

Assessment and Comparison of Farm Safety Net Proposals

Carl Zulauf, Ohio State University, October 2011

Prepared for American Farmland Trust

Overview

As a group, the proposals are a significant and important evolutionary improvement in the design of a risk management farm safety net, a step that began with the introduction of the Average Crop Revenue Election (ACRE) farm program. A potential exception is whether the program should be designed for farm-specific risks or for the systemic risks of a larger geographic area. A farm-specific program will raise serious concerns about its impact on the distribution and structure of farm production as well as its impact on the environment.

Background

Ten Farm Bill proposals are examined for similarities and differences. Source for the proposals are a Congressional Research Service Report (Shields and Schnepf), supplemented by documents publicly released by the proposal's author. Key policy parameters and attributes are listed in Tables 1a and 1b on pages 4 and 5, respectively. They are summarized in a table at the bottom of page 2. As a point of reference, Table 2 on page 6 presents key parameters of the current crop revenue insurance, ACRE, and SURE programs. **Caveat:** The proposals are likely to change as the debate continues.

Assessing the Proposals: Importance of the Rationale

- ▶ From the perspective of economics, to insure that both public and private national resources are used efficiently, it is important that public policy be enacted only when its benefits exceed its costs. A policy's net benefit is more likely to be positive when a private market fails.
- ▶ Private insurance markets can fail if a systemic risk occurs. A systemic risk affects a large group of individuals at the same time, for example a wide-spread drought. Thus, a systemic risk can generate large insurance payments, increasing the chance that private insurance companies will go bankrupt.
- ▶ Private insurance companies may be able to use private reinsurance markets to manage systemic losses, but reinsurance can be expensive and may not be available. Currently, the U.S. government, not the private market, is the primary reinsurer for crop insurance.
- ▶ Experiences from around the world reveal that, except for fire and hail crop insurance, private companies have not provided insurance against farm yield and revenue losses unless public assistance is provided (Tweeten and Zulauf, Wright and Hewitt).
- ▶ **Systemic risk and the resulting incomplete insurance market is the only current economic justification for a farm safety net.** For a more complete discussion of this argument, see Zulauf (March 2011).

Assessment of the Proposals: Steps Forward

- ▶ 90% require farms to have a loss to receive assistance.
 - ❖ Farms no longer receive payments unless they have a financial loss. This makes the farm safety net a risk management partnership between farms and the general public.
 - ❖ Insurance often causes the insured to take on more risk, leading to an inefficient use of resources. Having a loss deductible mitigates this response.
- ▶ 90% address a hole in crop insurance: multiple-year revenue declines due to no fault of the farm
 - ❖ This historic concern of farm policy makers is not addressed by crop insurance because its guarantee is reset each year based on that year's expected price at harvest.
- ▶ 90% address an imbalance in the current farm safety net: shallow revenue losses.
 - ❖ Crop insurance is designed to address deep losses on individual farms in risky production areas. However, the profile of losses, and in particular shallow losses, varies across the U.S. (Zulauf, July 2011 and September 2011). In essence, a shallow loss program

rebalances the risk management safety net, making it more equitable across crops and regions.

- ▶ 80% have no fixed price or revenue benchmark.
 - ❖ Risk assistance should not remove the incentive to adjust to the occurrence of a risk. Assistance should be temporary and thus adjust downward when market conditions warrant.

Assessment of the Proposals: Reason for Concern

- ▶ Economic justification for a farm safety net is systemic risk across many farms. It does not justify public assistance for losses unique to an individual farm or a small number of farms.
- ▶ A plurality of proposals is at the farm level. Pressure will be intense for a farm-specific program, if for no other reason than such a program delivers the most risk assistance to individual farms.
- ▶ Providing more assistance to individual farms than their share of systemic risk will lead to inefficient use of both private and public resources by
 - ❖ encouraging more production in areas with the greatest risk than is consistent with appropriate economic policy,
 - ❖ potentially creating environmental problems since risky production areas are often environmentally sensitive areas,
 - ❖ encouraging producers in all production areas to use more risky production practices, resulting in inefficient use of resources, and
 - ❖ increasing cost of the program to the public.
- ▶ A systemic risk program directed toward an area larger than the farm is preferred because it is systemic risk that causes the economic problem of incomplete insurance markets.
- ▶ While not the preferred option, if a farm-specific program is enacted, its payment rate should not exceed the share of farm-level risk that is systemic with a larger geographic area.

Farm Safety Net Proposals	Number of Proposals
Proposal Includes	
Revenue program (includes ACRE)	9 (exception: FOR)
Shallow loss program (includes ACRE)	9 (exception: FOR)
Coordination with crop insurance (includes ACRE)	9 (exception: FOR)
Revenue Program and FOR Program has	
individual crop orientation	9 (exception: CRGP)
multi-year benchmark (does not adjust immediately)	9 (exception: CROP)
farm loss must exist for farm to receive payment	9 (exceptions: FOR)
no fixed price or revenue benchmark	8 (exceptions: CRGP, STAX)
Revenue Program is delivered through	
Crop insurance	3 (CROP, FFSN, STAX)
Another program (includes ACRE)	6 (ADAP, AFBF, ADMIN, ARRM, CRGP, RMAF))
Revenue Program and FOR Program is sited at	
State	2 (AFBF, ADMIN)
Crop Reporting District	2 (ADAP, ARRM)
County	2 (STAX, CROP)
Farm	4 (CRGP, FFSN, RMAF, FOR)

Key: **ADAP** (Agriculture Disaster Assistance Program) by National Corn Growers Association, **AFBF** (American Farm Bureau Federation), **ADMIN** (Administration), **ARRM** (Aggregate Risk and Revenue Management) by Senators Brown, Thune, Durbin, and Lugar, **CRGP** (Crop Revenue Guarantee Program) by Senator Conrad, **CROP** (Crop Risk Options Plan) by Representative Neugebauer, **FFSN** (Farm Financial Safety Net) by a private crop insurance company, **FOR** (Farmer-Owned Reserves) by National Farmers Union, **RMAF** (Risk Management for America's Farmers) by American Soybean Association, and **STAX** (Stacked Income Protection Plan) by National Cotton Council.

Other Policy Design Considerations

- ▶ Reliable data are needed for a risk program to be fair. Currently, USDA, National Agricultural Statistical Service data on yield is statistically reliable only at the state and U.S. levels. Methods exist to combine data from different sources, such as yield data from USDA, Risk Management Agency with yield data from USDA, National Agricultural Statistical Service. The farm safety net could be improved if these methods are explored.
- ▶ Policy design considerations include administrative costs, transparency of the policy, simplicity of the parameters, and use of a co-pay. Attention to these issues can minimize cost and administrative errors as well as the potential for program participants to manipulate the policy. These issues will help determine whether the program should be delivered through crop insurance or the Farm Service Agency, an attribute on which disagreement exists among the proposals (see table on page 2).
- ▶ Payment limits undermine the effectiveness of a risk management program because the size of the loss is only known after the risk has occurred, not before it has occurred. Thus, a fixed, invariant payment limit can constrain the value of the program precisely when society may wish to provide the most assistance. If the decision is made to have payment limits, they should be flexible and adjust in some fashion with the size of the loss.

References

- Shields, Dennis and Randy Schnepf. (October 6, 2011). Farm Safety Net Proposals for the 2012 Farm Bill." Congressional Research Service, *CRS Report for Congress* 7-5700.
- Tweeten, Luther and Carl Zulauf. (Fall/Winter 1997). "Public Policy for Agriculture after Commodity Programs." *Review of Agricultural Economics*. Volume 19, number 2, pages 263-280.
- Wright, B.D. and J.A. Hewitt. (1994) "All-Risk Crop Insurance: Lessons from Theory and Experience." in *Economics of Agricultural Crop Insurance: Theory and Evidence*. Edited by Darrell L. Hueth and William H. Furtan. Kluwer Academic Publishers: Boston. Pages 73 – 112.
- Zulauf, Carl. (September 2011) "A Coordinated Farm Risk Management Safety Net," Ohio State University, Department of Agricultural, Environmental, and Development Economics.
- Zulauf, Carl. (March 2011) "Designing a Safety Net for 21st Century Farming," Ohio State University, Department of Agricultural, Environmental, and Development Economics AEDE-RP-0134-11.
- Zulauf, Carl. (July 2011) "A Look at Crop Insurance as a Farm Payment Program," Ohio State University, Department of Agricultural, Environmental, and Development Economics.
- Zulauf, Carl, Gary Schnitkey, and Michael Langemeier. (2010) "ACRE, Crop Insurance, and SURE: Interactions and Overlap for U.S. Midwest Crops." *Journal of Agricultural and Applied Economics*. Volume 42, Number 3, pages 695-700.

Table 1a. Comparison of Selected Farm Safety Net Program Proposals, as of October 6, 2012

KEY: AGI = aggregate gross income payment limit; APH = crop insurance average production history yield; CAT = catastrophic crop insurance product; CRD = crop reporting district; OMA = Olympic moving average (removes high and low value); NAP = noninsured crop disaster assistance program

Characteristic	ADAP (Corn Growers)	ARRM (Brown/Thune/Durbin/Lugar)	RMAF ^A (American Soybean)	STAX (for cotton only) (National Cotton Council)	CRGP (Conrad)
Programs Eliminated	direct payments, counter-cyclical, ACRE, SURE	direct payments, counter-cyclical, ACRE, SURE for ARRM eligible crops	direct payments, counter-cyclical, ACRE, SURE	direct payments, counter-cyclical, ACRE	counter-cyclical, ACRE, SURE for CRGP eligible crops, cuts direct payments 50%
Program Level	CRD	CRD	farm	county	whole crop farm
Revenue Program	yes	yes	yes	yes	yes
Yield Type for Benchmark	CRD yield; farm yield for farm loss condition	CRD yield; farm yield for farm loss condition	MAX [APH or 5-year OMA APH or 80% county yield]	expected county yield	MAX [APH or 5-year OMA APH]
Price Type for Benchmark	crop insurance harvest price	insurance harvest price (if not available, average of 1 st 5-months of crop year)	5-year OMA of U.S. crop year cash price	MAX [insurance plant price or fixed reference price]	MAX [2010 target price or 5-year OMA crop year price]
Price Type for Realized Revenue	crop insurance harvest price	same price type used for benchmark	1 st 4 months of U.S. crop year cash price	insurance harvest price	MAX [1 st 4 months of U.S. crop year cash price or loan rate]
Range of Loss Covered	5% to 15%	10% to 25%	dryland: 10% to 25%; irrigated: 5% to 20%	producer elects; non-specified MAX loss exist	Greater than 10% but MAX per acre payment exists
Payment Factor	100%	85%	85%	100%	60%
Note on Program	benchmark = 5-year OMA of revenue computed for year (no cup & cap)	benchmark = 5-year OMA of revenue computed for year (10% cup & cap); elected annually	Payment factor could be reduced to make budget; payment calculation includes net insurance payouts	insurance not required for STAX; farmer co-pay possible	requires CAT/NAP; payment capped at base acres; payment adjusted for net insurance payouts & quality loss; disaster programs for other farm sectors
Program Payment Limit	does not discuss	\$65,000; 2008 Farm Bill AGI	maybe; 2008 Farm Bill AGI	not discussed	not discussed
Marketing Loan	continue	continue	continue	loan rate tied to 2-year average price but within \$0.47-\$0.52	not discussed

Note: A. RMAF proposes that (1) the percent budget cut be the same for conservation and farm programs, (2) no cut be made in crop insurance, and (3) the acre cap for the Conservation Reserve Program be reduced.

Table 1b. Comparison of Selected Farm Safety Net Program Proposals, as of October 6, 2012
(KEY: APH = crop insurance average production history yield; OMA = Olympic moving average (removes high and low value))

FFSN (crop insurance company)	CROP (Neugebauer)	AFBF (American Farm Bureau)	Administration (Obama)	FOR (National Farmers Union))
<u>Programs Eliminated:</u> direct payments, marketing loan benefits, counter-cyclical, SURE; maybe ACRE	<u>Programs Eliminated:</u> None	<u>Programs Eliminated:</u> SURE	<u>Programs Eliminated:</u> direct payments	<u>Programs Eliminated:</u> direct payments, marketing loan benefits, counter-cyclical, SURE; ACRE
<u>Program Description</u> ▶ program level is the farm ▶ makes crop insurance the farm safety net ▶ to protect against multiple-year losses, minimum price is added to insurance equal to 80% of 5-year average of insurance plant price ▶ in computing APH, excludes some low- yield years if certain conditions are met ▶ to address shallow loss, adds 5 percentage points to coverage (e.g., 75% becomes 80%) ▶ limits farm-paid premiums to 15% of total dollars of enterprise ^A coverage	<u>Program Description</u> ▶ allows producers to supplement individual insurance coverage with additional coverage via a county insurance product to cover shallow losses ▶ changes APH calculation from a 10- year average to a 7- year OMA.	<u>Program Description</u> ▶ proposes that any budget cuts be distributed: 30% each from farm, conservation, and nutrition programs; 10% from crop insurance ▶ farm program cut distributed: 94% from direct payments, 5% from ACRE, 1% from dairy ▶ Reducing 85% payment factor is only specific method mentioned to cut direct payments and ACRE ▶ Conservation cut distributed: 67% from land retirement programs, 33% from working land programs ▶ Conservation Reserve Program cap reduced. ▶ Fewer number of conservation programs	<u>Program Description</u> ▶ reduces spending over 10 years on farm safety net programs by \$30 billion, on conservation programs by \$2 billion, and on crop insurance by \$8 billion	<u>Program Description</u> ▶ allows producers to put their crop into the crop's farmer owned reserve (FOR) when market price is below the crop's loan rate. ▶ producers paid a \$0.40/ unit/year FOR storage fee ▶ Loan rates are pegged to the corn loan rate and are adjusted for changes in the chemical input price index. ▶ when FOR reaches its cap, a voluntary paid land set-aside is triggered; producers can bid acres into the set-aside program based on their whole-farm acres (not crop-by-crop acres)

Notes: A. All acres of a crop in a county.

Table 2. Comparison of Selected Program Parameters for Crop Revenue Insurance, SURE, and ACRE, 2008 Farm Bill

The overlap among these programs is less than it appears. ACRE and insurance payments are included when calculating SURE payments, thus eliminating overlap. ACRE's overlap with crop insurance is limited because (1) ACRE pays on shortfalls in state revenue while crop insurance pays on shortfalls in county or farm revenue and (2) ACRE's state revenue payments are limited by a 25% cap. The latter means that ACRE covers state revenue losses between 10% and 32.5%. In contrast, approximately 75% of the crop insurance elected by farmers in 2010 only covered losses that were greater than 25%. Zulauf, Schnitkey, and Langemeier found that the payment overlap between ACRE and 75% Crop Revenue Coverage insurance due to covering the same part of the revenue risk distribution was less than 5% of all ACRE payments.

SURE and ACRE both largely address shallow losses or losses smaller than the crop insurance deductible. ACRE is the only program that addresses multiple-year revenue declines due to the use of historic moving averages to set its benchmark and a 10% limit on the annual decline in its benchmark value. In contrast, the benchmarks for crop insurance and SURE are determined each year; thus, these programs provide only single-year risk protection.

Program Parameter	Revenue Insurance	SURE	ACRE
Area Covered	individual field, or enterprise, ^A or county	whole crop farm	state; farm also must have a loss
Farm Loss Required	yes	yes	yes
Period Covered	growing season	growing season and marketing year	multiple marketing years
Yield Used to Compute Realized Value	current crop yield	current crop yield	current crop yield
Benchmark Value	historic insurance APH ^B yield	historic insurance APH ^B yield	5-year historic Olympic average
Price Type Used to Compute Realized Value	futures	U.S. marketing year cash	U.S. marketing year cash
Benchmark Value	futures	futures	2-year average of U.S. marketing year cash
Percent of Coverage	coverage level is elected: maximum is 85% for individual and 90% for county insurance	elected insurance coverage increased by a multiplier factor but cannot exceed 90% of expected revenue	90%
Payment Factor	100%	60%	83.3% or 85%, depending on year
Cap on Decline in Benchmark	None	None	10%
Cap on Payment	None	None	25%
Limit on Program Payment ^C	None	\$100,000	\$65,000 + 20% reduction in direct payments (max = \$8,000)

Notes: A. All acres of a crop in a county. B. APH = crop insurance average production history yield. C. Payments also are subject to Aggregate Gross Income limits in 2008 Farm Bill. Sources: U.S. Department of Agriculture (USDA), Farm Service Agency and USDA, Risk Management Agency.