

Theme Overview: Looking Ahead to the Next Farm Bill

Carl Zulauf

JEL Classifications: H51, K00, N50, N52, Q10, Q18

Keywords: Conservation Title, Dairy Safety Net, Evolutionary Policy Change, Farm Bills, Farm Policy, Field Crop Safety Net, Livestock and Specialty Crop Safety Net, Nutrition Safety Net

In contrast to the on time start and late arrival of the 2008 and 2014 farm bills, early chatter suggests the next farm bill debate will begin early 2017 with the goal of being completed by the date many provisions in the 2014 farm bill expire on September 30, 2018. This alternative timing reflects several factors, including the tumultuous legislative path of the 2014 farm bill, a desire to secure a favorable budget baseline for the commodities title due to current low crop prices, and the need to address emerging issues. This set of six articles frames key issues and titles in the upcoming debate. The discussion follows in the spirit of several recent farm bill themes in *Choices*: 3rd Quarter 2016—Crop Insurance; 3rd Quarter, and 2nd Quarter 2014—Welfare Assessment and Provisions, respectively, of the 2014 farm bill; and 3rd quarter 2013—Risk Management Issues and the farm bill.

Zulauf and Orden note that farm bill to farm bill adjustment is often minimal, but considerable change has occurred over time. While less than desired by critics, the change can be characterized as evolutionary reform that increased planting and price flexibility. Their article also discusses process dynamics, including the role of experimentation and of mean reversion in spending share by commodity. They note expanding coverage in recent farm bills and the long running willingness to bend the farm bill toward new and emerging issues, but also emphasize the importance of the budget baseline for the commodities title in writing farm bills, including its likely importance for the next farm bill.

Wilde discusses the history of the relationship between the farm bill and the nutrition title, which by far accounts for most of the farm bill's budgetary cost—around 80%. He highlights the importance of the Supplemental Nutrition Assistance Program (SNAP). SNAP shares a countercyclical feature with the crop and dairy programs. Wilde discusses the movement toward nutrition and away from calories alone, and speculates that the interrelationship between food consumption and cost of medical care may emerge as a guiding theme in the forthcoming debate.

Coppess argues the growing concern over water quality may provide another opportunity to bend the farm bill. Emerging water quality issues reflect not just a change in society's desires but also on-going legal action. Coppess suggests that this concern along with the current low farm return environment and resulting concern over financial

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stress present the opportunity for a new hybrid program. It would merge existing countercyclical programs with payment for best management practices that improve water quality. Payments would cover part or all the cost of adoption and use, but only if a payment is made by the countercyclical program due to low crop prices or revenue.

Schnitkey and Zulauf discuss the crop safety net, which includes both the commodities and crop insurance titles. They argue the forthcoming farm bill debate is likely to focus on the cost of the Price Loss Coverage (PLC) program versus the cost of crop insurance. They note this debate is likely to be a somewhat different take on long standing crop and regional differences, in this case preference of Midwest corn and soybean producers for crop insurance versus preference of Southern rice, peanut, and cotton producers for commodity programs, in particular PLC. They also discuss a new issue—the proposal to create a new cotton oilseed program, the latest chapter in how to respond to relatively low support for cotton in the 2014 farm bill after the World Trade Organization’s ruling against the 2002 farm bill’s cotton program.

Novakovich and Wolfe chronicle the discontent among dairy producers with the milk-feed cost margin program initiated by the 2014 farm bill. This discontent is raising another new issue—how to change the support program for dairy. They discuss changes being proposed to the milk-feed price margin program, but also raise fundamental questions about whether this margin program is consistent with the underlying desires and managerial behavior of dairy producers.

Mercier documents an important expansion in the scope of the farm bill—emergence of safety nets for livestock (excluding dairy) and specialty crop producers. Their safety nets center on market development, disaster assistance, and research; and thus differ from the safety net for crops, dairy, and nutrition. Mercier chronicles the change in attitude among livestock and specialty crop producers that led to this safety net.

Summary Observations

The titles discussed in these papers account for over 99% of farm bill spending and the actors interested in these titles will have important sway over not just their title but the entire farm bill. However, the farm bill’s scope extends much further. In addition to traditional titles such as research and extension, trade, credit and rural development, it includes contemporary issues such as the growing role of local and organic food production, land and farm preservation, and privately owned forests.

Most farm bills contain surprises. Unforeseen issues, new actors, and new programmatic proposals change the landscape. Research uncovers a new, important inefficiency. Weather changes crop prices. Given the 2016 Presidential campaign, trade could be a change catalyst. The next farm bill will not only provide new research and outreach opportunities for economists but also many opportunities to participate in the national dialogue that is the farm bill. We, the authors, invite you to join this American participatory experience.

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80 Years of Farm Bills—Evolutionary Reform

Carl Zulauf and David Orden

JEL Classifications: K00, N50, Q18

Keywords: Commodity and Insurance Titles, Conservation Title, Evolutionary Policy Reform, Farm Bills, Farm Policy, Nutrition Title

The 2014 farm bill is the latest chapter in a legislative history that dates to 1933. It secured large bipartisan majorities: 255-166 in the House of Representatives and 68-32 in the Senate, despite a difficult path through Congress amid the general gridlock of recent years. This long-running yet still contemporary saga spans constant threads, ever-changing content, and dynamic processes. While cumulative evolution over time has been sizable by many metrics, legislative experience suggests the next farm bill is likely to have more continuity than change, even after the heated 2016 elections and probable enactment of a farm bill by an undivided government for the first time since 1977 (Democratic control) and for the first time since 1954 under Republican control.

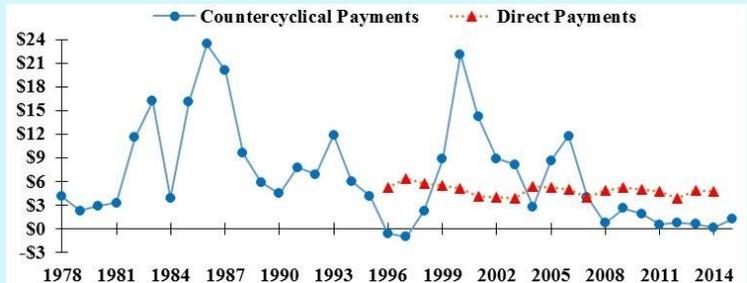
Constant Threads: Farmers, Food, and Land

Three threads weave their way through the history of U.S. farm bills: farmers, food, and land. The farmer thread started with the dire economic situation of farm families combined with farming’s importance to recovery from the Great Depression that began in 1929. Over one-fifth of gainfully employed Americans worked on farms (U.S. Bureau of the Census, 1954) while per capita farm income was only one third of nonfarm per capita income (USDA-ERS, 1982). The food thread started with concern over food security growing out of the Great Depression and Dust Bowl droughts of the 1930s. Public stocks and disposal of surplus food supplies were the initial mechanisms for addressing food security. The land thread started in part because land is hard to hide. Acres became a mechanism for controlling supply, which increased prices received by farmers. The Dust Bowl also drew attention to the need to conserve soil. In response to the 1936 Supreme Court ruling that the original New Deal farm program was unconstitutional, land retirement conservation programs became part of the farm bill. The on-going importance of these threads is underscored by the commodities, crop insurance, nutrition, and conservation titles of the 2014 farm bill accounting for all but 1% of the bill’s projected outlays (CBO, 2014).

Evolutionary Reform and Expanding Footprint

During the 1950s and 1960s, idled land and public stocks grew increasingly larger, making it clear that depression-era and post-World War II policies were inefficient and costly. Reforms followed. The 1973 farm bill introduced price flexibility via a program that made payments to farmers when market prices were below a target price. By 1996, the farm bill had ended most public stocks programs and had eliminated annual acreage controls, which was largely replaced by planting flexibility. This reform process has

Figure 1: U.S. Farm Commodity Payments, Billion Current \$, Fiscal Year 1978-2015



Source: USDA-FSA, 2016

Note: Not included in commodity payments by the Commodity Credit Corporation are operational and interest expenses, and payments by conservation, export, livestock assistance, tree assistance, and tobacco trust fund programs.

been called a “cash out” of farm policy (Orden, Paarlberg, and Roe, 1999) as payments replaced annual land set-asides and public stock programs.

Besides being payment based, U.S. farm policy since 1973 is best described as countercyclical. Farm support outlays by the Commodity Credit Corporation (CCC) were essentially zero during the high price/revenue periods of the mid-1970s and mid-1990s, as well as during 2007-2014, after separating out the fixed direct and production flexibility payments that by policy design did not vary with market conditions after 1996 (Figure 1). In contrast, outlays reached \$20-\$25 billion during the mid-1980 and late 1990 and early 2000 low price and revenue periods. CCC is the primary government agency through which programs in the commodities title are funded.

Reform of farm policy has not narrowed the coverage of commodities. Coverage in the 2014 farm bill is at a level last seen during World War II. The 2002 farm bill added target prices for soybeans and other oilseeds, and a title for forestry. The 2008 farm bill added marketing loan rates and target prices for dry peas, lentils, and small and large chickpeas; as well as a number of programs desired by horticultural and organic farms. A Supplemental Disaster Assistance Program was added for livestock, honeybees, farm-raised catfish, orchard trees, and nursery stock; then funded permanently in the 2014 farm bill.

The scope of farm programs has also expanded. An energy title was added in the 2002 farm bill, and insurance has emerged as a twin pillar, along with commodity programs, of the farm safety net. Begun as an experimental program in 1938, the modern insurance program dates to *The Federal Crop Insurance Act of 1980*. Although an insurance title was included in the 1991 farm bill, insurance was largely addressed by separate legislation until the 2008 and 2014 farm bills. It looks set to remain in future farm bills. Between 1989 and 2015, insured acres increased from 101 to 296 million while federal premium subsidies increased from \$0.2 to \$5.8 billion (USDA-RMA, 2016).

Turning to the food thread, starting in the 1960s, the Food Stamp Program (FSP) progressively became the primary mechanism to improve food security for low income individuals and families. The 1996 farm bill renamed the food stamp title, nutrition; while the 2008 farm bill renamed FSP, the Supplemental Nutrition Assistance Program (SNAP). Names of programs and titles are rarely happenstance. Changes in names acknowledge past trends, in this case the changing focus of food programs from calories to nutrition. More importantly, they signal a desire for future change.

FSP and SNAP in essence provide targeted income transfers and are countercyclical to an extent. During the recent recession SNAP’s budget rose from \$37.6 billion in 2008 to \$79.9 billion in 2013 before starting to decline as the economy improved (USDA, 2016).

Depression-era long-term land idling conservation programs were ended when demand for commodities rose during World War II but reappeared in the mid-1950s. The programs again were ended during the 1970s price run up as a fence row-to-fence row planting mentality dominated. The farm financial crisis of the early 1980s provided another reentry point, this time for an enlarged portfolio consisting of a land retirement Conservation Reserve Program (CRP), restrictions on bringing environmentally fragile grassland and swampland into production, and environmental compliance criteria for land receiving commodity program payments.

Current land programs can be described as an environmental pyramid. Its four sides are (1) retiring environmentally sensitive land from farm production—CRP; (2) enhancing environmental performance of farms—environmental compliance, Conservation Stewardship Program, and Environmental Quality Incentives Program; (3) buying easements to protect natural resources or agricultural use—Agricultural Conservation Easement Program; and (4) fostering private-public partnerships to address environmental issues—Regional Conservation Partnership Program. Reflecting a clear change in policy perspective, Congress chose to reduce but not eliminate CRP in the 2008 and 2014 farm bills written during the post 2006 price run up.

Other titles have also been added to the farm bill over time. Titles are a shorthand guide to a bill’s major issue themes. Titles may reflect issues of the moment or of on-going importance. The latter include research and extension, credit, rural development, and trade; all of which have appeared as titles in all farm bills since 1981.

These added titles are important for building coalitions to move the farm bill forward. The 2014 farm bill reduced projected spending on the commodities, conservation, and nutrition titles below the so-called baseline spending if then-current programs were reauthorized while increasing projected spending above the baseline by 6% on crop insurance and by 50% on average for the other titles. This shift involved only about 1% of total projected spending, but helped the 2014 farm bill pass with bipartisan majorities (CBO, 2014).

The evolutionary reform and expansion of the farm bill resulted in a 2014 farm bill with a commodities title that claimed only 5% of projected spending. Its share was dwarfed by the 79% share of the nutrition title and was even less than the share for the crop insurance (9%) and conservation (6%) titles. Nevertheless, the commodities title remains at the core of the farm bill. Primary reasons are the historical roots in serving the farmer thread and the permanent laws on commodity support that the modern countercyclical programs amend.

The permanent laws are production-restricting and high support-price programs enacted in the 1930s and 1940s. As noted above, they have been largely abandoned by evolutionary reform. Elimination of the permanent laws was considered but rejected in the 1996 farm bill. The House of Representatives made another attempt in the 2014 farm bill, again abandoned after a diverse coalition of organizations urged Congress to retain the permanent laws. Most farm bill actors recognize that the permanent legislation framework creates a powerful incentive to pass a new farm bill, thus creating opportunities to pursue their policy agendas. It also facilitates compromise. Policy actors may not get all they want in the current farm bill, but the permanent laws make a new farm bill likely, giving them opportunity to revisit on-going issues.

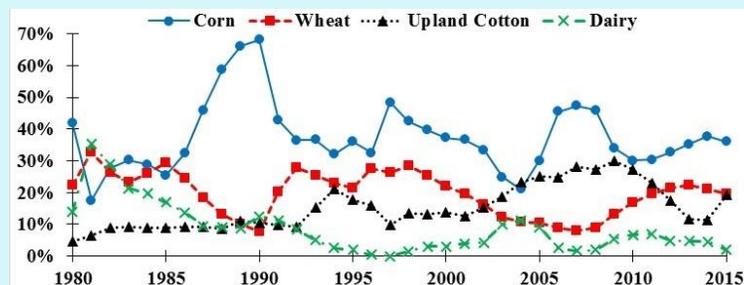
Reinforcing the role of permanent legislation is that one or more commodities title issues are often highly contentious. In the 2014 farm bill debate, despite often rancorous deliberations surrounding SNAP and an eventual 1% cut to its projected cost, the last issues resolved were the crop and dairy commodity title programs. Congressional conference committees usually address the most contentious issues last. Contention occurs because constituents and their Congressional representatives are passionately committed to the alternatives framing the issue. Their resolution is often driven by the collective acceptance that time for closure has come.

Process Dynamics and Experimentation

The farm bill can be viewed as the outcome of the policy process mediating the interplay of two types of markets. One is the set of economic markets encompassing farm commodities, food, and environmental services. The second is the political market encompassing organized interests, institutions, and ideas. Moreover, since farming is now a small and concentrated sector, U.S. farm policy can be viewed as an equilibrium result of organized group lobbying (Orden, Paarlberg, and Roe, 1999; Anderson, Rausser, and Swinnen, 2013).

Most farm bills are negotiated under a relatively tight budget, with constraints set within rules adopted by Congress. As organized interests compete for scarce budget, they are quick to point out when their share is abnormally low or when the share of others is abnormally high. As a result of this competition, a commodity's share of commodity program spending tends to exhibit mean reversion over time. For example, the share of spending on dairy reached 24% for Fiscal Years (FY) 1981-1985 versus a lower long-term average of 8% for FY 1978-2014 (Figure 2). To bring dairy spending into line, Congress reduced milk support prices before and in the 1985 farm bill, which also contained a producer funded "whole herd buy-out" program.

Figure 2: 3-Year Share of Commodity Program Spending, 4 Commodities with Highest Shares, U.S., Fiscal Years 1978-2015



Source: USDA-FSA, 2016

Note: Not included in commodity payments by the Commodity Credit Corporation are operational and interest expenses, and payments by conservation, export, livestock assistance, tree assistance, and tobacco trust fund programs.

Upland cotton's share of farm bill commodity spending reached 25% for FY 2005-2012 versus an average of 15% for FY 1978-2014, due in part to parameters enacted in the 2002 farm bill. The 2014 farm bill sharply altered upland cotton's support. Countercyclical assistance was limited to marketing loans and the Stacked Income Protection Plan, a within-year county insurance product with premium subsidies of 85%, was authorized. A proximate cause of this policy shift was the World Trade Organization (WTO) dispute ruling in favor of Brazil against the 2002 farm bill cotton program, but the underlying cause was the program's largesse. The mean reversion attribute of spending share by commodity suggests upland cotton policy likely would have been revised in some manner even without the WTO case.

Policy debates often occur because information is incomplete. Furthermore, enacting a law often creates new outcomes, information and understandings, including unexpected and unintended consequences. Since Congress can amend, even replace, existing law, it is thus useful to view U.S. policy as an on-going series of experiments undertaken to fit circumstances of the time. While ideas can be so powerful that they drive the policy process, the usual case is the unglamorous slow progression of evaluation and dialogue that inform leaders and create marginal adjustments to policy. Nonetheless, little steps over time can accumulate into powerful evolutions, as comparing recent farm bills to those from the 1930s and 1940s demonstrates.

Economic analysis serves several roles in this dynamic and experiment driven policy process. One is to tell compelling stories using broad picture data. Gardner (1992) underscored the importance of this role in his examination of the changing economic perspective of the farm problem between 1933 and 1990. He particularly emphasized the importance to the farm policy debate of the discussion and analysis drawing out the improving income of farm households relative to non-farm households.

A second role is to identify variations of current policy that reduce inefficiencies, outcomes often not evident until after a policy is enacted. Identification and quantification of economic inefficiencies of farm policy that negatively impacted the U.S. economy and its agribusiness sector critically guided the evolutionary reform of commodity programs toward increased planting and price flexibility. Increased flexibility, combined with low government spending on countercyclical programs during the several periods of high farm prices and revenue since 1970, have allowed U.S. farmers to adjust production to market conditions, thus blunting the potential for serious long-term inefficiencies. Yet few established ideas that serve political actors disappear completely. Sugar policy remains an exception to the evolutionary reform of U.S. farm policy as New Deal style programs continue with high supports relative to global market prices and with marketing and international trade restrictions to control supply.

A third role of economic analysis is to preclude harmful policy options completely from the idea set in the political market. This preclusion role is important because political actors often seek economic rents and because it is easier to sustain a policy option once it is enacted than to get it enacted initially. However, this role of economics becomes muted when economic evidence is debatable or when reputable economic experts disagree on interpretation.

Implications

The 80-year—and counting—lifespan of the farm bill reflects in part its extensive reach. Every American is touched by at least one of its constant threads: farmers, food, and land. Equally important has been the willingness to adapt farm bills not just to changes in U.S. society and the U.S. farm sector, but also to our understanding of economic inefficiencies. These attributes facilitate the farm bill's ultimate bipartisan support. That compromise is facilitated by preserving a permanent law framework largely unworkable for contemporary America bears consideration if the desire is a government that enacts laws which address contemporary issues.

Little is known with any degree of certainty at the time this article was written—December 2016—about how the next chapter in this farm bill saga will unfold. It is known that Congress has signaled in recent farm bills a desire to move calorie based food programs to broader nutrition wellness programs and land conservation programs to broader environmental services programs. It is not known if a Republican Senate, House, and newly-elected President that will likely write the next farm bill share these desires.

It is known that many members, perhaps a majority, of the House would like to split the nutrition title away from the farm bill as separate legislation. Some have said or hope this dismantling of the farm bill could make farmer and conservation programs vulnerable to reductions and reign in nutrition spending. Whether the farm bill is split, and if so, the consequences are yet to be determined. However, farmers and environmentalists potentially form a coalition with enough breadth to make a new style of farm bill sustainable. For example, many farmers and their supporters would like to increase acres in CRP to booster low crop revenues. Open questions are whether farmers and environmentalists can agree on specifics and how to pay for it. For the food thread, cutting nutrition spending may run counter to congressional interest in strengthening working class families and governing with compassion toward the least advantaged.

Focusing on the farmer thread, it is known that cotton would like a new cottonseed oil program to reestablish a presence in the commodities title, but open questions include how to pay for this program and how Brazil and other foreign cotton producers will react. Dairy farmers also are calling for more support, and confronting the same question of how to pay for it. However, based on what is currently known about spending on commodity programs in FY 2016 and 2017, the mean reversion characteristic of the share of spending by commodity suggests that these efforts may prove successful to some degree.

The 2014 farm bill gave farmers the choice between Price Loss Coverage (PLC), a fixed price target program, and Agricultural Risk Coverage (ARC), a revenue program with a hybrid market flexible-fixed target. ARC's revenue target in part flexes with market conditions but its downward flexibility is limited by the inclusion of the fixed PLC reference target prices as price minimums in its payment formulas. The choice applies only through the 2018 crop. Past experience suggests farmers will be allowed to make a new choice for the 2019 crop. It also suggests farmers will elect the program expected to pay more at decision time, as they did initially selecting between ARC and PLC (Schnitkey et al., 2015).

If prices in future years remain near the levels of late 2016, PLC is likely to pay more over the course of the next farm bill. ARC's benchmark revenue is moving lower for most crops as their high price years of 2009-2013 move out of the 5-year olympic average calculation window. PLC coverage starts at 100% of the reference price while ARC coverage starts at 86% of its benchmark revenue, which in a low price environment depends on the reference price. PLC's cap on per acre payment is set by the difference between the reference price and marketing loan rate, which is much larger than ARC's 10% cap on per acre payment.

Assuming late 2016 price levels, PLC payments under the next farm bill could be large, approaching \$10 billion per year (Zulauf et al., 2016). Thus, the projected baseline for the farm commodity title could be high. In contrast, the potential baseline for the commodity title in the next farm bill could be small if prices are expected to average above the reference prices.

A high baseline for the commodities title will give the next farm bill flexibility, with or without a nutrition title, to fund meaningful support in the commodities title while providing some new money for other titles notably conservation. In such a scenario, ARC and PLC may need to be changed to reduce their largess. Potential changes in reference prices, coverage levels, and per acre payment caps will likely draw attention. ARC and PLC may even be merged into a single program, a potential outcome signaled by inclusion of PLC reference prices in ARC's calculation formulas. How these decisions play out will determine if the reform concept in ARC, that support is provided when revenue falls over multiple years but less so when revenue stabilizes even at a relatively low level, takes hold. On the other hand, a low commodity baseline will reduce pressure to change ARC and PLC but increase pressure to save money on crop insurance, the other pillar of the crop safety net. Thus, as has historically been true, the commodities title likely holds the key to how the next farm bill is written.

For More Information

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The Nutrition Title's Long, Sometimes Strained, but Not Yet Broken, Marriage with the Farm Bill

Parke Wilde

JEL Classification: H51, Q18

Keywords: Farm Bill, SNAP, Nutrition Assistance, Food Security, Food Policy

In recent farm bills, most of the funding has been devoted to the nutrition title, especially the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps. SNAP is the nation's largest anti-hunger program. In the next farm bill, decisions made about this title will greatly influence food security and dietary quality, especially for low-income Americans.

In the 2014 farm bill (the Agriculture Act of 2014), the nutrition title had 10-year outlays of \$756 billion, about four fifths of the full cost of the legislation. In fiscal year 2015, SNAP provided targeted food benefits to a monthly average of 45.7 million low-income Americans, at an annual cost of \$74 billion.

The nutrition title also includes much smaller programs. The Emergency Food Assistance Program (TEFAP) provides commodities and other financial supports to food banks and food pantries at a cost of \$376 million in FY 2015—approximately one-200th the funding for SNAP. The Healthy Food Financing Initiative encourages retailers to locate in underserved areas. The Seniors Farmers Market Nutrition Program and the Food Insecurity Nutrition Incentives (FINI) program support purchases of fruits and vegetables in local markets. The major child nutrition programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (\$6.1 billion in FY 2015) and the National School Lunch Program (\$16.9 billion), are reauthorized through separate legislation, not the farm bill. Re-authorization of child nutrition programs is the responsibility of the Senate Agriculture and House Education and Workforce Committees.

With a new President and Republican leadership in both the House and the Senate, SNAP and other nutrition assistance programs are likely to come under pressure in the next few years. Leading up to the next farm bill, important debates will address whether the nutrition title even belongs in the bill in the first place, how much funding to provide for SNAP, and whether to redesign SNAP to more strongly encourage good nutrition and dietary quality.

Splitting the Nutrition Title

In a tradition dating to the early 1970s, having farm programs and nutrition programs together in the farm bill allowed for greater political support from both rural and urban legislators. While working on the 2014 farm bill, in what was at the time a remarkable act of brinkmanship or desperation, the House of Representatives in 2013 sought to end this tradition by passing a farm bill with no nutrition title. That stand-alone bill could not pass both houses of Congress. In the end, the nutrition title was rejoined to the farm bill in the conference committee process before the bill passed both houses and was signed by the president in February, 2014.

Looking forward, the Heritage Foundation has renewed its argument for splitting the nutrition title from the next farm bill (Bakst, 2015), which is consistent with the foundation's broader criticism of farm programs and SNAP

alike. Representative Mike Conaway (R-TX), the chairman of the House Agriculture Committee, in early 2015 proposed that the nutrition title, including SNAP, be split from the farm bill. “We’re going to have to create an urban-rural alliance,” Conaway said, “that helps us pass the next farm bill that’s not based or held together by the SNAP program” (Brasher, 2015). In a mirror image of this logic, some SNAP supporters began to argue that anti-hunger programs had sufficient support on their own, and no longer needed farm-sector votes.

Conaway announced a series of hearings before the House Agriculture Committee, which observers initially expected to be harshly critical of SNAP, perhaps preparing the ground for proposals that would sharply cut the program’s budget. However, the series of hearings turned out to be less fiery than expected. Some hearings focused on more technical issues such as how to encourage employment and training initiatives through the SNAP program. Even at hearings on more sensitive issues, such as fraud and abuse in SNAP, there was bipartisan recognition that the program must take measures to protect public confidence in the program (Chase, 2016). The House Agriculture Committee has not released a final report on SNAP as of this writing (early December, 2016).

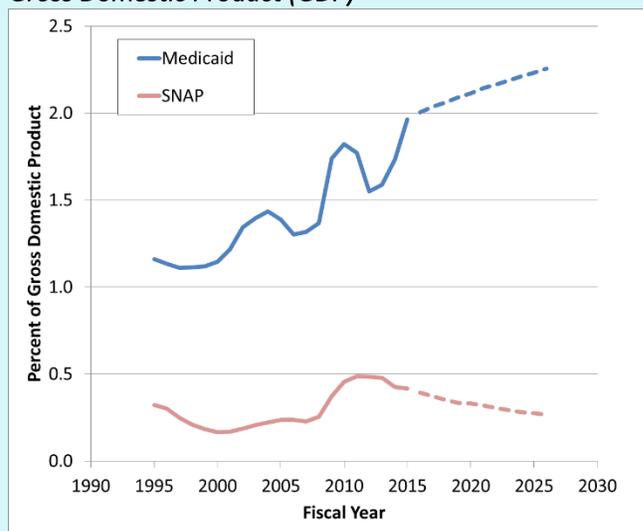
Meanwhile, also in 2016, major anti-hunger groups and farm organizations met to reinvigorate shared support for an omnibus farm bill, including both agriculture programs and nutrition assistance. In an effort to send a signal about this unique alliance, a coalition of 254 farm, nutrition, and conservation groups sent a joint letter in March 2016 to the House and Senate Budget and Appropriations Committees, urging those Committees to not re-open the 2014 farm bill for the purpose of cutting funding. On the other hand, the GOP platform for the 2016 election called for the nutrition title to be separated from the farm bill, which observers interpreted as an intention to limit SNAP funding. The 2016 election gave Republicans the Presidency and returned the party to power in both the House and the Senate, but it did so with significant support in rural and agricultural areas of the United States. In light of these forces pulling in both directions, even within the Republican Party, it is simply unknowable at this time whether the nutrition title will remain part of the next farm bill.

Funding for SNAP

Just as political support for the commodity title depends in part on current prices and whether farmers are experiencing economic troubles, support for the nutrition title depends on trends in national income and poverty, which in turn influence participation in SNAP. Eligibility for SNAP depends on having income below 130% of the federal poverty standard, in most cases, so higher unemployment and poverty lead to greater program participation.

Congressional debate over the 2014 farm bill was affected by the rapid growth in SNAP spending for several years previously, due in part to caseload growth during the Great Recession and in part to a temporary 13% benefit increase that was passed as part of the federal government’s effort to stimulate the economy in 2009. Lawmakers in the House of Representatives in 2013 proposed cutting SNAP benefits and converting the federal entitlement program into block grants to the states, which would have limited the ability of the program to grow automatically during recessions, diminishing its effectiveness as a safety net program. The program had grown from \$31 billion (0.24% of gross domestic product) in fiscal year 2005, just before the recession, to \$80 billion (0.48% of GDP) by fiscal year 2013 (Figure 1).

Figure 1: Congressional Budget Office (CBO) Projections for SNAP and Medicaid Spending as a Percentage of Gross Domestic Product (GDP)



Source: Author’s computations based on Congressional Budget Office (CBO), 2016.

Note: SNAP is the Supplemental Nutrition Assistance Program.

However, there is reason to think that the context for the next farm bill may be different. After many years of waiting, the post-recessionary economic expansion has finally started to reach the lower end of the income distribution, leading to small reductions in both poverty and food insecurity by 2015 (Coleman-Jensen et al., 2016). As SNAP caseloads peaked and began to fall again, annual total SNAP spending at last declined by \$6 billion to \$74 billion in fiscal year 2015 (0.42% of GDP). Based on Congressional Budget Office (CBO) 10-year forecasts for baseline SNAP spending, SNAP spending is projected to continue to fall as a percentage of GDP, even if there are no cuts in farm bill legislation (Figure 1).

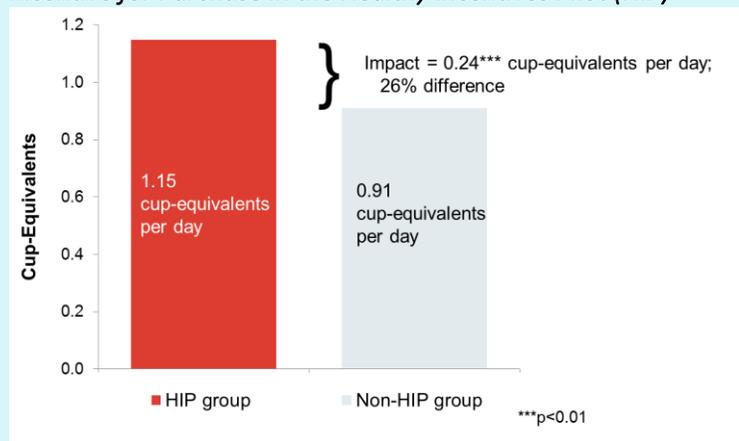
Several new proposals call for increasing program benefits. An Institute of Medicine (IOM) committee led by economist Julie Caswell in 2013 suggested updating the SNAP benefit formula to better account for the time costs of food preparation and for geographic variation in food prices (Yaktine and Caswell, 2014). Writing for the Brookings Institution’s Hamilton Project, economist Jim Ziliak (2016) proposed an immediate 20% increase in benefits, accompanied by other changes to the benefit formula. With support from Feeding America, the national organization of food banks, Representative Alma Adams and other Democratic lawmakers have proposed a “Closing the Meals Gap Act of 2016,” which would change the benchmark food spending target for SNAP benefits from the “Thrifty Food Plan” to the somewhat higher priced “Low-Cost Food Plan.” Although passing separate legislation is possible in principle, it is likely that such proposals will be folded into discussion of the next farm bill.

Encouraging Nutrition and Dietary Quality

Even more than in previous years, the next farm bill debate may include substantial proposals to subsidize healthful foods or to restrict access to less healthful items under SNAP. In the past, such changes have been advocated by two very different political constituencies: program critics who argue that participants waste their food resources and public health nutrition organizations that believe program changes could enhance the program’s effectiveness in addressing high rates of obesity and chronic disease. Such proposals, especially those that restrict program benefits to certain foods and beverages, have been opposed by anti-hunger organizations and by USDA’s Food and Nutrition Service (FNS), due to concerns over administrative complexity and potential stigma for program participants leading to reduced participation by eligible low-income Americans (USDA-FNS, 2007).

With funding from the 2008 farm bill, USDA did support a Healthy Incentives Pilot (HIP), which provided a 30% incentive on targeted fruit and vegetables purchases with the SNAP card in Hampden County, MA (Wilde et al., 2015; Olsho et al., 2016). The study found that randomly assigned HIP participant adults had daily fruit and vegetable intake that was 0.24 cup-equivalents (26%) higher than intake for non-participants (Figure 2). In the 2014 farm bill, the Food Insecurity Nutrition Incentives (FINI) program expanded federal support for such incentives, with a particular focus on farmers markets and other local retail channels. A recent Minnesota study—sponsored by the National Institutes of Health, not USDA—considered a program design that combined a healthy incentive with a disincentive for purchase of sweets. Participants were not allowed to purchase sugar-sweetened beverages, candy, or baked sweets with the study-provided debit card. The study found participants with both the incentive plus the restriction had lower total food energy intake and an improved healthy eating measure (Harnack et al., 2016).

Figure 2: Intake of Targeted Fruits and Vegetables Was 26% Higher for SNAP Participant Adults Who Received a 30% Incentive for Purchase in the Healthy Incentives Pilot (HIP)



Source: Olsho et al., 2016

While SNAP spending is projected to decline for the next several years even in the absence of policy changes, it is notable that the much larger cost of Medicaid—the leading government medical insurance program for low-

income Americans—is expected to soar well above 2% of GDP. Indeed, rising medical costs are seen as a critical issue for the U.S. economy. It is possible to imagine two very different legislative responses. On the one hand, as they plan the next farm bill, legislators may accept falling SNAP costs and rising Medicaid costs, on grounds that the funding lost from SNAP still is going toward another important safety net program. On the other hand, legislators could reason that preventing poor nutrition and chronic disease makes more sense than treatment after the fact. From the latter perspective, providing extra resources for SNAP to address unhealthy eating and diet-related chronic disease may be a worthwhile investment if it slows the growth of Medicaid costs.

A Bipartisan Nutrition Title

In most past cycles, congressional debate over the farm bill was comparatively less partisan than debate over other legislation. This changed in the 2014 farm bill, as legislators concerned about the federal budget deficit challenged the traditional bipartisan support for farm programs, and criticism of SNAP had a more partisan character than usual. To reduce partisan tensions over this issue, Congress established a national commission on hunger in the 2014 omnibus appropriations bill. The commission's final report was released in January, 2016 (National Commission on Hunger, 2015). The report places substantial emphasis on employment and training programs and requirements, and it proposes to exclude a narrowly defined class of sugar-sweetened beverages from SNAP eligibility, which is a provision likely to be opposed by SNAP's supporters in anti-hunger organizations. At the same time, the report describes SNAP's overall success in reducing the rates of household food insecurity and hunger in the United States.

In the next farm bill, it is uncertain whether to expect a renewal of the rancorous and partisan argument over the nutrition title. The commission's report may serve as a roadmap for a less divisive nutrition title, if lawmakers seek such a thing.

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The Next Farm Bill May Present Opportunities for Hybrid Farm-Conservation Policies

Jonathan Coppess

JEL Classification: Q18, Q20, Q28

Keywords: Conservation, Farm Bill, Risk

Natural resource conservation policies have long been a part of American farm policy. They predominantly consist of voluntary incentives and cost-share assistance in programs that have grown in number, scope and in terms of Federal outlays since the Food Security Act of 1985. This expanding suite of programs has become increasingly important in the omnibus farm bill legislation that Congress works to reauthorize approximately every five years. Recent lawsuits, State and Federal actions, as well as voluntary commitments made by major food retailers and manufacturers, may well magnify that importance for the 2018 and future farm bill debates.

The public perception of modern farming created by water quality hotspots such as the Great Lakes, Gulf of Mexico, Chesapeake Bay, and key drinking water sources for cities such as Des Moines appears to be increasing pressure on elected officials, private food companies, and farmers to undertake greater efforts to address water quality concerns. This further sharpens the focus on farm bill conservation programs. It coincides, however, with a significant downturn in commodity prices and farm incomes in an increasingly difficult political environment for farm bills. Reducing nutrient losses, improving water quality and meeting industry sustainability goals by financially-stressed farmers calls into question not only the design of existing policies and programs, but also the compartmentalized system of farm policy. Conservation concerns intersect with farm risks on the same fields covered by crop insurance and farm programs. This may present opportunities for creative, hybrid policies in the next farm bill that help farmers stay in business while being good stewards of natural resources and sustainable suppliers.

Reviewing Nutrient Loss Reduction and Sustainable Sourcing Efforts

Nutrient loss and sustainable sourcing are built upon the same realities of Midwestern row crop farming. Growing crops require nutrients such as nitrogen, phosphorus and potash, but they do not consume all that is applied or available; significant quantities of these nutrients are exported from farm fields or leached through soils into drainage tiles by water (Cameron 2013; Ribaudo et al., 2011; Royer et al., 2006; Kladvko et al., 2004). Nutrient loss is largely a function of the weather, especially rain. As large concentrations of these exported or lost nutrients collect in water bodies, they can cause hypoxia or dead zones such as in the Gulf of Mexico (Petrolia and Gowda, 2006; Rabalais et al., 2002). They can also contaminate drinking water supplies requiring expensive removal and treatment efforts by municipal suppliers that are required to meet standards for safe drinking water (EPA, 2016b). The public response to nutrient loss and water quality degradation has thus far been regulatory or quasi-regulatory. For example, the Environmental Protection Agency (EPA) has moved forward with regulatory actions under the Clean Water Act that impact farmers in regions such as the Chesapeake Bay (Fowler, 2013). Additionally, many States have implemented wide-scale strategies to reduce the nutrient loads from both point and nonpoint sources within their borders (David et al., 2015). A second response has recently become more prominent: litigation. The Des Moines Water Works (DMWW) lawsuit against three drainage districts is arguably the most consequential because it challenges existing exemptions for, and has the potential to impose significant costs on, farmers (Coppess, 2016).

Many leading food companies, retailers and grain companies are also joining efforts to reduce farming's impact on water quality under the broader banner of sustainable farm production (SUSTAIN News, 2016; Keystone Policy Center, 2016; Acharya et al., 2010). Some predict that within less than five years, nearly all food companies in the United States and the European Union will have publicly committed to sustainable sourcing, an objective unknown as recently as 2004 (Hamilton and Reaves, 2014). For example, the Midwest Row Crop Collaborative (MRCC) was recently formed by founding partners such as Cargill, the Environmental Defense Fund, General Mills, Kellogg Company, Monsanto, PepsiCo, The Nature Conservancy, Walmart, and the World Wildlife Fund. The MRCC pledges to support farmers in the improvement of soil health and water quality. Its goals include farmer adoption of sustainability measures on 75% of Iowa, Illinois, and Nebraska row crop acres by 2025, a 45% nutrient loss reduction goal to be met by these pilot states by 2025, and partnership efforts with other states in the upper Mississippi watershed. These goals notably align with the EPA's Mississippi River/Gulf of Mexico Hypoxia Task Force (2001) strategies for reducing the hypoxic zone in the Gulf of Mexico ([EPA, 2016a](#)).

A Brief History of Farm Support and Conservation Policies

Today's omnibus farm bill legislation includes commodity support programs, crop insurance and conservation programs. These policies have long, interconnected histories that date to the New Deal responses to the Great Depression. Commodity programs have provided price and income support to producers, while Congress initially created crop insurance as an experimental effort to provide assistance in cases of yield losses. Conservation policy began as an attempt to preserve soil in response to the devastating conditions of the Dust Bowl. Combined, these policies focus on fundamental farm risks: market prices; weather-related production; and natural resource consequences.

Commodity programs were first designed to increase crop prices by attempting to control supplies and using price supporting loans, but repeated failures and political problems caused Congress to shift to a system of income supporting deficiency payments when prices were low (Orden and Zulauf, 2016; Glauber, 2013; Winders, 2009; Glauber, 2004; Hansen, 1991). The modern system features direct assistance payments in a decoupled scheme that dates to the 1996 Farm Bill, as well as an emphasis on risk management through crop insurance (Glauber, 2013; Orden, Paarlberg, and Roe, 1999). This system provides farmers more flexibility in making planting decisions and may also benefit conservation efforts because farmers who put land into conserving uses or made better use of beneficial rotations do not lose payments. It also emphasizes risk management. Currently, payments are contingent on price or revenue losses. Moreover, farmers are encouraged to purchase subsidized crop insurance, which has become the largest item of Federal farm spending (CBO, 2016).

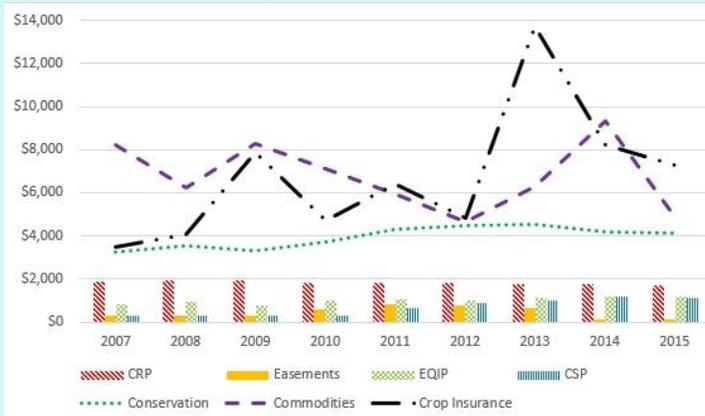
While farm conservation policy was initially a response to the Dust Bowl, it was quickly placed in service of price support policy as a mechanism for taking acres out of production and providing direct assistance to landowners and farmers (McGranahan et al., 2013; Cain and Lovejoy, 2005). The focus for conservation policy changed significantly beginning with the 1985 Farm Bill. Congress emphasized conserving natural resources and addressing environmental concerns when it created the modern Conservation Reserve Program (CRP). CRP was an updated version of earlier policies but with a specific statutory purpose of retiring environmentally-sensitive and highly erodible lands for ten or fifteen years. Over time, the suite of reserve or retirement programs has grown to include easement policies that remove acres—whole fields or portions of fields—from production via property rights on the land for conservation measures such as restored wetlands or permanent grasslands.

The 1985 effort also added a quasi-regulatory component in the form of conservation compliance (Heimlich and Claassen, 1998; Malone, 1986). Conservation compliance is not an assistance program but rather places eligibility requirements on Federal farm support based on conservation practice adoption by the farmer. Specifically, farmers and landowners can lose program eligibility if they fail to comply with restrictions for farming on highly erodible land and wetlands. Failure to comply can result in lost payments and, potentially, a requirement that the farmer repay Federal assistance received while she or he was out of compliance.

Working lands policies provide direct financial assistance to farmers for adopting conservation practices. The 1996 Farm Bill created the Environmental Quality Incentives Program (EQIP) to provide cost-share assistance to the farmer for installing specific and approved conservation practices to help meet or avoid regulations. The 2002 Farm Bill created the Conservation Security/Stewardship Program (CSP), which has been modified each farm bill

thereafter. In general, the program provides five-year contractual payments to farmers for maintaining and improving conservation across the entire farming operation. Funding and interest in these policies has been increasing, while new trends are developing. For example, the 2014 Farm Bill combined various authorities to emphasize a regional focus with coordinated efforts and assistance across multiple farms, while adding funding and requiring non-Federal sources of matching funds (Coppess, 2014; Zulauf, 2014). Figure 1 plots spending on various conservation programs as well as a comparison with outlays for commodity programs and crop insurance.

Figure 1: Federal Outlays (\$ Billions)



Source: Congressional Budget Office, 2016

Opportunities for Creative Policy Solutions and Hybrid Programs

Farming is complex and full of risk. Production is undertaken by many individual actors spread across large land areas and subject to the vagaries of weather, climate and markets; each farmer is in competition with neighbors and farmers around the world. Nutrient loss and sustainable sourcing are also deeply connected to the weather and similar issues impacting production (Cameron et al., 2013; Klavivko et al., 2004; Gentry et al., 1998). This connects them to the price and yield risks farmers must manage. Adding or revising practices for conservation, sustainability or similar outcomes can add significant expense and management challenges for farmers that, in turn, may increase resistance to both policy and practice changes (Kanter et al., 2015; David et al., 2015; Hamilton and Reaves, 2014; Christianson, 2013). Weather, risk and costs are familiar terrain for farm policy. Current assistance policies, however, are compartmentalized into commodity, crop insurance and conservation programmatic systems; a system which arguably fails to align fully with realities on the farm and in the fields. Nutrient loss reduction and sustainable sourcing raise questions about this policy system, but may also provide opportunities for creative policy solutions that take into account not only conservation but also farm risk.

Efforts to address conservation challenges could benefit from incorporating counter-cyclical and risk components familiar to farm programs and crop insurance. Similarly, farm programs and crop insurance could provide better assistance to farmers if they incorporate aspects of the economic risk farmers may face from nutrient loss reduction and sustainable sourcing. As a result, hybrid conservation-risk policies could benefit farmers who are good stewards of natural resources. They could also push Federal farm payments in the direction of a public good where the taxpayer obtains environmental benefits in return for the assistance. This could be especially beneficial politically in a time of polarization and challenging Federal budgetary scenarios that limit policy effectiveness. The following discussion provides an initial exploration of hybrid programs and how existing policies could be creatively adapted to help farmers reduce nutrient loss and meet sustainable sourcing goals.

Research and experience have developed a set of practices that can help reduce nutrient losses and improve the sustainability of row crop production, commonly known as Best Management Practices (BMP); adopting them can increase the farmer's costs (David et al., 2015; Christianson, 2013). Farmers adopting BMP could potentially be putting themselves at a cost disadvantage to those farmers who do not adopt BMP, a situation that could be magnified in times of low prices. Current conservation programs address this issue generally through cost-share assistance, while current farm programs and crop insurance provide assistance triggered on low prices or decreased revenues. Taking a hybrid policy approach towards encouraging adoption of BMP might prove effective.

To begin with, a hybrid program could be designed to provide enhanced counter-cyclical assistance to the farmer adopting BMP. For example, the price and revenue guarantees in farm programs could be increased for those farmers that adopt BMP based on the estimated additional costs of the BMP adopted. If a certain practice was estimated to cost \$0.20 per bushel, then that could be added to the reference price or benchmark price

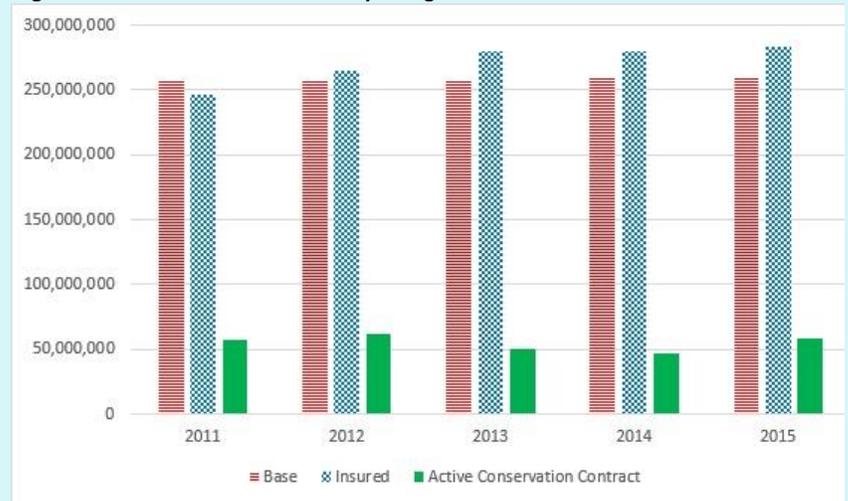
components of the farm programs. Thus, farmers adopting BMP would trigger payments before farmers who do not adopt them. They would also receive larger payments for the same level of decline.

Current farm programs make payments on historical base acres rather than on the actual acres planted to the crop. Most of the programs make payments on 85% of the decoupled base acres for the crop on the farm, known as the payment acres. This could also be adjusted to provide enhancements to farmers who adopt BMP, especially if budget challenges to the farm bill result in efforts to lower payment acres. For example, BMP farmers could continue to receive payments on 85% of base acres but non-BMP farmers could receive payments on only 80% of their base acres. Other features of the programs could be adjusted as well. For example, the revenue programs limit payments to a maximum of 10% of the benchmark average revenue and that limit could be adjusted to enhance the program for farmers adopting BMP.

Aside from farm programs, the hybrid concept could also be applied to crop insurance. The operational aspects of crop insurance, especially the rating of policies and the requirement for actuarial soundness—that is, indemnities must be matched by premium—could limit the options for hybrid components. The most straightforward adjustment would be to provide additional assistance with the cost of insurance premiums to those farmers adopting BMP relative to those who do not. The Federal government currently subsidizes on average 62% of the cost of crop insurance, but that is averaged across all policies and farms. The actual level of premium subsidy a farmer receives depends on the level and policy they purchase (Zulauf, 2016). For example, farmers purchasing 60% coverage on basic and optional units receive a 64% subsidy rate but farmers purchasing 85% coverage on basic and optional units receive a 38% subsidy rate. Congress could provide BMP farmers with a higher subsidy rate than non-BMP farmers, which could play a role if farm bill discussions are consumed by political pressures to reduce premium subsidy rates. BMP farmers could avoid the rate reduction.

The above are only examples for ways to create hybrid policies in the next farm bill and much will depend on the direction the debate takes in Congress. The underlying point is that these policies can be adjusted in ways that encourage conservation but continue the focus on helping farmers with the risks inherent in production via the counter-cyclical and risk-based features of existing farm programs. Moreover, hybrid policies may reach significantly more acres than continuing to limit conservation assistance to the cost-share programs. This potential can be found in comparing the acres reached by the various programs. According to the Farm Service Agency, there are more than 259 million base and generic base acres counted in farm programs (USDA-FSA, 2016). According to the Risk Management Agency, there were nearly 283 million acres insured by crop insurance in the 2015 crop year (USDA-RMA, 2016). Natural Resources Conservation Service program data indicates far fewer acres are covered by the conservation programs of the farm bill, as demonstrated in Figure 2 comparing total base acres, total insured acres and the total acres under active conservation contracts for the major conservation programs: CRP; CSP; EQIP; and easements (USDA-NRCS, 2016). In addition to potentially reaching far more acres, creative hybrid policies might further conservation goals at a lower cost as compared to expanding cost-share assistance to an equivalent acreage. This is due to the counter-cyclical nature of the hybrid policies which would make payments only in years of price or revenue declines. Furthermore, adjusting premium assistance or payment acres to encourage conservation practices might well result in some estimated reductions in program spending.

Figure 2: Total Acres Covered by Programs



Source: USDA, 2016

Budget Challenges and Lessons from History

The key to the next farm bill likely lies in the obscure Federal budgeting process and, more specifically, in the estimates created by the Congressional Budget Office (CBO). Under Federal budget rules and procedures, the funding available for the next farm bill will depend on the 10-year CBO expenditure forecast at the time. Any changes to program authorities that are estimated to spend more will require offsets. In that way, the CBO baseline has outsized influence on the development of farm and conservation policies and the writing of a farm bill. Budgetary pressures on the farm bill coalition can be intense, threatening to split apart the coalition and defeat the legislation. New spending or programs for conservation and farmers will collide at the baseline. These same constraints, however, could also be the catalyst for creative policy design such as the hybrid concepts discussed herein.

History may not repeat itself but it does appear to recycle, certainly in the case of farm policy. For example, the 2014 Farm Bill debate featured many similarities to past farm bill debates, including 1995-1996 and even as far back as 1962. Looking ahead to 2018, the 1985 debate may be particularly relevant. It featured low prices, depressed farm incomes, a strong push for farm program reforms from environmental interests and significant budgetary challenges (Heimlich and Claassen, 1998; Malone, 1986; Infanger et al., 1983). It is not a perfect precedent, however, because the farm economy is not expected to be anywhere near the level of economic crisis as it was in the 1980's. The key is the fact that despite the many challenges it faced, the 1985 Farm Bill initiated modern conservation policy with the CRP and conservation compliance. The latter was arguably the larger legislative achievement because Representatives and Senators agreed to withhold payments from struggling farmers in a time of crisis if they did not abide by conservation measures.

If farm and environmental interests again struggle in 2018 under difficult budgetary and political circumstances, the 1985 debate might provide valuable lessons for capitalizing on the challenges. Opportunities exist where conservation and farm policies intersect. Nutrient loss reduction and sustainable production highlight this because both involve some of the same risks inherent in farm production. Finally, the long history for farm and conservation policies provides valuable lessons to guide the search for mutually-beneficial and workable solutions that can also strengthen the coalitional bonds necessary on the rough legislative road through Congress.

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The Farm Safety Net for Field Crops

Gary Schnitkey and Carl Zulauf

JEL Classification: N52, Q10, Q18

Keywords: Commodity Crop Programs, Crop Insurance, Farm Groups

The starting point for discussion on the next farm bill will be the commodity title in the 2014 farm bill as well as the crop insurance program. While a new infusion of Federal money is possible, a more likely scenario is for reduced Federal spending on crop safety net programs. The extent to which Federal safety net outlays need to be reduced will depend on expected commodity prices. A low and high price scenario are discussed. The debate over farm safety net programs likely will focus on reducing outlays from Price Loss Coverage (PLC) program and crop insurance. This debate will have a regional dimension, as often happens in farm bills. Producers of cotton, rice, peanuts, and wheat will prefer to protect spending under PLC. Producers of corn and soybeans will desire to protect crop insurance spending.

2014 Farm Bill Commodity Crop Programs

The 2014 farm bill dramatically changed commodity programs, ending direct payments, a program with average outlays of \$5 billion from 1996 to 2013. Direct payments faced scrutiny because payments did not vary with different prices or yields, resulting in the same direct payment even when revenue was high (Orden, Blandford, and Josling, 2010). In its place, commodity programs now are justified as providing risk management to farmers.

Figure 1: Safety Net Programs for Field Crops in 2014 Farm Bill

Farmer's choice of

1. Price Loss Coverage (PLC) -- payments made when market year average (MYA) prices are below fixed reference prices
2. Agricultural Risk Coverage at the county level (ARC-CO) -- payments made when county revenue is below a revenue guarantee on a crop by crop
3. Agricultural Risk Coverage at the individual level (ARC-IC) -- payments made when farm revenue for all crops is below a guarantee.

Marketing loan program

Available on all production. Marketing loans available at fixed loan rates or loan deficiency payments received when market price is below loan rate

Source: Author Original Information

The 2014 commodity program consists of two tiers (Figure 1). The first contains marketing loan and loan deficiency payment programs which have fixed price targets in the form of loan rates. For most crops, loan rates are low relative to expected prices, leading to low expectations of Farm Safety Net protection. The second tier are producer elected, irrevocable choices between Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC). Payments by these programs are made on historical base acres and yields, which are fixed for the life of the 2014 farm bill. Corn, soybeans, and wheat have the largest number of base acres. Base acres for the other program crops are notably smaller.

PLC makes payments when national, crop year prices are below reference prices set by Congress. The 2014 farm bill reference prices were increased relative to the same, but differently named target prices, in the 2008 farm bill. The increase varied by crop, ranging from 8% for peanuts to 88% for barley, with the increase in general being 35% to 50% (Zulauf and Orden, 2014). The effective increase is even larger—generally 50% to 75%—since counter-cyclical payments in the 2008 farm bill were triggered when market price was below the crop’s target price minus its direct payment rate. As noted above, the direct payment rate no longer exists.

Table 1: Program Crops, Base Acres, and Program Elections, 2014 Farm Bill

Program Crop	Total Base Acres	Percent Enrolled In ¹ :		
		PLC	ARC-CO	ARC-IC
Barley	5,185,717	75%	22%	4%
Canola	1,476,317	97%	2%	1%
Corn	96,768,447	7%	93%	0%
Crambe	2,603	65%	34%	1%
Dry Peas	441,890	44%	50%	6%
Flaxseed	230,292	63%	36%	1%
Grain Sorghum	8,979,430	66%	33%	0%
Lentils	287,063	53%	41%	7%
Large Chickpeas	85,634	23%	66%	11%
Long Grain Rice	4,014,721	100%	0%	0%
Medium Grain Rice (Southern)	173,824	96%	4%	0%
Mustard	24,715	56%	38%	6%
Oats	2,095,226	32%	67%	1%
Peanuts	2,020,243	100%	0%	0%
Rapeseed	2,481	44%	54%	2%
Safflower	99,068	63%	34%	3%
Sesame	5,206	84%	16%	0%
Small Chickpeas	22,067	23%	68%	9%
Soybeans	54,514,972	3%	97%	0%
Sunflowers	1,650,954	56%	43%	1%
Temperate Japonica Rice	575,194	62%	34%	4%
Wheat	63,699,144	42%	56%	2%
Generic	17,582,910			

Abbreviations stand for Price Loss Coverage (PLC), Agricultural Risk Coverage -- county option (ARC-CO), and Agricultural Risk Coverage -- individual option (ARC-IC).

Source: Farm Service Agency.

ARC has county (ARC-CO) and individual farm (ARC-IC) versions. ARC-CO is a significant modification of the Average Crop Revenue Election (ACRE) program instituted in the 2008 farm bill. ARC-CO makes payments when county revenue falls below a guarantee. The guarantee is based on five-year moving averages of national prices and county yields, except that prices used to calculate the guarantee cannot be less than the reference price for the crop. ARC-IC has its genesis in the Supplemental Revenue Assistance Payment (SURE) program of the 2008 farm bill. ARC-IC makes payments when the farm's revenue is below the farm's revenue guarantee. The farm's revenue guarantee is for all program crops on the farm based on the same prices as ARC-CO but moving averages of the farm's yields for program crops.

Existence of three programs represents a political compromise as agricultural constituencies could not agree on the preferred counter-cyclical program (Orden and Zulauf, 2015). In general, producers of peanuts and rice in southern states supported PLC. Producers of corn in the Midwest states preferred ARC-CO. ARC-IC reflects a Great Plains perspective. Preferences likely reflect a number of factors. Peanut and rice producers see low prices as a concern while corn and soybean producers see revenue as a concern. Another factor is the reference prices in PLC. Peanuts and rice have relatively small base acres. Having high reference prices relative to market prices results in large payments to rice and peanut acres, but relatively small Federal budget impacts. The same is not true for corn and soybeans which have much larger base acres.

Over 90% of base acres in corn and soybeans were enrolled in ARC-CO while 90% peanuts and rice were enrolled in PLC (Table 1), leading to regional enrollment differences. Over 90% of base acres in the Midwest states were enrolled in ARC-CO while the majority of base acres in southern, southwest, and Mountain states are in PLC (Schnitkey et al., 2015b). ARC-IC had larger enrollment numbers for small chickpeas, large chickpeas, dry peas, lentils, and mustard, crops with base acres centered in the Great Plains. While geography played some role in decisions, so did expected payments from the programs. In general, farmers' enrollment was positively correlated with expected payments (Schnitkey et al., 2015a). As a result, enrollment may not so much model program preferences as it does expected payouts. Whatever the explanation, existence of three programs and their regional dimensions will carry over to the next farm bill.

Table 2: Insurance Policies and Coverage Levels, 2016 Crops

Crop	Plan of Insurance ¹				Coverage Level of Farm-Level Plan			STAX and SCO Acres as a % of Insured Acre
	RP	RP-HPE	YP	Area Plans	60% or Less	65% to 75%	80% to 85%	
Corn	90%	1%	8%	1%	6%	43%	51%	0.3%
Soybeans	90%	1%	8%	1%	8%	49%	43%	0.3%
Wheat	87%	0%	12%	1%	12%	75%	13%	3.4%
Cotton	81%	0%	19%	0%	25%	70%	5%	26.2%
Grain Sorghum	84%	0%	16%	0%	20%	76%	4%	2.2%
Rice	35%	2%	62%	1%	36%	42%	22%	9.3%
Barley	37%	0%	63%	0%	14%	73%	13%	1.8%
Dry Peas	56%	0%	44%	0%	16%	75%	9%	0.6%
Canola	91%	0%	9%	0%	3%	91%	6%	4.6%
Sunflowers	91%	0%	9%	0%	9%	85%	6%	0.3%
Peanuts	65%	1%	34%	0%	18%	72%	10%	0.6%
Dry Beans	58%	1%	41%	0%	12%	77%	11%	0.1%

¹ Abbreviations stand for Revenue Protection (RP), Revenue Protection with the Harvest Price Exclusion (RP-HPE, and Yield Protection (YP). Area plans include Area Revenue Protection, Area Revenue Protection with the harvest price exclusion, and Area Yield Protection.

Source: Risk Management Agency, Summary of Business.

Crop Insurance and the 2014 Farm Bill

As has occurred in previous farm bills, tradeoffs will be made between commodity title and crop insurance programs. Farmers purchase crop insurance, paying a portion of the premium with the remaining portion subsidized by the Federal government. Premium subsidies are a large portion of the Federal outlays on insurance. Farmers are given a choice of products, with 98% of acres insured with farm-level products which indemnify based on farm yields (Table 2).

Within farm-level products, farmers can choose between Revenue Protection (RP), Revenue Protection with the Harvest Price Exclusion (RP-HPE), and Yield Protection (YP). As its name implies, RP offers revenue protection, with prices calculated off of futures contracts. RP has a feature that allows its guarantee to increase between insurance sign-up and harvest if prices rise. RP is a popular product being used to insure over 80% of acres planted to canola, sunflowers, corn, soybeans, wheat, grain sorghum, and cotton (Table 2). Like RP, RP-HPE is a revenue insurance. Unlike RP, RP-HPE does not increase its guarantees if price rise. RP-HPE is not widely used (Table 2). YP makes payments when yields fall below a guarantee. YP use is highest for rice (70%) and barley (57%). Use of the different types of insurance likely indicates the types of risks farmer wish to protect against.

Corn and soybean farmers tend to elect high coverage levels, with 51% of corn policies and 43% of soybean policies at 80% or higher coverage levels (Table 2). Comparable shares are 13% for wheat, 5% for cotton, 4% for grain sorghum, and 22% for rice. Higher coverage levels are consistent with corn and soybeans producers viewing crop insurance as more important than producers of other crops, potentially leading to a debating point in the next farm bill.

Over time, steps have been taken to make crop insurance more attractive to farmers by reducing the share of premiums paid by farmers and increasing coverage levels. Relative to farmer paid premiums, the 2008 farm bill increased the share of premium subsidized for farm-level products that insured all of a crop in a county—that is, enterprise units. Examples of increase in coverage include introducing revenue products, increasing coverage levels, and increasing t-yields. A t-yield is the minimum yield used in calculating guarantees. Higher t-yields lead to higher guarantees. The 2014 farm bill increased coverage by introducing Yield Exclusion, cotton Stacked Income Protection Plan (STAX), and Supplemental Coverage Option (SCO).

Yield Exclusion allows a producer to exclude a yield from the guarantee calculation in a county where the county yield was below 50% of the ten-year average yield or an adjacent county had a yield with a 50% reduction. Impacts of Yield Exclusion on guarantees varies geographically. Many counties in the Midwest have no or at most one year eligible for exclusion. Producers in the southern Great Plains typically have many more. Having more excludable yields potentially raises guarantees more than when excludable yields are limited.

Cotton STAX is a crop insurance program available to producers on acres planted to cotton (Shields, 2016), coming into existence with support from the National Cotton Council (NCC) due to special circumstances discussed in the next section. STAX is an area plan of insurance. STAX's range of coverage is from 90% down to the higher of 70% or the coverage level of the underlying farm-level cotton insurance policy. Purchase of a farm-level product is not required. Maximum coverage level under a farm-level plan is 85%. Premiums under STAX have a subsidy level of 80%, meaning that the Federal government pays 80% of the premium while the farmer pays 20% of the premium.

SCO is similar to cotton STAX but is less attractive (Zulauf and Orden, 2014). The maximum coverage level under SCO is 86% compared to the 90% coverage level under STAX. Unlike SCO, STAX requires purchase of a farm-level product and is either yield or revenue based on the underlying product. STAX is always revenue based. SCO has a premium subsidy rate of 65% compared to 80% under STAX. SCO does not have a protection factor while STAX does. The protection factor scales up payments when they occur and farmers can choose from within a range. Suppose a farmer chooses the highest protection factor and a 90% coverage level. In this scenario, a \$30 difference in the guarantee and revenue results in a \$78 payment, 75% larger than the difference.

Popularity of STAX and SCO have been relatively low. In 2016, cotton STAX was used on 26.2% of insured cotton acres. SCO use on all crops was below 10.0% of insured acres. Rice has the highest use at 9.3% of insured acres,

followed by canola at 4.6% and wheat at 3.4% (Table 2). Some of the low use of SCO reflects the provision that SCO is not an option for a crop for which ARC was elected. It also likely reflects the unpopularity of area plans with farmers.

Cotton and the 2014 Farm Bill

Cotton faced particular issues during the 2014 farm bill negotiations. Brazil successfully challenged U.S. cotton programs at the World Trade Organization (WTO). To settle the dispute, several changes were enacted in the 2014 farm bill, with NCC playing an active role in designing cotton support programs (Schnepf, 2014). The cotton programs do not include PLC, ARC-CO, and ARC-IC. Rather, they consist of generic base acres, the aforementioned cotton STAX program, and marketing loans. The first two are new; the third is a continuing program.

Generic base acres are former cotton base acres. Generic acres do not receive cotton payments. Rather, they can receive payments for other program crops planted on generic acres. Commodity title payments likely enter profitability calculation, potentially causing planting decisions on generic acres to be impacted by commodity program payments. This possibility is problematic when farmers choose to plant crops with high expected commodity title payments, leading to more supply, further price declines, and higher commodity title payments. This concern is especially prevalent with regard to peanuts (Schnepf, 2016). Rice and corn also were planted extensively on generic base acres.

Next Farm Bill

The next farm bill debate likely will begin with a Congressional Budget Office (CBO) estimate of Federal outlays for the above programs assuming that they continue into the future. Then, the U.S. Congress will give the House and Senate Agricultural committees a target for Federal outlays, with the expectation that the target will be less than the CBO estimated outlays. If targeted outlays are above CBO estimated outlays, a very different debate will occur to that presented below. If targeted outlays are below CBO estimates, farm bill debates will become more contentious as the need to reduce Federal outlays on field crop safety net programs from CBO estimates become larger. Size and composition of CBO outlay estimates will depend on commodity prices used in CBO estimates. Outlays will be large if commodity prices are low -- with low being expected prices near or below reference prices. This scenario is tackled in the next "Low Price" section. A high price scenario then is discussed.

Low Price Environment: PLC versus Crop Insurance in Budget Cutting

Under low prices, most spending for commodity title programs will be in PLC. PLC's expected payments per base acre increase relative to those for ARC-CO as commodity prices decrease. This occurs because PLC's payments increase as prices fall below reference prices and do not decrease over time. On the other hand, ARC-CO payments are limited to 10% of the guarantee and guarantees will decrease until the reference price becomes binding on guarantee prices used in guarantee calculation. Moreover, while choice of program cannot be changed during the life of the current farm bill which runs through 2018, after 2018 farmers likely will be allowed to choose between PLC and ARC, either in an extension of the 2014 farm bill or in a new farm bill. Given changes in expected payments, shifts of acres to PLC should be expected. For example, in their most recent projection, CBO (2016) estimates that ARC-CO enrollment of corn base will decrease from 97% under the 2014 farm bill to 51% after 2019.

CBO estimates average yearly spending for 2019 through 2023 at \$8.92 billion for crop insurance, \$3.01 billion for PLC, \$1.42 billion for ARC-CO, \$.04 billion for ARC-IC, and \$0.30 billion for marketing loans. Taken together, crop insurance and PLC account for 87% of commodity title and crop insurance spending. In its March 2016 baseline, CBO used expected prices that average above the reference prices for corn and soybeans for the years from 2019 through 2023. Even at expected prices above reference prices, focus of cuts will be on PLC and crop insurance because of their high percentage of total spending. At lower expected prices, PLC and crop insurance spending becomes an even higher proportion of total spending.

For PLC, several mechanisms exist for making cuts: reference prices could be lowered, reference prices could be tied to a moving average of previous prices, a tighter per acre cap could be instituted, or the percent of base acres that receive payments could be reduced. Given experiences with previous farm bill debates, much of the debate

likely will focus on reference price levels, leading to a discussion of relative reference prices across crops. Some crops – notably peanuts, long-grain rice, and wheat—have reference prices above expected prices, leading to relatively high per base acre payments. This situation then leads to equity concerns across crops as well as public concerns for the purpose of the program. Continuing large payments for a crop look more like an income support program similar to direct payments, rather than as a counter-cyclical risk management program. Tying reference prices to moving averages of prices could eliminate this issue.

For crop insurance, one approach for lowering costs would be to reduce or eliminate crop insurance provisions added over the years to increase coverages. However, each will receive support from specific crops and regions, making it difficult to change these provisions. Yield Exclusion and t-yield provisions have larger impacts in high yield-risk areas such as the Great Plains. Trend-adjusted yields aid areas with high yield growth such as corn and soybeans in the corn belt. The harvest price option is widely used for many crops (Table 2). High coverage levels are purchased on many corn and soybean acres. SCO and STAX could be eliminated, but would offer only small budget savings given their low use and may generate significant opposition among current users.

Lacking specific crop insurance provisions to cut, the focus could turn to reducing Federal subsidies on premium. Cutting these subsidies by the same percentage point(s) across all policies would be a way to distribute cuts to crop insurance across all farmers, crops, and regions. Cutting subsidies would likely result in farmers lowering coverage levels of crop insurance purchases, leading to further reduction of crop insurance spending, and also reducing risk protection offered by insurance.

Under any low price environment, ARC-CO will not face as much budgetary issues as does PLC. It has a 10% cap on per acre payments and its coverage level was set at 86% of its revenue target, which in a low price environment depends on the reference price. In contrast, PLC has a much higher per acre payment cap that is a function of the difference between the reference price and the loan rate and its coverage level was set at 100% of the reference price. The reason for these different parameters is that the 2014 farm bill was discussed with an expectation of a downward moving price environment but prices were not expected to average much below the reference prices. Under a low price environment, a potential issue could be changing ARC-CO parameters so that expected payments are nearly the same as those from PLC.

Where budgetary cuts in the commodity and crop insurance titles come from will have crop and geographical implications. Producers of peanuts, rice, and wheat will have more of an interest in preserving PLC spending. Given the high levels of crop insurance use, producers of corn and soybeans will wish to protect crop insurance. A north-south divide is likely: with the south protecting commodity title spending and north protecting crop insurance spending.

High Price Environment: Low Commodity Title Spending

Higher prices would likely result in higher Federal outlays on crop insurance, but significant reductions in spending in commodity title programs. Moreover, there would be a shift in spending from PLC to ARC.

Low expected outlays could lead to relatively easy negotiations on the commodity title as there simply is relatively little Federal outlays to argue about. On the other hand, high prices along with a need to cut Federal outlays could lead to a much larger focus on crop insurance. Crop insurance could represent over 70% of Federal outlays on farm safety net programs for field crops. Significant cuts in farm safety net costs would have to come from insurance.

Cotton

Whether prices are low or high, cotton will be an issue. Adding a cottonseed program will increase costs in a likely environment where reductions in Federal outlays need to occur. Thus, cotton interest groups likely will have to offer cuts in other programs to pay for it. Options include elimination of cotton STAX, lower cotton loan rates, and elimination of generic acres. Eliminating generic acres could potentially reduce the quantity produced of crops with the highest expected government payments per acre, such as peanuts, rice, and corn; thus, providing savings. However, it could increase the acres of other crops, notably soybeans; thus reducing their price and potentially increasing expenditures on them. A second issue is what should be the cottonseed oil reference price, both its

level and relative to the “other oilseed” reference price. A third issue is how to determine the base acres for cottonseed oil. Historical cotton base acre reflects neither how many nor where acres are planted to cotton today (Zulauf et al., 2016).

As the preceding paragraph implies, a cottonseed oil program will face opposition. Such a program could have been instituted in the 2014 farm bill. Instead, the NCC supported STAX and generic acres. There also likely will be concerns about whether a cottonseed program could again cause trade concerns with Brazil. The following question will need to be answered: “Given this legislative history, why institute a cottonseed commodity program now?”

The New Twist

The current dialogue leads to an expectation that a new program for cotton, cuts to commodity title spending, and cuts in crop insurance spending will likely be key topics in the debate over the crop safety net in the next farm bill. If Federal outlays need to be reduced, contentious debates could ensue between cutting PLC or cutting crop insurance. As price expectations decrease, the pressure to cut spending on PLC will increase, with a particular focus likely to be the level of the reference prices. A potential debate along crop and geographical lines looms that pits supporters of crop insurance, notably Midwest corn and soybeans, against supporters of PLC, notably the Southern crops. While this geographical division is a historical feature of farm bill debates, it would be the first time that target price programs, in the form of PLC, will be pitted against crop insurance. This new twist in the age old crop policy saga will create new opportunities for economic analysis and dialogue.

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Federal Interventions in Milk Markets

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Keywords: Dairy, Livestock Gross Margin, Margin Protection Program, Milk, Milk Marketing Orders

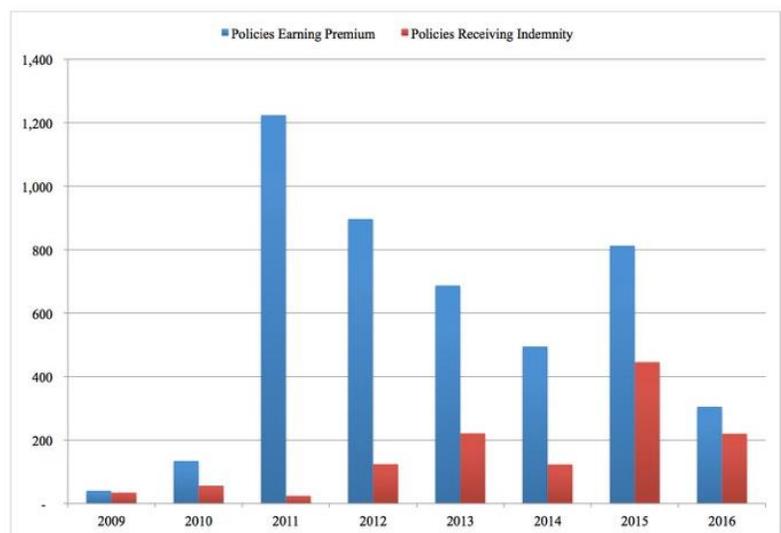
Federal regulations and programs have been crafted over the last 80 years to address the farm level markets for milk. These programs share the basic underlying motivations behind other agricultural policies and, likewise, rely on combinations of price support, income support, regulation of competition, product promotion and market development, and a complex system of grades, standards and quality criteria. The particular ways in which dairy policy is implemented end up being quite different from other agricultural programs, and these differences are driven by the physical, institutional and economic characteristics of milk and dairy markets. The Dairy Subtitle of the typical Farm Bill tends to focus on price and income programs, but all aspects of dairy policy are subject to the review and consideration of the Congressional agriculture committees, the U.S. Department of Agriculture (USDA), and other regulatory agencies, such as the Food and Drug Administration (FDA). The Agricultural Act of 2014 (2014 farm bill) was especially notable for dairy as it replaced existing price and income programs with the Margin Protection Program for Dairy Producers (MPP-Dairy).

Primary Safety Net Programs

MPP-Dairy combines elements of the Milk Income Loss Contract (MILC) with the Livestock Gross Margin for Dairy Cattle (LGM-Dairy) insurance product. MILC was a traditional deficiency payment program that originated in the 2002 farm bill. It offered payments triggered if a benchmark milk price was less than a legislatively specified threshold price, up to a payment limit defined by pounds of milk sold. After grain prices rose dramatically in conjunction with the demand for corn to make ethanol, the MILC trigger was modified in the 2008 Food, Conservation and Energy Act. When a national average dairy feed ration cost increased above a certain level, the trigger price would be adjusted upward to reflect a portion of the increased cost. Dairy farmers faced few restrictions to participate, but total payments were limited. MILC expired with passage of the 2014 farm bill.

LGM-Dairy dates to 2008 when it was added as a pilot program offered by the Risk Management Agency of USDA. It is a true insurance program that provides indemnities based on the differences between the Federal Milk Marketing Order minimum Class III price of milk and prices of corn and soybean meal using futures prices. Since FY2011, premiums have

Figure 1: Livestock Gross Margin –Dairy Policies by Fiscal Year*



Source: USDA-RMA.

* All Active Policies and Policies Receiving an Indemnity Payment (a policy may have covered more than one unit or time period during a year).

been subsidized, with additional reductions based on a farmer-selected deductible to make the product more attractive to farmers, but the funding for these subsidies is so limited that it has resulted in LGM-Dairy contracts only being available for short time periods and few producers. The number of farmers that have taken out one or more LGM-Dairy contracts is illustrated in Figure 1, which also shows the number of farmers that received an indemnity payment. The data do not reveal individual producers across years, but we can say that the number of farmers that used LGM-Dairy since its inception in 2009 is at least 1,224 and could be as many as 4,595—assuming no farmer bought a policy more than once. The number of farmers activating a policy reached over 800 in FY15 when some very favorable contracts were available near the end of 2014 and 55% of participants received an indemnity payment. Farmers generally describe LGM-Dairy as overly complex and too expensive. LGM-Dairy remains available to producers, but once they enroll in MPP-Dairy they can no longer use LGM-Dairy for that operation during the life of the 2014 farm bill.

MPP-Dairy makes payments to producers when the cost of feed is high relative to the price of milk. Like MILC, MPP-Dairy is offered through the Farm Service Agency (USDA-FSA) but has some features more in common with USDA-RMA's insurance products. The MPP-Dairy milk price is set to the published U.S. All Milk Price and feed cost is benchmarked using U.S. average corn and hay prices, as estimated by NASS, and the Central Illinois soybean meal price, as surveyed by Agricultural Marketing Service (AMS). Participating producers pay an annual fee of \$100, for which they automatically receive \$4/cwt (hundredweight) margin coverage on 90% of their program quantity. They can choose to buy-up to higher margins in \$0.50/cwt increments to a maximum of \$8/cwt. Buy-up coverage can be applied to 25-90% of the program quantity in 5% increments. The \$8/cwt maximum coverage level is near the average of ADPM since 2000. The \$4/cwt minimum is well below the "normal" lows experienced in 2000, 2002-2003 or 2006 but above the extreme \$2 levels experienced in 2009 or 2012. If the bimonthly average ADPM falls below the selected margin coverage, a payment is triggered on the amount of eligible milk. Once enrolled, as long as they remain active in the dairy business and have paid their premiums, producers are obliged to remain in the program through 2018. They may change their coverage levels annually. Premium levels are fixed by the farm bill and therefore invariant to risk (Newton et al., 2015).

In 2015, just over half of the eligible operations elected to participate in MPP-Dairy. About 44% chose to participate at the minimum, and cheapest, coverage level (USDA-FSA, 2016). Although dairy farmers generally regarded 2015 as a down year, MPP-Dairy provided only trivial payments to about 260 farmers who chose the highest coverage level. As illustrated in Figure 2, somewhat fewer farmers enrolled in 2016 and coverage levels shifted to lower amounts. The share of farms that elected the minimal coverage jumped to 77%, and participation at every buy-up level was lower in 2016. Insofar as market expectations for 2016 were pessimistic, the movement by so many enrollees towards the minimum and cheapest level of coverage has been widely interpreted as a clear indication that many farmers were dissatisfied with the performance of the program in 2015.

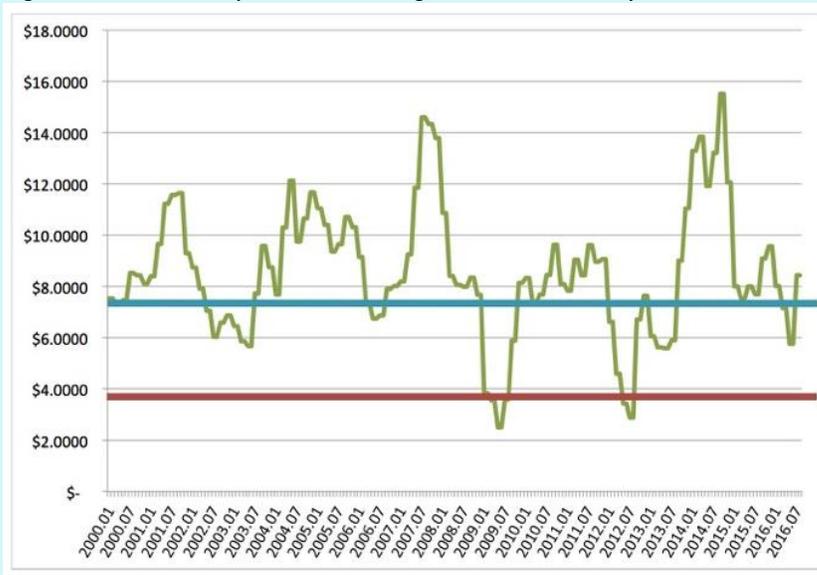
Figure 2: MPP-Dairy Enrollment of Dairy Operations by Coverage Level, 2016 and 2015



Source: USDA-FSA.

The ADPM dropped precipitously from the unusual highs of Fall 2014 into early 2015, as shown in Figure 3. ADPM is estimated for 2000 through February 2014, with the official ADPM shown subsequently. Despite the dramatic decline, the magnitude of the ADPM was consistently near a 15-year average. It did fall to well below that average in several months of 2016. As will be discussed in a following section, farmers generally contended that 2015 and 2016 were considerably worse than the ADPM measure suggested, either in the absolute or relative to previous years. This raised questions about the reliability of ADPM as an accurate indicator of actual farm financial performance. It also begs the question how do farmers gauge their financial status, such as by changes in the price of milk by itself or by liquidity as opposed to profitability.

Figure 3: Actual Dairy Producer Margin as Calculated by USDA*



Sources: USDA-FSA for 2014 and later. Early years calculated from ADPM formula, USDA-NASS and USDA-RMA.
 * Lines denote upper and lower bounds for coverage under MPP-Dairy.

The Era of Price Supports and Closed Markets

MPP-Dairy is a stark contrast from previous and long-standing government programs to support milk prices or dairy farm incomes. From the 1940s to the 1990s, the primary safety net tool for dairy farmers was the Milk Price Support Program, which created a floor under milk prices by essentially establishing a perfectly elastic demand for certain dairy commodities that USDA purchased, held, and later disposed of outside of commercial markets—butter, cheese, and non-fat dry milk. The support program was part of a suite of agricultural price supporting programs permanently authorized in the Agricultural Act of 1949. Whereas similar programs for major program crops were abolished in the 1970s, the dairy support program was active through the 1980s. Massive surpluses and government costs in the 1980s resulting from an overly aggressive price support in the 1970s led to a political evisceration of the half-century old milk price support program. It continues to remain part of permanent law and serves as a serious threat should Congress fail to pass a new farm bill in a timely manner.

Figure 4 illustrates the effect of the price support program on dramatically restraining price variation. It presents the volatility of the all milk price—as the standard deviation of the log change in the all milk price between consecutive months—starting in 1910. The high degree of price volatility prior to the implementation of price supports in the 1940s helps to understand the justification for price supports and Federal Milk Marketing Orders introduced in the 1930s. It also vividly shows the significant reduction in price volatility from its introduction during the 1940s until its essential demise in the late 1980s. Since U.S. dairy markets were opened following the Uruguay Round, milk price volatility has resurfaced at levels comparable to the pre-World War II period. Moreover, as suggested by the short-term variations that are more pronounced in the current time period, the nature of these variations is also different. Earlier price variations were large but almost entirely seasonal and hence quite predictable. Since the mid-1990s, the seasonal variation in monthly prices has been compounded by cyclical and other effects that are more difficult to anticipate (Nicholson, Stephenson, and Novakovic, 2009). This has led to a heightened concern about volatility.

Output Price vs. Margin as a Payment Trigger

Transitioning from a program designed to prevent prices from going below a minimum to one that provides income subsidies when prices inevitably fall made sense when dairy markets were opened to world trade in the mid-1990s. Dairy farmers disliked the more overt subsidy of countercyclical payments but nonetheless felt justified in receiving some degree of support in a marketplace that had become increasingly volatile.

Two events led dairy farm advocates and policy makers to seek an alternative to either MILC or LGM-Dairy. The first was the prolonged regime of higher grain prices in the second half of the 2000s. The second was the precipitous decline in milk prices in

2009, during the depths of the Great Recession. Although both programs were designed to protect farmers against unfavorable variations in the prices of feeds relative to the milk price, MILC was judged to be too anemic and LGM-Dairy too complicated and expensive. The political assessment was that it would be better to start with a clean slate.

Milk production supply controls were also seriously considered and proposed. Some farmers and advocates felt and still feel strongly that supply interventions are both necessary to quickly address low milk prices and are more fair than simply letting low net income force some farms out of business. Ultimately, those approaches lacked sufficient Congressional support. On the other hand, proposals that looked like an insurance product held appeal as public and Congressional sentiment was moving towards favoring crop insurance over direct payments types of programs. Key factors that favored MPP-Dairy over LGM-Dairy or other forms of crop insurance were:

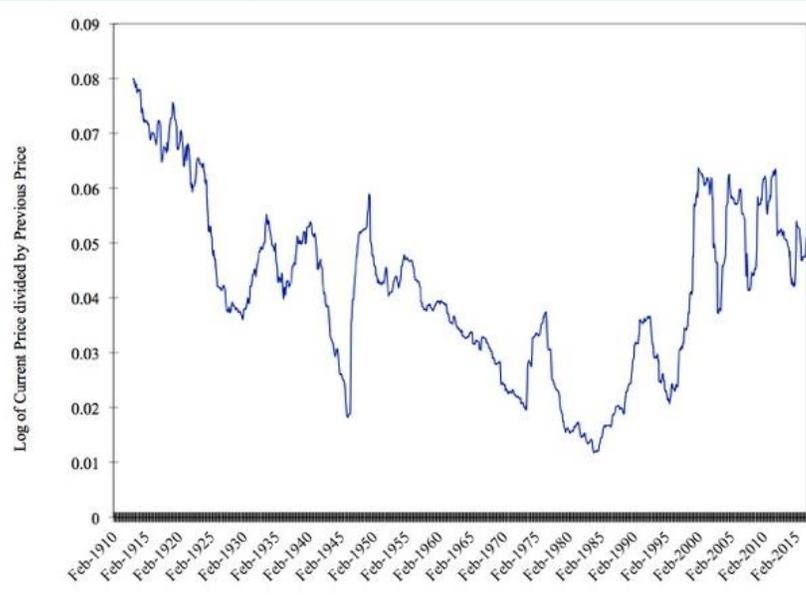
1. fixed premiums and benefits,
2. an ability to differentiate premiums for smaller farms, and
3. simplicity in design.

Although MPP-Dairy was designed to provide very low premiums to farms of average size or smaller, it was a priority of the developers to have a program that would be more relevant and fully available than MILC to all sizes of dairy farms, as it was clear that size offered no immunity to precipitously low milk prices and high feed costs.

MPP-Dairy to Date

Satisfaction with MPP-Dairy is believed to be low based on feedback from extension educators, farm media, cooperative economists and farmers. Dairy farmers had grown somewhat accustomed to not receiving a lot of assistance from federal programs, but they expected more from MPP-Dairy (Dickrell, 2016; Stephenson, 2016). On top of that, farmers resented being asked to pay premiums for a program many felt had failed on its promise. Although payments from MILC would have been meager, many farmers said at least they wouldn't have had to pay for it. Even for farmers who paid only \$100 for the lowest level of coverage, they felt the insult of payment with no help for the injury of low net farm income.

Figure 4: Standard Deviation of 36-month Rolling Averages of Relative Changes in the Monthly All Milk Prices, 1910 to 2016



Sources: USDA, NASS.

As shown in Figure 2, the ADPM has not fallen below the base level of \$4/cwt since 2014. In the 12 payment periods during the first two full years of the program, six have had an ADPM below \$8/cwt, the highest coverage level. However, five of these have been between \$7 and \$8 and one was calculated as \$5.76/cwt. With very few producers signing up at the \$8 or \$7.50 level, the number of program beneficiaries has been about 4,500 over the two years compared to some 24 thousand enrollees and over 40,000 dairy farms nationwide. Of that 4,500, 4,000 or more received only one payment during that one exceptional period in 2016. While every analyst is quick to point out that the success of an insurance program is not to be measured by the number of times it pays out, the fact remains that many producers apparently believe that MPP-Dairy should have paid out far larger and more frequent benefits than it did. Many dairy farmers would say that 2015 and 2016 felt to them like years when many more farmers deserved assistance.

Is ADPM the Best Measure for Dairy Farm Risk?

Increasing milk and feed price volatility in recent years has led to the development and use of dairy forward pricing tools, such as the Dairy Options Pilot Program and LGM-Dairy insurance. Dairy farmers also have purely private risk management tools at their disposal including forward contracts from their buyers or futures and options contracts for milk and feed that are available via the Chicago Mercantile Exchange. Despite the variety of tools available few farmers take advantage of risk management tools other than MPP-Dairy. Although exact numbers are unknown, industry reports indicate that something like 10-15% of farms have tried private sector risk management tools and only a small subset use them with any consistency although those farms represent a disproportionately large share of milk production (Wolf and Widmar, 2014). This is consistent with Figure 1, which suggests that 3-7% of U.S. farmers have even tried LGM-Dairy. This is not to say that dairy farmers are oblivious to risk, but what farmers tend to emphasize is:

1. management strategies focused on long term profitability,
2. management strategies like precautionary reserves of feed or over-stocking, and
3. tax management strategies to create cash expenses in profitable years and either reduce cash expenses in off years or use operating loans or deferred loan payments to preserve cash flow.

Most dairy farmers also market their milk through a cooperative. While this does not necessarily result in higher prices, it does tend to effectively deal with the risk of losing one's market (buyer). The discussions around the development and launch of MPP-Dairy increased awareness of price and income risk by dairy farmers, but it may not have swayed them to take a more active role in their own price risk management.

The logic behind using a milk price less feed cost margin to trigger dairy farm assistance is sound. Milk is by far the largest source of revenue on dairy farms and feed the largest cost. Past research has shown that the ADPM is correlated with profitability on dairy farms (Wolf et al., 2014). However, there are issues with the ADPM including the fact that a general correlation with farm profitability hardly guarantees that the ADPM will accurately or even approximately reflect the financial conditions of all farms or even most farms.

Farmers expect that income above feed costs will be sufficient to pay for all other inputs—for example, hired labor, replacements, utilities—and generate a sufficient return to the unpaid factors including management, labor and capital. There is a large amount of heterogeneity across dairy farms in the United States that might affect the efficacy of the ADPM to reflect farm level risk. These factors include variations in production technologies or size, capital structure, and management. By using spot prices on a monthly basis, the ADPM implicitly assumes the farm is operating in the cash market for its output and inputs. Many dairy farms grow their own crops to meet feed needs—particularly forages. They do so because they can generally grow crops more cheaply than they can buy feed. In years when this is true, the ADPM would tend to understate their actual income over feed costs. Historically, operations in the Great Lakes and Northeast regions have this characteristic, whereas very large herds typical of the West have a much higher reliance on purchased feeds, especially grains and oilseeds. Another factor is that the differences in prices of milk and purchased inputs and thus margins are not constant across regions over time. For example, droughts in the Southwest and Pacific regions have driven up feed prices beyond normal regional relationships with the rest of the country.

Alternatives to the Current Program

The policy debate in the next couple of years is likely to focus on whether MPP-Dairy can be modified to make it a more acceptable instrument to dairy farmers. In its current form it seems likely that many would desert the current program if a new sign-up is required under the next farm bill. At present, primary attention is being paid to "fixing" the current program, including four major changes.

The first is to return to the ADPM formula using feed price weights as proposed in the original House bill. In a cost cutting move, the Senate bill reduced the weighting factors on all feed prices by 10%. This had the effect of inflating the margin. Returning to the original ADPM formula would have decreased the monthly ADPM an average of \$0.95 in 2015 and 2016, ranging from \$0.86 to \$1.03 across all months.

A second change would be to reduce premiums, especially at the higher coverage levels. This could also include raising the minimum catastrophic coverage from \$4/ cwt to a higher amount.

A third change might be to add coverage levels above \$8 per cwt.

Lastly, some groups would like to use regional prices instead of national prices to make the ADPM reflective of regional differences in prices. A specific proposal has already been introduced to use regionally differentiated input prices. It seems unlikely that a regional approach would ignore regional differences in the milk price.

Each of these proposals has budget consequences that may make them difficult to implement in the current climate. They certainly would make the program more appealing to producers but it is not at all clear how favorably producers would react.

A different suggestion for change is to recast MPP-Dairy as a proper insurance program under the auspices of USDA-RMA, not USDA-FSA—for example: rate the premiums at sign up based on current market situation. How this would relate to the ongoing pilot LGM-Dairy has not been much articulated or explored. This would make the program cost part of the overall crop insurance program, not the dairy title. Lacking any specifics on its structure, it is not possible to anticipate how such a program would be received by producers.

Other Aspects of Dairy Policy

The oldest and most active federal intervention is Federal Milk Marketing Orders. Federal Orders regulate farm level markets for milk primarily through a complex system of minimum prices that are applied to the buyers of farm milk according to the products they make. A complex set of regulations, Federal Orders are frequently discussed and often criticized, even within the industry. However, there is no consensus on how they might be improved or even that legislative changes are necessary, as opposed to the conventional method of regulatory hearings. A pending decision on a brand new Federal Milk Marketing Order to encompass the California market and displace the current system based in State law, could lead to new discussions about Federal Orders elsewhere. The issue will be the extent to which USDA accepts California producer proposals to retain certain features of the existing California regulation that are quite different in design or execution from what is used elsewhere in the Federal system. A recommended decision on a California Order is expected in 2017.

As noted earlier, numerous other areas of government regulation are of keen interest to dairy farmers, including immigration reform, environmental regulations, animal and other management practices, and food laws ranging from GMOs to the use of beverage milk in child nutrition programs. Some of these may be on the agenda of the new Republican administration, but it is premature to speculate on what those might be or what direction they might take.

Dairy Policy Shift

U.S. agricultural policy has shifted towards insurance and other risk management tools and away from traditional income subsidies and price supports in recent years. Dairy policy has been a part of this shift including encouraging the use of dairy options contracts, dairy revenue insurance, and MPP-Dairy, a new program established in the

Agricultural Act of 2014. Despite these policy trends, dairy farmers have not embraced conventional price or margin risk management tools. Although over half of U.S. dairy farms enrolled in MPP-Dairy, the current impression is that this program has not lived up to farmer expectations. Policy-makers and industry advocates have begun to consider ways in which the current program could be improved, but many farmers are skeptical and will be looking for dramatic changes. Whether or not Congress can afford to be more generous with dairy programs is probably a more relevant question than their desire to offer dairy farmers a more appealing package.

Federal Milk Marketing Orders, another and long-standing component of U.S. dairy policy remains, but also faces various criticisms. After resisting trade for most of the 20th Century, the U.S. dairy industry from farmers to processors, has become quite bullish on trade and generally supportive of increased trade liberalization, while of course retaining a strong sense of the need for "fair" trade rules. Looming ever larger above familiar issues related to volatile prices are consumer driven issues related to production practices, environment, health, animal welfare, nutrition and other issues directly related to dairy foods.

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Federal Benefits for Livestock and Specialty Crop Producers

Stephanie Mercier

JEL Classification: N52, Q10, Q18

Keywords: Farm Bill, Livestock, Market Promotion, Specialty Crops

Largely due to their own policy choices over time, livestock and specialty producers do not benefit from farm safety net programs like producers of field crops, which are provided under the Commodity Title of farm bills. Although they do participate to some degree, these producers do not rely on the federal crop insurance program either. Instead, the major forms of current support for these producers provided through the U.S. Department of Agriculture (USDA) are discussed in this article, including efforts to expand both domestic and international demand, funding to ensure the wholesomeness of their products and environmental sustainability of their operations, and disaster assistance. It does not cover the suite of smaller programs aimed at fostering local and regional marketing of food or those focused on enabling organic production and marketing.

Disdain for Federal Benefits Among Some U.S. Farmers

The traditional farm safety net programs provide financial support for a minority of American farmers and ranchers from the federal government. These programs are focused on bolstering the income of farmers producing the major row crops and milk. According to data collected in the 2012 Census of Agriculture, the federal government provided no payments whatsoever to more than 60% of Census farms, and some of the payments that were made came out of conservation and loan programs that are not part of the formal farm safety net. Of the roughly 800,000 farmers who did receive some payments, nearly 60% received \$5,000 or less in 2012.

Roughly half of the nation's farms are predominantly livestock operations, and about 9% specialize in vegetables, fruit, or nursery crop operations. As of the latest USDA estimates for total agricultural receipts from August 2016, livestock and dairy account for roughly the same share of total agricultural receipts as number of farming operations at 48%, while specialty crop production is expected to generate 27% of total receipts, or about three times their share of producers.

Until relatively recently, farmers whose primary on-farm activities were not raising field crops or dairy cattle were content to not receive substantial direct federal financial assistance. In fact, certain groups of those farmers took pride in this status--livestock producers often characterized themselves as 'rugged individualists' not needing to rely on federal farm support. However, this description does not acknowledge benefits that cattlemen from the Western United States derive from the availability of public grazing land at relatively low cost per animal unit rented from one or more federal agencies such as the Bureau of Land Management (BLM) and the U.S. Forest Service. Both Western livestock and specialty crop producers also benefit from large federal investments over the years in water and hydroelectric projects, with the Bureau of Reclamation and the Army Corps of Engineers building infrastructure such as dams, canals, tunnels, and aqueducts. According to a 2006 study by the Congressional Budget Office (CBO), the federal government spent \$24 billion—in nominal dollars—on such projects between 1902 and 2004, although a share of that investment was eventually reimbursed by beneficiaries.

Alternative Paths for Assistance

In addition to the below-market cost access to land, water, and electricity that many livestock and specialty crop farmers have received over time due to the federal but non-USDA efforts described above, some of these farmers have also benefitted from USDA programs that are broadly available to producers of all types of commodities.

Until the last few farm bills, rather than pursue direct benefits through the farm bill process, commodity associations representing livestock and horticultural producers primarily focused on maintaining or increasing resources for programs which helped to expand the demand for their products, either domestically through nutrition assistance programs such as the school lunch and breakfast programs or internationally through USDA trade promotion programs. For example, during the mid-1990's, the U.S. Department of Defense ordered its domestic procurement officials to purchase fresh fruit and vegetables for distribution to school systems located near U.S. military installations in addition to the purchases it would make for food preparation facilities serving the military personnel and dependents living on those bases. This effort was institutionalized as a specific provision in the Food Security and Rural Investment Act of 2002. The so-called DOD Fresh program now provides assistance to school districts beyond those located near military installations.

Periodically, the Secretary of Agriculture also uses a longstanding authority, under Section 32 of the Act of August 24, 1935 to procure commodities for distribution within the school lunch program if those commodities are deemed to be in surplus or their producers are seen as facing economic distress. This 'emergency removal' procedure was used to purchase turkey, fruits and vegetables, and chicken products valued at \$200 million in fiscal year 2013. The flexibility of Section 32 was reduced somewhat by language included in the 2008 farm bill, but it still serves as a tool of last resort to help U.S. producers not covered under traditional safety net programs.

On the trade side, both specialty crop and livestock groups are major participants in the two main trade promotion programs operated by USDA's Foreign Agricultural Service, the Market Access Program (MAP), funded at \$200 million annually, and the Foreign Market Development Program (FMDP), funded at \$34.5 million

Table 1: Key Federal Programs for Livestock and Specialty Crop Producers

Program	Year established in legislation	Annual Benefit	Share Accrued to Specific Commodity Groups
Market Access Program (MAP)	Food Security Act of 1985 (Originally Targeted Export Assistance Program)	\$200 million	11% for livestock producers, 33% for specialty crop producers in 2015
Foreign Market Development Program (FMDP)	Agricultural Act of 1954	\$34.5 million	16% for livestock groups in 2015
Technical Assistance for Specialty Crops (TASC)	Farm Security and Rural Investment Act of 2002	\$9 million	Only available for specialty crop producers
Environmental Quality Incentives Program (EQIP)	Federal Agriculture Improvement Act of 1996	\$1.65 billion for FY17	60% for livestock producers mandated for each year
Federal Crop Insurance Program	Agricultural Adjustment Act of 1938	\$6 billion in premium subsidy in 2015	19% of liability for specialty crop producers and 2% for livestock producers in 2015
Tree Assistance Program	FY05 agricultural appropriations bill	\$10 million in 2015	Only available for tree crop producers
Livestock Forage Disaster Program	Food, Conservation and Energy Act of 2008 (2008 farm bill)	\$2.7 billion in 2015--includes back payments for 2011-14	Only available for livestock producers
Livestock Indemnity Program	Food, Conservation, and Energy Act of 2008	\$58 million in 2015	Only available for livestock producers
Specialty Crop Block Grant Program	Specialty Crop Competitiveness Act of 2004	\$72.5 million in 2016	Only available for specialty crop producers
Specialty Crop Research Initiative	Food, Conservation, and Energy Act of 2008	\$80 million in 2016	Only available for specialty crop producers

Sources: Agricultural Act of 2014 (for mandatory programs, FY17 USDA Budget Summary, FAS/USDA (for shares of trade promotion programs), OBPA/USDA Budget Tables.

annually, both with mandatory Farm Bill money. MAP funding tends to support generic promotion efforts in targeted markets, while FMD funds are focused more on efforts to ensure that foreign markets stay open to U.S. products. Meat and livestock groups received \$19 million in MAP funds in fiscal year 2016 (FY16)—about 11% of the total allocated—while fruit, vegetable, and tree nut groups received \$58 million—33% of the total (Table 1). The livestock funding primarily went to the U.S. Meat Export Federation, while the specialty crop funds went to a variety of state groups—especially from California—national commodity groups, and a handful of large grower cooperatives, such as Sunkist and Welch's. Meat and livestock trade associations—and exporters of related products such as hides and skins and animal semen) also received about 16% of the funds provided under FMDP for FY16.

On the trade promotion side, specialty crop stakeholder groups were also able to obtain farm bill funds for a separate program focused entirely on their trade issues, called Technical Assistance for Specialty Crops, or TASC. This program first received modest funding of \$2 million annually under the 2002 farm bill, with funding ratcheted up from \$4 million to \$9 million annually under the 2008 farm bill, and maintained at \$9 million annually under the 2014 farm bill. The program provides funding to U.S. organizations for projects that address foreign sanitary, phyto-sanitary and technical barriers that prohibit or threaten the export of U.S. specialty crops, with approved projects receiving up to \$500,000. Trade associations or other organizations participating in the MAP and FMDP are required to provide their own funds to match what they receive under the program, while such matches are encouraged though not required for TASC applicants.

Expanding Access to Federal Crop Insurance Beyond Row Crop Production

When the federal crop insurance program (FCIP) was established in 1938, it was aimed solely at producers of key row crops in major producing regions, such as wheat, corn, and cotton. The program limped along with low participation and relatively little public support for several decades until the passage of the Federal Crop Insurance Act of 1980, which made several significant changes in the program. Coverage was expanded into new crops and regions. Federal premium subsidies were offered for the first time to defray the cost to producers and thus encourage more participation in the program. Also, for the first time, private sector insurance companies were allowed to sell and service FCIP policies.

Today, although the program remains focused on row crops in terms of value of crops and total acres insured that the top four crops—corn, soybeans, wheat, and cotton—accounted for 75% of the program's liability in 2015—affirmative steps have been taken in recent decades to facilitate coverage for a broad range of specialty crops and to a lesser extent for livestock production. Beginning with the Agricultural Risk Protection Act of 2000 (ARPA), a mechanism was established to provide an opportunity for outside stakeholder groups to develop proposed crop insurance products for additional crops or livestock, and if those proposals were approved by the Board of the Federal Crop Insurance Corporation (FCIC), receive reimbursement for expenses incurred. In the 2008 farm bill, this policy submission mechanism was modified to allow groups to also request funds for policy development in advance of their detailed work, up to 50% of the estimated costs, rather than wait for reimbursement after the policy is approved. In February 2015, USDA's Risk Management Agency (USDA-RMA) announced that groups developing a new crop insurance policy could collect up to 75% in advance rather than 50% if that work was focused on specialty crops or underserved producers.

As a result of the new mechanism for private sector development of crop insurance products in ARPA, access to such coverage has expanded greatly for both specialty crop and livestock producers. Although the number of specialty crop policies sold declined by about 10% between 2000 and 2015, as have policy counts generally, the liability for those crops—their insured value—rose by more than 150% over the same period, from \$7.6 billion to \$19.5 billion. Part of this increase is due to higher prices, but a portion is due to the fact that many specialty crop producers now have access to higher coverage levels under buy-up policies, as opposed to the catastrophic policies that were the main type of insurance available previously.

Livestock producers have two different paths to participate in the federal crop insurance program. Hog and cattle producers have access to coverage against declines in the value of their animals when they take them to market,

although the federal cost of such programs was capped by statute in ARPA at \$10 million annually. These products never caught on. In 2015, only about 2,400 producers purchased such policies, with total liability of \$1.3 billion, or about 1% of the liability insured under the crop side of the program. In addition, farmers who graze their animals on pasture or rangeland also have access to insurance against loss of the forage they need for those animals. Indemnity payments for these policies are based on changes in precipitation or temperatures in the area where the animals are grazing, rather than losses in specific fields as is the case with most crop insurance policies. In 2015, the liability of these rangeland and pasture policies was \$1.1 billion, a 400% increase over 2000 levels.

Additional Disaster Assistance Provisions for Specialty Crop and Livestock Producers

The 2008 farm bill established a set of five stand-alone disaster assistance programs. Four of the programs were targeted at least in part to assistance for producers of livestock and certain specialty crops. Livestock owners whose animals die as a result of a natural disaster such as floods or blizzards are eligible for payments under the Livestock Indemnity Program, and livestock producers whose access to good quality forage is reduced due to drought or fires can receive payments from the Livestock Forage Disaster Program. The 2008 farm bill also provided funds to continue the Tree Assistance Program (TAP), which gives owners of orchards or nursery trees a payment if their trees, bushes, or vines are lost as a result of a natural disaster. This program is distinct from the crop insurance indemnity a farmer would receive as a result of a lost tree crop, such as apples or oranges in a given season, because the latter assumes that the trees would still be there to bear fruit in subsequent years. An ad hoc program to help tree producers had first been created in the fiscal year 2005 omnibus appropriations bill. The Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish (ELAP) is designed to provide assistance for losses by livestock producers not otherwise covered under other programs, such as losses due to cattle tick fever treatment or the cost of moving animals to alternative watering sources if a drought dries up their normal sources. The other program was the Supplemental Revenue Assistance Program (SURE), available to help all crop producers

All of the programs except for SURE were re-authorized in the 2014 Farm Bill, and mandatory funding for four of the continued programs (excluding ELAP) was left intact without caps. In fiscal year 2015, USDA estimates that more than \$2.7 billion was disbursed under the Livestock Forage Disaster Program, \$58 million for the Livestock Indemnity Program, and \$10 million for the Tree Assistance Program. Due to the expiration of these programs in 2011, the disbursements in FY2015 covered multiple years of losses for many farmers that occurred during the period when the coverage had lapsed.

Evolving Attitude Toward Federal Assistance

Beginning with the 2002 farm bill, the commodity organizations representing specialty crop and livestock producers shifted their attention to potential benefits that would be specifically targeted at their members. Despite this change in approach, these groups deliberately chose not to adopt the conventional safety net model used to provide income support for program crop producers. This attitude stemmed from a widely held concern that such a program would make raising specialty crops more financially attractive, inducing some row crop producers to shift some of their cropland out of row crops into growing fruits and vegetables, potentially flooding specialty crop markets and driving down prices. According to the 2012 Census of Agriculture, there were 253 million acres planted in row crops that year, as opposed to about 10 million acres with vegetables, fruit, or tree nuts. Thus, a 5% shift of row crop acres into specialty crops in one year would more than double total area under specialty crops. In fact, beginning in 1996, these groups insisted that farm bills bar program crop producers who received direct payments from planting specialty crops on any of their program base acres, fearing that the direct payment would amount to 'cross-subsidization' of their specialty crop production. This requirement remained in place until the direct payment program was eliminated in the 2014 farm bill, a rule that was known as a planting flexibility restriction.

Specialty Crop Efforts

Specialty crop groups were able to secure \$160 million in assistance for their members in an August 2001 emergency piece of legislation intended to support U.S. agriculture in response to financial losses suffered as a result of weak global markets. This provision was included in an assistance package that totaled \$5.5 billion. The

legislation required USDA to distribute the money to the 50 state departments of agriculture, allocated based on states' share of U.S. specialty crop production.

After getting their first taste of disbursement of direct funds in 2001 on an ad hoc basis, specialty crop producers initiated overtures to their members of Congress for regular, targeted federal funding to assist with domestic market issues for their products. The Specialty Crop Competitiveness Act (SCCA) which authorized several programs to help specialty crop producers with their marketing, promotion, and research needs was enacted in 2004, but none of the newly created programs received any funding until 2006. In that year's agricultural appropriations bill, the Specialty Crop Block Grant program, modeled on the ad hoc disbursement mechanism used in 2001, received \$6.5 million in discretionary funding.

The push to provide mandatory funding for this program and several others authorized in the SCCA in the 2008 farm bill was led in the Senate by Senator Debbie Stabenow (D, MI), and in the House by Representative Jim Costa (D, CA), from California's Central Valley, both members counting a fairly large number of specialty crop producers among their constituents. This effort resulted in the establishment of the first horticulture and organic agriculture title in a farm bill, with programs for which \$1 billion in funding would be provided over a ten year period, from 2008-2017. That figure was 10% of the net mandatory funds added to the 2008 farm bill above baseline levels.

In addition to the Specialty Crop Block Grant program, which received \$466 million in the 2008 farm bill, the specialty crop sector obtained \$377 million to fund state efforts to monitor specialty crop pests and disease outbreaks and another \$20 million to set up "clean plant centers" that would provide pathogen-free propagative plant material to state agencies or private nurseries.

The last piece of the specialty crop pie was \$230 million in funding—over ten years—for specialty crop research, which was included in the agricultural research title, not the horticulture and organic agriculture title. Unlike most recent efforts by the Agriculture Committees to provide mandatory funds for agricultural research through the farm bill process, these funds actually went for their intended purposes, rather than being diverted by the Agricultural Appropriation Subcommittees to pay for other items in the annual appropriations bill.

In the next farm bill, Senator Stabenow had moved up to become the chairwoman of the Senate Agriculture Committee. The horticulture title in 2014 farm bill received an additional \$694 million over baseline levels over the 2014-2023 period, with additional funds for the Specialty Crop Block Grant program accounting for nearly 40% of the total increase. In addition, the specialty crop research initiative received \$745 million in new funds in the 2014 farm bill. These increases occurred in the context of a farm bill that actually spent \$16.5 billion less than would otherwise have occurred under baseline levels, according to CBO scoring estimates of the legislation at the time of passage.

In fiscal year 2015, USDA-AMS distributed \$72.5 million to state departments of agriculture under the Specialty Crop Block Grant Program. Based on states' share of specialty crop production, the same basic formula used since 2001, California (\$19.8 million), Florida (\$4.1 million), North Dakota (\$2.6 million) and Michigan (\$1.9 million) were the largest recipient of funds. The size of the North Dakota share was due primarily to their production of pulse crops like dry peas and lentils.

Livestock Group Efforts

Livestock groups focused on obtaining financial assistance for their members operating large confined animal feeding operations, also known as CAFO's, who were facing increased regulatory pressure to manage the manure being produced by their animals without polluting the ground and surface water supply near their farms. The vehicle that was chosen to provide this assistance was the Environmental Quality Incentives Program (EQIP), which was established as a discretionary program in the 1996 farm bill and had received annual funding which ramped up from \$130 million in 1996 to \$200 million in 2001.

Testimony in support of this effort was offered by the then-President of the National Cattlemen's Beef Association (NCBA) before the House Agriculture Committee in 2001. His testimony was also endorsed by groups representing the other major groups representing animal agriculture in the United States, including hogs, sheep, dairy, and

poultry producers. One of the main Congressional advocates of this approach was Representative Frank Lucas (R, OK), at the time chairman of the subcommittee with jurisdiction over conservation programs. In the 2002 farm bill, EQIP's funding was increased significantly, starting at \$545 million in 2002 and ramping up to \$1.16 billion by 2007, and was switched from discretionary to mandatory funding. To address the 'ask' sought by livestock groups, Congress included in that legislation a requirement that at least 60% of EQIP funds be allocated to livestock operations, primarily to underwrite those farmers' efforts to manage their manure in compliance with state and federal regulations. A March 2007 study by the Soil and Water Conservation Society on the EQIP program found that for 2005, the average EQIP contract involving livestock production received one-third more funds than EQIP contracts involving primarily crop production, at more than \$19,000 as compared to \$14,000. EQIP is scheduled to receive \$1.65 billion for fiscal year 2017 under the 2014 farm bill.

While there is not a specific program that provides for mandatory spending on livestock-specific issues in the agricultural research title of the farm bill as there is for specialty crops, these groups support broad authorizations for publicly funded agricultural research at land grant universities. They recognize the importance of ongoing efforts to identify and address diseases that affect their livestock herds, and will continue to push for expanded agricultural research funding through the annual appropriations process.

Looking Toward the Next Farm Bill

By all indications, groups representing both U.S. specialty crop and livestock producers have been reasonably satisfied with how their farm bill programs have performed over the last several years. They are expected to focus on maintaining or even increasing funding for the programs their producers benefit from, especially in the areas of trade promotion and agricultural research.

For More Information

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