | $\begin{array}{r} 2006-15 \\ \text { Total } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (million dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Crop Cash Receipts | -826 | -80 | -72 | -89 | -90 | -91 | -84 | -94 | -80 | -66 | -1,158 | -1,571 |
| Livestock Cash Receipts | 3 | 35 | 32 | 38 | 43 | 6 | 56 | 20 | 25 | 30 | 151 | 288 |
| Government Payments | -1,705 | -2,299 | -2,292 | -2,109 | -1,952 | -1,883 | -1,848 | -1,792 | -1,754 | -1,716 | -10,358 | -19,350 |
| Sum of Above | -2,528 | -2,344 | -2,331 | -2,160 | -2,000 | -1,968 | -1,875 | -1,866 | -1,809 | -1,752 | -11,364 | -20,633 |
| Rent to Non-Operators | -232 | -551 | -687 | -733 | -727 | -705 | -684 | -667 | -649 | -631 | -2,931 | -6,267 |
| Other Production Expenses | -327 | -261 | -267 | -275 | -250 | -262 | -260 | -271 | -262 | -254 | -1,380 | -2,689 |
| Total Production Expenses | -559 | -812 | -954 | $-1,008$ | -977 | -967 | -945 | -938 | -912 | -885 | -4,311 | -8,957 |
| All Other Net Income* | -168 | -5 | -35 | -61 | -53 | -82 | -101 | -103 | -112 | -122 | -322 | -842 |
| Net Farm Income | -2,137 | $-1,538$ | $-1,412$ | $-1,213$ | $-1,075$ | -1,083 | $-1,032$ | -1,030 | -1,009 | -988 | -7,375 | -12,518 |


[^0]:    ${ }^{1}$ Slight differences in reported baseline results for measures such as production, prices, and producer returns reflect the difference between the deterministic point estimates reported in the briefing book and the mean of the stochastic outcomes reported here. For government costs and farm income, the figures in the baseline briefing book should precisely match those reported here, as both reports use the mean of the stochastic outcomes as the baseline for government costs and farm income.

[^1]:    ${ }^{2}$ For DPs, CCPs, and loan deficiency payments (LDPs), this is straightforward: calculate payments in the normal fashion, but then multiply by 0.95 to determine actual payments. For marketing loan gains (MLGs), it is less clear how the change would be implemented. In modeling the scenario, it is assumed that producers electing to take out non-recourse loans would repay loans at the normal repayment rate (the posted county price for wheat, feed grains, and oilseeds; the adjusted world price for cotton and rice) plus 5 percent of the difference between the loan rate and the repayment rate whenever repayment rates are below the loan rate plus interest. For example, suppose the loan rate for corn is $\$ 1.95$ and the posted county price (PCP) is $\$ 1.75$. Instead of repaying loans at the PCP of $\$ 1.75$, producers would be required to repay the loan at $\$ 1.75$ + (\$1.95-\$1.75)*. $05=\$ 1.76$ per bushel.
    ${ }^{3}$ Published descriptions of the President's budget proposal do not spell out how the loan limitation is to be carried out, but based on discussions with CBO analysts, we believe this interpretation to be consistent with that used by CBO in its estimates of the President's budget.

[^2]:    ${ }^{4}$ One could argue that the reduction in MLBs would reduce marginal incentives to apply fertilizer and other inputs, and that this should have a negative effect on crop yields. However, any such effect is likely to be small, and may be partially offset by acreage shifts that affect the average yield potential of land in crop production.

[^3]:    ${ }^{5}$ Because CCPs and MLBs occur at different times for different crops, there are differences across crops in which payments occur during the FY 2006-2010 budget window.

[^4]:    ${ }^{6}$ This estimate differs slightly from the crop year and fiscal year numbers reported earlier because of timing issues. Some payments associated with crop year 2009/10 and 2010/11, for example, are scheduled to be made in the fall of 2010. They would fall within the 2006-2010 window for net farm income calculations, but not the FY 2006-2010 window for government outlay calculations (FY 2010 ends September 30, 2010).
    ${ }^{7}$ The estimated reduction in crop cash receipts in the loan limitation scenario is largely a timing issue. Producers newly unable to take out a CCC loan in the fall of 2006 may not market their crops until the following calendar year. Given accounting rules, this reduces crop receipts in calendar year 2006.

[^5]:    * FAPRI has not developed its own estimates for the payment limitation (D) or dairy price support (E) provisions. To allow comparisons of totals, CBO estimates for the dairy price support provision are reported in the FAPRI column. CBO indicated it had insufficient information to estimate impacts of the payment limitation provision.

