Are we where we want to be with commodity programs?

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Talk overview

• Where we are
• How we got here
• What are we trying to accomplish?
• What do (domestic) critics say?
• Are there alternatives?
Are Farm Programs Counter-Productive?

• One justification for farm programs is that U.S. farmers need support because of their exposure to a great amount of risk.
• But won’t a reduction in risk also reduce expected returns?
• Perhaps, but farm programs also increased expected or average returns.
Structure of Program Payments for Corn

- **Target Price**
  - Direct Payment: $2.63
  - Counter-Cyclical Payment: $2.35
  - Loan Deficiency Payment: $1.95

- **Loan Rate**
  - Regardless Of Market Price: $0.28

Not Tied To Prod Req. Regardless Of Market Price Only If… Effective Target Price
Distribution of Farm (not field) Yields for an Average Boone County Farmer

Probability distribution of farm yields (bu/ac) for an average Boone County farmer.
Distribution of Corn Harvest Revenue Less $180 Variable Cost
Reduced Risk

• With no insurance or government programs:
  – Average return over variable cost = $143/ac
  – 3.8% probability of not covering $180 variable cost

• With all government programs and insurance:
  – Average returns over variable cost = $235/ac
  – 5.6% probability that returns are less than $143/ac
Risk and Return in a Free-Market Economy

• Capitalism works when those with capital are induced to invest by the expectation of a higher return on invested capital than on non-invested capital.
Risk-Return Tradeoff

Expected Return

Risk
Effects of Government Programs on Iowa Cash Renters

- Cash rents will increase due to the increase in expected returns.
- Cash rent is also a variable cost of production.
- How much will cash rents increase?
  - Depends on returns to corn land.
Effect of Government Programs on Net Returns from Iowa Soybean Producer Who Cash Rents Land

Probability of net returns in $/acre range:

- Negative returns: -150 to 0
- Positive returns: 75 to 225

Distribution shows that the most likely net returns are around 0 $/acre.
A Comparison of Risk and Returns for Cash Renter

No programs except revenue assurance

Current situation

$/acre

Probability
How did we get here?

• Macro-economic stabilization policy objective in the 1930s led to farm programs
  – Focus on higher prices through price supports and acreage reduction
Relative Importance of Farming to U.S. Society and Economy

Agriculture's Share of GDP

Farm Population (Share of U.S.)


- 0% 5% 10% 15% 20% 25% 30%
How did we get here?

• Policy quite stable from the 1950s through the mid-1980s
  – High support prices offset by acreage restrictions
  – Corn favored over soybeans
  – High prices in 1970s and high support prices in early 1980s led to conversion of pasture to corn

• 1985 farm bill cut loan rates and took land out of production with CRP
How did we get here?

- Freedom to farm in 1995 eliminated non-CRP acreage controls, converted deficiency payments to fixed payments, and allowed loan deficiency payments.

- Price declines in late 1990s allowed Congress the opportunity to double AMTA payments.
How did we get here?

• “Surpluses as far as the eye can see” allowed Ag to increase baseline funding by $78 billion and add countercyclical payments

• Surpluses also funded Agricultural Risk Protection Act which greatly expanded the crop insurance program
What are we trying to accomplish?

- Support individual farmer income?
  - No. (No means test.)

- Enhance adoption of conservation practices?
  - No. (CSP funds are first to go. EQIP funding expanded primarily to help livestock producers meet Clean Water Act requirements)

- Support crop sector income?
  - Yes. (In so doing help support national net farm income.)
What’s Been Criticized in the Current Farm Bill?

• Payments based on price rather than revenue
  – No payments in low yield high price yields
  – “Over” payment in low price high yield years
• Why is there a need for ad hoc disaster payments?
• Why are we making payments to cotton farmers who have not grown cotton in 8 years?
• Have we lost the “high road” now that the EU has reformed its policies?
• How should we respond to the WTO cotton case?
• Why do we have two agencies of USDA providing income support? (FSA, RMA)
• Overall cost
An Alternative

• Make payments when county average yield times harvest price is less than target revenue

• Much like GRIP replacing CBOT price with a target price
  – Would do away with need for disaster assistance
  – Would replace much of the risk borne by the crop insurance program
Calculating the target

• Expected production times national loan rate \textit{plus}
• Maximum CCP rate times CCP base production \textit{plus}
• Direct payment rate times base
Market and Target Revenue for Corn and Soybeans Since 2002

The chart depicts the market and target revenue in billions of dollars for corn and soybeans from 2002 to 2004. The y-axis represents the revenue in billions of dollars, ranging from 0.00 to 30.00. The x-axis lists the years from 2002 to 2004.

- Corn-02, Corn-03, and Corn-04 show consistent market revenue compared to target revenue, with Corn-04 having a higher target revenue.
- Soy-02, Soy-03, and Soy-04 show a similar trend, with Soy-04 having a higher target revenue than market revenue.

The chart indicates a general increase in revenue as we move from 2002 to 2004 for both corn and soybeans, with target revenue slightly exceeding market revenue in most years.
Figure 1. Do farm bill payments arrive when revenue is low?
Figure 3. Would modified GRIP payments arrive when revenue is low?