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# Agriculture's Safety Net

## Looking Back to Look Ahead

by Joy  
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The safety net's been a non-starter of an issue these past two years with the farm economy so strong. But 1998 is starting off looking like a different sort of year.... I think it would be a wise time to settle the unfinished business of 1996 and answer the question: In the post-farm-bill world, what is the proper role of government in helping farmers should the market take a turn for the worse?

—Secretary Glickman at the 1998 Farm Bureau Convention, 12 January 1998

**T**alk of the "safety net" has grown louder as farm prices declined sharply from their near-record-high levels during the 1996 farm bill debate. Senator Roberts (R-Kansas) recently declared that a safety net should be "a trampoline and not a hammock." Congressman Gutknecht (R-Wisconsin) wants the safety net to be a "shock absorber." Although no one definition of a safety net has been widely adopted, most interested parties believe a safety net should provide some combination of government support of farm incomes and protection against "undue" downside income or price variability.

The recent introduction of various farm safety-net bills and proposed changes to the federal crop insurance program make the safety net once again a hot topic. How has the farm safety net changed over time? What critical questions and issues should be addressed by a safety net as we look to the future? Answers to these questions can help guide the debate about a safety net for the twenty-first century.

### Looking back

Since its inception in the 1930s, the government safety net for agriculture has been woven from many strands. These strands included direct income payments to producers, "non-recourse" commodity loans, crop yield and revenue insurance, disaster assistance, government inventory operations, producer storage subsidies, farm credit, and selected

tax provisions (such as income averaging). At the same time, private-sector risk management tools are increasingly seen as important, integral strands of the safety net.

The levels, forms, and impacts of these strands—both government and private-sector—have changed over time. For example, non-recourse commodity loan programs have always provided short-term financing (the original justification), but the level at which loan rates are set can have a major impact on market prices and producer returns. When loan rates are set above market-clearing prices they may, depending on their implementation, support market prices (and income), as during the 1950s and early 1980s, or they may simply support income (but not market prices), as during the late 1990s. Crop insurance availability and subsidies have been expanded to new crops and new regions, as well as to revenue-based programs, and a whole-farm revenue insurance option is being offered as a pilot program in selected counties in 1999. Options on futures contracts have been available for agriculture since 1986, and a pilot program on off-exchange options was first authorized in mid 1998.

We illustrate the changing farm safety nets of the twentieth century with a table of "snapshot" years and a short narrative. For commodity provisions (which can vary among crops), we use wheat as the representative crop. Wheat—along with feed grains, cotton, and rice—has been one of the major "program" crops supported by government intervention since the 1930s. At the same time, legislators from key wheat-producing states have been among the most vocal in the current debate on the farm safety net. For our snapshot analysis, we started with 1924 and then chose other years representative of their era—years not unduly influenced by wartime phenomenon, the Depression, or other extreme situations.

Our story begins just after the collapse of grain

prices in the fall of 1920, when rapid acreage expansion (in response to the high prices of World War I) and stagnating per-capita consumption raised a clamor for government assistance. Policy to meet the cost-price squeeze focused not on direct payments and price supports but on provisions designed to provide countervailing power in the marketplace (Benedict). Under the Capper-Volstead Act of 1922, farmers could form centralized cooperatives, exempting them from anti-trust legislation, in this era of "blame the business interests" (Cochrane). At the same time, the government assisted in making available feed, seed, and fertilizer loans to help farmers in areas hard hit by poor weather. In contrast to the current array of offerings, the private sector provided few mechanisms to help producers. Futures markets, although open for wheat since the 1860s, were not as liquid as they are currently, and the potential for "corners" and "squeezes" was an ever-present threat (Paul). In addition, relatively few farms produced enough wheat to effectively use 5,000-bushel contracts for hedging.

Low prices, excess supplies, and weak export demand (the United States exported less than 0.5 percent of its wheat production in the early 1930s) led the government to design the first peacetime commodity programs in 1933. These programs supported prices while adjusting production to demand. Just a few years later, the Agricultural Adjustment Act (AAA) of 1938 authorized a system of acreage allotments and marketing quotas. An acreage allotment was assigned to each farm. The allotment specified the farm's share of national acreage needed, according to the secretary of agriculture, to produce sufficient supplies of a particular crop. Farmers who produced within their allotment were eligible for non-recourse loans (loans which could be satisfied at maturity by forfeiting to the government grain held as collateral, instead of selling the crop and repaying the loan amount). The government set loan rates based on market factors and parity relationships (parity prices kept farmer purchasing power on par with a designated historical period). Reflecting on this period, Paarlberg notes that, "It was generally agreed, back in the days when the parity concept originated, that parity prices were so high as to be unobtainable."

In addition to these provisions, the government authorized payments if a producer chose to plant "soil-conserving" crops and made parity payments if Congress appropriated sufficient funds for that purpose. If the government projected what it deemed to be excessive supplies, it announced marketing quotas (which indicated the amount of the commodity that could be marketed within the year). If two-thirds of producers approved these quotas, all producers of the crop were limited to marketing



no more than the production from their allotment plus carryover quota from previous years (Benedict, Hadwiger). Federal crop insurance was first initiated in 1938 but was not generally available in high-risk areas (USDA).

This system of acreage allotments and marketing quotas continued throughout the 1950s, a time of strict controls over planting decisions and accumulating government stocks. Food aid under P.L. 480 was widely used to dispose of "excess" production, and export credit guarantees were first introduced in 1956 (Ackerman and Smith). While loan rates were lowered modestly toward the end of the decade, they remained substantially above market-clearing levels. Under the Soil Bank's "Conservation Reserve," farmers received direct payments to shift cropland acres to long-range conservation uses. The Soil Bank programs were not very successful in reducing total output, however, and voters were concerned about "paying producers for growing nothing" (Cochrane and Ryan). In 1960, wheat ending stocks reached 110 percent of total use and USDA's Commodity Credit Corporation (CCC) owned 91 percent of all U.S. wheat stocks. According to Hadwiger, mountains of surplus wheat characterized the "farm problem."

Booming export markets of the mid 1970s brought a changed role for the government, including set-asides, target prices, and deficiency payments (which paid producers on the basis of the difference between a politically determined target price and a market price established over a predefined period). The 1973 Act authorized deficiency payments, designed to provide income support to producers, and the 1977 Food and Agriculture Act replaced allotments (which were, at times, out of line with current plantings) with the concept of deficiency payments

1924 "Blaming the Business Interests"	1939 "Adjusting Output to Demand"	1960 "Continuing the Course"
<ul style="list-style-type: none"> <li>• Farm cooperatives exempted from antitrust protection in the Capper-Volstead Act of 1922.</li> <li>• Producers formed "pools" in an attempt to obtain market leverage relative to downstream buyers; less than 8% of Kansas production covered by the state pool in this peak membership year.</li> <li>• Emergency feed, seed, and fertilizer loans made to assist farmers in hard-hit areas; average loan amount: \$215.</li> <li>• No direct payments to producers; no federal commodity loans.</li> <li>• No federal crop insurance, although some hail insurance through state systems. Hartford's "cost of production" insurance policy abandoned two years earlier after two years of heavy losses.</li> <li>• Hedging in futures was possible, although risky given the potential for "squeezes" and "corners."</li> </ul>	<ul style="list-style-type: none"> <li>• Acreage allotments and marketing quotas, requiring a 2/3 referendum, limited amount of wheat marketed without penalty. Voted on only in years of projected excess supplies.</li> <li>• Complying farmers eligible for non-recourse loans (as a percentage of parity), conservation payments (for fallowed land), and parity payments (low price protection).</li> <li>• Federal crop insurance in its second year, but availability limited to major areas.</li> <li>• Various subsidized loans to low-income farm families to help them survive hard times; loans for farm water systems; etc.</li> <li>• First food stamp program—\$2 of surplus food (inc. flour) could be bought with stamps costing \$1.</li> <li>• About \$20 million each spent on wheat/flour distribution to the needy and export subsidies.</li> </ul>	<ul style="list-style-type: none"> <li>• Allotments and marketing quotas were continued, although beginning in 1959, overplanting was penalized through allotment reduction.</li> <li>• Commodity loan rates set at 75% of parity, down from earlier levels of 90%, but still setting a floor for market prices. CCC owned 80% of huge year-end stocks.</li> <li>• The Soil Bank's Conservation Reserve shifted cropland acres to long-range conservation uses in return for direct payments.</li> <li>• Federal crop insurance still available only in limited areas.</li> <li>• Various subsidized loans to low-income farm families, including farm ownership and operating loans, emergency farm loans, housing loans, and small watershed project loans.</li> <li>• U.S. share of world wheat exports at 42%, with 2/3 of U.S. exports shipped under PL480. U.S. exports were 53% of total U.S. use.</li> </ul>

based on actual plantings. Loan rates provided price support, while target prices were indexed to various production cost measures. Both loan rates and target prices increased considerably in the late 1970s (Harwood and Young). Building surpluses in the late 1970s led to the Farmer-Owned Reserve (FOR), a program that allowed farmers to retain ownership of their crops over a multiyear period. Under the FOR, producers could realize any potential increase in the value of their stocks, with the added incentive of government-subsidized storage.

In the early 1980s, Congress used projected inflation rates—which in retrospect turned out to be too high—to establish minimum loan rates and target prices. Despite the introduction of crop-specific acreage reduction programs in the early 1980s, wheat surpluses again grew. With high safety-net levels provided by the loan rate and target price, the 1984 deficiency payment rate reached \$1.00 per bushel, accompanied by a 20 percent acreage reduction program and a paid land diversion (Harwood and Young). Congress had directed USDA to greatly expand coverage provided under the federal crop insurance program and had eliminated the statutory disaster assistance of the 1970s. Private hail-protection policies were widely avail-

able. In addition, USDA had become a major provider of farm capital, holding or backing over 17 percent of farm debt by the 1980s (Collender and Koenig). Farmers generally had ready access to different types of forward contracts, and some—mainly operators of the largest farms—hedged directly in futures markets (Harwood et al.).

By the 1985 crop year, high loan rates and associated large supplies and low exports, among other factors, pushed year-ending wheat stocks to a monumental 97 percent of total use. In an effort to increase U.S. competitiveness, Congress lowered loan rates, implemented the Export Enhancement Program (EEP), and used the Conservation Reserve to promote long-term land retirement (a take-off on one of the Soil Bank programs of the 1950s). In addition, generic commodity certificates, issued to producers and exporters in lieu of cash payments, helped reduce government stocks as producers repaid loans rather than forfeiting grain to the government, and exporters were able to access government grain stocks despite sales price restrictions. Even with the drop in loan rates, the safety net still remained well in place, with income support provided by a deficiency payment rate of \$1.98 per bushel in 1986/87 (Harwood and Young). In addi-

1984

**"Averting Crisis"**

- Allotments and quotas had been replaced with deficiency payments, set-asides, and a farmer-owned reserve.
- In 1984, a 20% acreage reduction program (ARP) and a 10% land diversion (paying \$2.70 per program yield bushel) was in effect for participating producers.
- Participants had access to CCC loans at an average rate of \$3.30/bu.; farmer-owned reserve offered same rate, plus \$0.265/bu in annual storage payments.
- Deficiency payment of \$1/bu. to participants based on \$4.38 target price.
- Federal crop insurance expanded to new geographic areas; disaster payments made only to farmers for whom insurance was unavailable.
- Expanded provisions for farm ownership, operating, and emergency loans; special debt restructuring programs.
- PL 480 and export credit guarantees used to boost exports.
- Earned income tax credit (EITC) available to low-income workers who satisfy criteria.
- Forward contracting widely available; few producers hedging directly in futures.

1994

**"Moving Toward the Market"**

- Continuation of deficiency payments, with 15% no-pay normal flex acres lowering benefits.
- Planting flexibility on up to 25% of base; no ARP in 1994.
- Participants had access to CCC loans at an average rate of \$2.58/bu.; marketing loan provisions, designed to minimize forfeitures, allowed farmers to benefit from difference in loan rate and "repayment rate" when market prices were low; farmer-owned reserve continued.
- Deficiency payment of \$0.61/bu. to participants; \$4.00 target price.
- Federal crop insurance covered wheat in nearly all areas; program reform, partially in response to seventh straight year of ad hoc disaster aid.
- PL 480, Export Enhancement Program (EEP), and export credit guarantees used to boost exports.
- About 35 million acres in the Conservation Reserve Program, of which about 11 million were wheat base acres.
- EITC provisions continue to provide assistance to rural poor.
- Various types of federally subsidized loans, including emergency, farm ownership, farm operating, and beginning farmer loans; focus moved from direct to guaranteed lending.
- Various types of forward contracts widely available; still relatively few producers hedging directly in futures.

1998

**"Balancing Competing Demands"**

- Replacement of deficiency payments with contract payments, invariant to market prices; payment rate of \$0.66/bu. on 85% of base.
- Complete planting flexibility, with some limits on fruits/vegs; no ARPs or set-asides; farmer-owned reserve eliminated.
- Participants have access to CCC loans at an average rate of \$2.58/bu.; marketing loan provisions continue to help provide income support.
- Emergency assistance in fall, 1998: >\$3 billion in market loss assistance (due to low prices), of which \$750 million paid to wheat producers. Multiyear and single-year crop loss payments; various tax, other provisions.
- Federal crop insurance available for wheat in all areas, but considerable dissatisfaction; several types of USDA-subsidized revenue insurance available.
- Use of export credit guarantees, other programs to boost exports; EEP available but not used.
- About 30 million acres in the Conservation Reserve, of which 8.4 million were wheat acres.
- EITC provisions continue to provide assistance to rural poor.
- Various types of federally subsidized loans, including emergency, farm ownership, farm operating, beginning farmer loans.
- Various types of forward contracts; use of hedging, other tools on the rise.

tion, farm loan programs were expanded and revised to provide a greater safety net, helping offset the financial crisis faced by many farmers (USDA-FmHA). Federal crop insurance between 1981 and 1989 paid out \$1.55 for every \$1 in total premium (the producer-paid premium plus the government subsidy), while participation remained at less than one-third of total eligible acres.

Droughts in 1988 and 1989 significantly reduced supplies and raised prices, and greater market orientation—encouraged by tight budget constraints—was the wave of the next ten years. In the early 1990s, program participants no longer received deficiency payments (which varied inversely with market prices) on all of their wheat grown on wheat base acres. Ad hoc disaster assistance was enacted for 1988–94 crops in response to yield losses in

major producing areas, and federal crop insurance was reformed in 1994 to once again attempt to make it the major form of yield loss assistance to producers. As the high prices of the mid 1990s emerged, many observers thought that the marketplace provided a sufficient safety net. Robust exports and a wide variety of private insurance products and forward pricing arrangements supported arguments for a market orientation in agriculture, freer of government subsidies and regulation.

With the 1996 Act, eligible wheat producers receive production flexibility contract payments that do not vary with market conditions (Jagger and Harwood). They have access to commodity loans (at loan rates now capped at 1995 levels), farm operating and ownership assistance loans, and a more highly subsidized federal crop insurance pro-

gram (including various revenue insurance options). With low commodity prices and serious yield losses in some areas in 1998, however, Congress authorized about \$6 billion in additional aid to farmers (Morehart and McElroy). As of February 1999, USDA projected that per-acre market returns over variable costs for 1998 wheat would be \$45, significantly below the 1994–97 average of \$82 per acre (USDA, USDA-OCE). And, as of mid 1999, many analysts expect no rebound in net market returns for major crops in 1999; some project even lower net returns than in 1998.

### Looking ahead

Discussions on Capitol Hill in mid 1999 focused on alternatives ranging from uncapping loan rates to revamping (again) the federal crop insurance program, this time by increasing the premium subsidy



and providing a higher level of catastrophic coverage. As our narrative and table have shown, the direction of government aid and intervention can take many paths. Here we pose some questions to help guide the safety net debate, and offer some lessons learned from past safety-net policy.

- *Should safety-net policies be automatic or ad hoc?* Although both types of assistance have been available in different forms over the years, market prices automatically triggered safety net policies between the mid 1970s and mid 1990s. Such “automatic” responses can, however, distort price signals, as was the case in the early 1980s when high loan rates and target prices signalled farmers to produce unwanted surpluses. The 1996 Farm Act, with its fixed contract payments, cancellation of acreage reduction programs and the Farmer-Owned Reserve, and capped loan rates,

removed many of the market-triggered safety net mechanisms. The 1996 Farm Act did, however, still provide for loan deficiency payments (allowing producers to capture the difference between the loan rate and a locally determined market-price proxy), keeping in place a partial safety net. With less of an automatic response in place in 1998, both Congress and USDA took steps to counter poor economic conditions. Congress provided an ad hoc supplemental appropriation of almost \$6 billion for “market-loss” and emergency yield loss assistance for fiscal year 1999. In addition, USDA took various ad hoc actions to support prices and promote exports using existing legislative authority. If 1998 offers any gauge, it appears that ad hoc payments are likely in years of poor market conditions unmitigated by automatic, market-triggered government payments—even if some automatic assistance, such as loan deficiency payments, remains.

- *How should safety-net costs be shared between taxpayers and farmers?* Historically, most payments to producers—with the exception of federal crop insurance, which requires a premium—required no direct cash outlay. Rather, as illustrated above, many programs offered during the middle part of the century tied the receipt of direct payments (the “carrot”) to the producer-borne cost of taking land out of production (the “stick”). With substantial productive capacity in Argentina, Brazil, China, and other countries, taking land out of production in the United States sends a strong signal elsewhere in the world and appears to be a less viable option than it did thirty or more years ago when the infrastructure in such countries was less well-developed and their policies were not as likely to promote exports. As a result, insurance (with a part of the cost assumed by producers) and programs that remove the cap on loan rates or offer decoupled cash payments (both safety-net options that do not impose direct costs on producers) receive more attention today.
- *Should the safety net be tied to production or should it be independent of output?* Until the 1996 Farm Act, government programs typically tied payments—sometimes closely and sometimes not so closely—to current production or land use. In the early 1980s, for example, deficiency payments depended on acres planted (limited by acreage reduction requirements) and payment yields that could be increased by “proving” the actual yield. The government froze program yields in 1986 for budgetary reasons, at a time when yields for most crops trended upward. With the 1990 Farm Act, the introduction of 15 percent “normal flex acres” reduced potential payment acres and weakened the link between actual production and pay-

ment production. In 1996, the linkage between contract payments and current production was completely severed. In contrast, non-recourse loans—and marketing loan benefits—have been consistently available on actual output since the 1930s. Many economists historically have come out on the side of decoupled payments because linking payments to production can encourage output—a result that often works counter to combating the low prices that income-support programs aimed to remedy.

- *Which farmers should be assisted?* To date, most safety net actions taken by the federal government have focused on assisting producers of seven “program” crops: wheat, corn, sorghum, barley, oats, rice, and cotton. (Soybean producers have also benefitted through a loan program, while tobacco, peanut, sugar, and dairy producers have benefitted through unique programs designed for each commodity.) Livestock producers have received assistance primarily indirectly, through such programs as livestock feed assistance and through pilots such as the dairy options pilot program initiated in 1998. Unusually low beef and pork prices in 1998 and 1999 have spurred the interest of livestock producers in the price protection safety net historically provided to crops through direct payments or, recently, through revenue insurance. Certainly, assistance to agriculture can be delivered in broader, non-commodity-specific ways. Increased interest appears to be centered on the idea of whole-farm programs that could encompass both crops and livestock, and a “whole farm” revenue insurance pilot, based on farmers’ Schedule F tax forms, has been initiated in selected areas in 1999. Alternatively, payments could be targeted to producers with low incomes—a policy that would have a dramatic impact on the distribution of farm program benefits across different types of farms.
- *How much producer management is needed?* Some policy options—such as deficiency payments—require very little management by producers. From the 1970s through the early 1990s, participating farmers received a deficiency payment check in the mail based on the difference between a pre-set target price and an average market price. Crop- or revenue-insurance programs also require few management decisions—other than the decision to enroll and at what coverage level. In contrast, the use of marketing loan gains and loan deficiency payments may require more management because producers must decide on the day (or days) to capture the benefit and must do so before the crop is sold. The use of futures, options, and various types of cash forward contracts—such as deferred price or hedge-to-arrive

contracts—require the greatest degree of farmer education and management decision making.

- *What role should the private sector play?* Private companies have increasingly become a strong force, offering products available to manage risk in agriculture. The variety of forward contracting tools available to producers has expanded rapidly over the past fifteen years, and approximately forty-five insurance products—some subsidized but some not—were available in the late 1990s (Tim Hoffman, USDA-Risk Management Agency, personal communication, March 1999). According to USDA’s Agricultural Resource Management Study, many commercial-size producers make fairly widespread use of such tools. In USDA’s 1996 survey, for example, about 60 percent of producers with sales of \$250,000 or more used forward contracts, and about 45 percent used futures or options (Harwood et al.). Given the availability, and use, of private alternatives, many observers question the need for government subsidies and regulation. It also raises a key safety net issue: Are we after risk management, income enhancement, or both?
- *Do farmers really need safety nets?* This last key question underlies much of the debate and ultimately will be answered, as the other questions, in the political arena. Some believe that greater concentration of assets may make producers more focused and effective lobbyists. Others believe, however, that as the farm population dwindles and the U.S. population becomes more urban, the political support for transfers to farmers will likely become increasingly thin. This may be particularly the case as farming becomes increasingly industrialized and average farm size (and net worth) grow. The question may become, Why subsidize farming more than other types of businesses?

In the 1920s, farm incomes averaged only about one-quarter of nonfarm incomes, and the standard of living for farm people was below that of urban dwellers. In contrast, incomes per farm household today generally equal or exceed those of nonfarm households, and the wealth of farm households averages several times that of all households (USDA-ERS). Even so, averages can mask the great variability across households—both farm and nonfarm. USDA data indicate, for example, that half a million farm households in the United States had incomes below \$20,000 in 1997 (Mitch Morehart, USDA-ERS, personal communication, June 1999).

### Looking back—looking ahead

Even with changes in general farm conditions, many safety net ideas tend to resurface over time. The Soil Bank’s Conservation Reserve Program of the 1950s, for example, also appeared in the 1985 Farm



Act as a means to preserve soil and help boost market prices through long-term land retirement. Similarly, cost-of-production insurance, promoted by some farmers in the late 1990s, was first tried in the early 1920s by the Hartford Insurance Company. The company charged a premium equal to 6 percent of liability; without government subsidization, however, losses mounted and the policy was dropped after only two years (Benedict). In several periods, the government used grain to make program payments and simultaneously reduce large government stocks. At various other times, the government simply provided direct subsidies.

As policy makers consider a safety net for the new millennium they will, of course, look back to the effects of previous policies to see what has or has not worked. In doing so, however, they need to look not only at government policies but also at how the economic (and political) climate has changed, taking into account globalization, the introduction of biotechnology, consolidation within agribusiness, the WTO negotiations, and other factors. How best to help producers and others in the farm sector deal with the structure of the new millennium—given the price and yield risks confronted in farming—is a critical question. ■

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