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Domestic and International Policy Goals?**

Anne Effland, Edwin Young, and Paul Westcott

Economic Research Service, USDA

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Can Traditional Approaches to Agricultural Policy Meet Domestic and International Policy Goals?

Anne Effland, Edwin Young, and Paul Westcott¹
Economic Research Service, USDA

More than seven decades of farm policies have established both tradition and ample experience from which to draw some lessons. Although U.S. farm policy has evolved in many details over the years, its core of commodity-based income support remains. Not only is 70 years long enough to create a traditional approach to policy, it is long enough to teach us something about how different programs within that policy framework have worked for farmers and the agricultural sector. It is also long enough to witness a dramatic alteration in the structure of the farm sector, which raises questions about how well changes in traditional policies have kept up with this new agricultural sector environment. Further, not only do farm programs operate under a changed set of economic and structural conditions, they also face an expanded set of goals for agricultural policy, new limitations from international trade agreements and negotiations, and most recently, a seriously constrained budget environment. Thus the question: can traditional approaches to agricultural policy meet current and future domestic and international policy goals?

To some extent, answering the question of how to best meet domestic and international farm policy goals requires shooting at a moving target. The clarity of both domestic and international goals for agricultural policy may be less than it was only a few years ago, making assessments of

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the fit between policy and goals more difficult, at least in the short-term. Just as the domestic debate about policy goals includes a growing number of stakeholders with each new farm bill cycle, international goals have also been affected by the increased participation of new partners in setting the objectives of trade agreements, including the current Doha Round of WTO. In addition, the WTO dispute settlement process has raised new questions about what types of farm programs meet the requirements of agreed trade disciplines and international policy goals.

In this paper, we approach the question by constructing a roadmap through the last 70 years, reviewing the changing goals of farm policy, the changing agricultural sector, and the evolving approaches to policy that have responded to these changes. We examine some of the lessons about traditional approaches that have been learned from experience and analysis, and consider some of the unresolved issues that remain as these traditional approaches are adapted to new policy settings and market conditions. Rather than directly answering this question in a short paper, we hope to bring some insight to the issue from recent and ongoing work at ERS that may help in thinking about appropriate directions for future farm policy.

Evolving goals of farm policy

The expressed purpose of virtually all farm bills from 1933 to 1990 was to stabilize agricultural commodity prices, for the purposes of bringing stability to agriculture and the wider economy. By protecting and improving farm income, the general economy would benefit through the strengthened purchasing power of farmers and non-farm consumers would benefit from the assurance of an abundant supply of food and fiber at “fair and reasonable” prices. The 1996 Act altered this direction to some extent, culminating a 10-year movement toward more market

orientation in farm policy, but the return of low commodity prices in 1998-2001 brought many stakeholders back to this traditional farm policy goal of protecting farm incomes.

Beyond this fairly straightforward explicit goal, however, many implicit goals have been brought to the table by the wide range of stakeholders in farm policy (fig. 1). Farms of varying sizes and ownership, agribusiness firms, consumers, taxpayers, environmental groups, and rural communities, among others, have differing concerns and interests in the outcome of farm policy. Varied and often conflicting goals have complicated policy and program choices—for example, some producers have preferred programs that support market prices and thus their incomes, while consumers (of raw commodities for processing, as well as at the retail level) have favored programs that support producer incomes without raising market prices or reducing supply. Stakeholders may also conflict over the effect of policies on land values, with owners preferring policies that keep land values high and renters favoring the opposite. Conflicts have also arisen over environmental issues, including land use rights and landscape preservation, protection of water and air quality, food safety, animal welfare, and economic development of rural communities (see “Background and Issues,” ERS web briefing room on Farm and Commodity Policy, <http://www.ers.usda.gov/Briefing/FarmPolicy>).

Also implicit in many interpretations of farm policy goals has been preserving the independent family farm by maintaining a minimum level of profitability for farmers. The goal of supporting family farming became explicit in the Food and Agriculture Act of 1977, but there has been little agreement about the definition of family farm, either currently or over time. Typologies of farming from the 1940s and 50s included family farms as a category of commercial farms with a

minimum sales level. Operations below that size fell in categories termed “smaller-than-family farms” or “subsistence farms” depending upon sales and off-farm sources of employment and income and were not the intended beneficiaries of price support policies (Brewster; Ratchford). USDA has a working definition of small farms as operations with sales of \$250,000 or less, but the automatic connection between the two terms “small” and “family” continues to be debated. The ERS typology describes family farms in a series of categories from “limited resource” to “very large,” and includes a separate category for non-family farms not defined by size (fig. 2). Additionally, the range of categories within the larger ERS series of small family farms, including primary occupation farming high and low sales, retired, lifestyle/residence, and limited resource, further illustrates the challenge of meeting a small or family farm goal for farm policy.

International policy goals reflected in trade liberalization efforts have consistently focused on reduction of barriers to open trade among nations. Under the multiple rounds of trade negotiations under the General Agreement on Tariffs and Trade (GATT) from its origins in 1947 until the Uruguay Round began in 1986, efforts to liberalize trade in agriculture were not very comprehensive and included mainly modest efforts to discipline tariffs. With the Uruguay Round, goals for liberalization expanded to include not only market access or border measures, but also export subsidies and domestic support. Within each of these areas are a range of policy instruments international trade agreements seek to discipline in a way that balances advantages among participating countries by removing the price and trade distortions, i.e. price and access differences, which result from these barriers (Porter and Bowers, 1989). As is the case for domestic policy goals, the range of international policy goals can also be described as often in conflict. Interventions in all three areas distort prices and trade, but countries vary in their use of

the different types of measures. Some employ tariffs to a greater degree, for example, while others rely more on domestic support. These differences have become even more challenging with the increasingly active participation of developing country members in the current Doha Round (ERS web briefing room on WTO, <http://www.ers.usda.gov/Briefing/WTO>).

Evolving settings and approaches to farm policy

Traditional approaches to farm policy have sought to meet domestic policy goals of price and income support and stability for farmers by relying primarily on commodity-specific price and income support programs coupled with supply controls, both through acreage or output restrictions and through tariffs and other import constraints. These programs originated with the New Deal agricultural legislation of the 1930s as emergency measures to stabilize farm incomes, in which they joined the earlier creation of farm credit systems and earlier supply management tools related to cooperatives and controlled marketing (Bowers et al. 1985).

Farm programs continued into the 1940s and 50s, initially to secure adequate war-time production, then to secure farm incomes against an expected post-war price drop, and then to safeguard production during the Korean War. High, fixed price supports became flexible price supports in 1954 in the face of accumulating agricultural surpluses and concerns about the impact of high prices on trade competitiveness. Income support slowly began to replace price support policies in the 1960s and 1970s for the same reasons. By the 1980s, those same pressures of surpluses and trade competitiveness led policymakers to move toward greater market orientation in policy design (Bowers et al. 1985). Marketing loan provisions and some flexibility in planting were implemented under farm legislation during 1985-1995. In 1996 came

nearly complete planting flexibility with the end of supply management, and the “decoupling” of production flexibility contract payments from current production (fig. 3).

The ability of these traditional price and income support policies to address the needs of farmers and rural communities has changed since their first introduction. In the 1930s, when farm households made up 25 percent of the national population, policies protecting the income of farmers potentially benefited a large share of the population directly. Similarly, in the 1930s, farming dominated the rural economy, making farm policy also directly beneficial to most rural communities. Beginning about the 1960s, when productivity increases in agriculture and development of urban manufacturing and other industries together produced extensive migration from the farms to the cities and chronic surpluses of farm commodities (caused in part by farm programs), traditional farm policy interests expanded their constituency by joining with groups advocating domestic and international food assistance programs to include such programs in farm legislation. Similarly, as the diversity of rural life beyond agriculture became more apparent in the late 1960s to 1970s, targeting non-farm rural development programs became a new farm policy goal. (Programs like rural electrification in the 1930s had facilitated some rural economic development, but focused primarily on electricity for farm operations and households.) Over the next couple of decades, long-time conservation goals of farm policy, particularly mitigation of soil erosion, expanded to include a wider range of environmental goals, in part driven by the views of an increasing number of Americans without even intergenerational ties to farming. Consumers also have come to expect farm policy to protect their interests, particularly with respect to food safety and product choice.

As farm policy has been developed and modified, and goals have been added and refined, the structural context for farm policy has changed dramatically. Since 1930, farm population has fallen from over 30 million to less than 3 million; percent of the labor force engaged in farm work has fallen from 21 percent to less than 2 percent; the number of farms has fallen from over 6 million to around 2 million. Farming is a much smaller component of the U.S. economy—while agriculture accounted for 7.7 percent of U.S. GDP in 1930, it now accounts for 0.7 percent. Even within rural areas, farm families make up only 5 percent of the population, and only about one-fifth of all rural (nonmetro) counties were classified as farming-dependent (at least 15 percent of county earnings derived from farming or 15 percent of employed residents in farming occupations) (fig. 4).

Moreover, by the end of the 20th century, most farm households derived more than half their income from off-farm sources; on average, only households on farms with annual sales of \$250,000 or greater derive more than half of their income from farming. Average farm household income and wealth are higher than average income and wealth of U.S. households, economy-wide (Mishra et al, 2002). The structure of farming has also changed, with greater concentration and specialization—average farm size has risen nearly 200 percent from 1930 to 2003 and the average number of commodities produced per farm has fallen from 5 to 1 (see Gardner for explanation of commodity specialization indicator). Agriculture is an increasingly global sector, and U.S. agriculture has become more fully integrated in that global sector. U.S. agricultural export value relative to total market cash receipts has risen from just under 14 percent in 1960 to more than 28 percent in 2002, with a peak of 31 percent in 1981 (ERS web briefing room on U.S. Agricultural Trade, <http://www.ers.usda.gov/Briefing/AgTrade>).

Lessons and unresolved issues of farm policy

As U.S. farm policy has evolved in the context of changes in the agricultural sector and in policy goals, some clear lessons have been learned. Experience has indicated that supporting prices is self-defeating. Price supports require domestic and border supply control to operate. Border controls (e.g., tariffs) distort international trade and domestic supply controls require administrative decisions that frequently must be made far in advance and are inflexible, often leading to problems in the marketplace. In addition, government stockholding programs for supply management distort markets and can be very expensive (fig. 5). One of the real difficulties with stocks programs is that eventually you have to dispose of the stocks, which depresses prices.

Over the past 20 years of policy evolution, progress has been made by moving commodity programs away from price supports, supply control, and government stockholding toward decoupled payments and planting flexibility. To help us assess this progress, commodity programs can be depicted as falling along a continuum between two general categories: coupled and decoupled. Farm programs are considered coupled if there is a strong or direct link between the farmer's program benefit and the farmer's production decisions and market conditions (such as prices). The benefits of coupled programs affect net returns associated with specific production choices. As a result, these programs have the greatest potential to affect agricultural production and agricultural markets. The current marketing loan program is an example of a coupled program, as were the previous price-support systems. In contrast, decoupled payments are not linked directly to net returns and production choices. Thus, their potential influence on

production decisions is smaller than coupled programs (Westcott and Young). While coupled program benefits may be viewed as farm enterprise benefits, decoupled program benefits may be viewed as more general income transfers to farm households.

However, while some progress has been made in farm commodity policy reform by moving towards a greater market orientation, unresolved issues remain that affect the ability of traditional commodity policies, even the more decoupled programs, to meet evolving domestic and international goals of competitiveness and open markets. Remaining coupled programs continue to have the potential to distort production and trade by interfering with market-driven resource allocation signals. Fixed loan rates under the current marketing loan program cannot adjust to market conditions, which can distort production in a low-price environment, encouraging continued production when market prices would not. Dairy and sugar price support programs with border controls and supply management continue to operate along the lines of the most traditional coupled programs.

Under both coupled and decoupled programs, the distribution of payments by size and type of farm remains an issue. Large farms receive the majority of payments. In 2003, for example, 51 percent of payments went to large commercial farms, but these operations represented only 9 percent of farms (fig. 6). (See ERS web briefing room on Farm and Commodity Policy, Government payments and the farm sector, <http://www.ers.usda.gov/Briefing/FarmPolicy/gov-pay..htm>) An additional issue is the effect of program payments on farmland values. ERS estimates that commodity programs added about \$60 billion to farmland values in 2000, although the influence of farm programs varies regionally. Additionally, because about 60% of the

cropland used to produce major crops is leased, a large share of program benefits may be passed through to landlords, some of whom live outside the rural community (Barnard et al., 2001). Consequently, the beneficiaries of many payments are not part of the communities traditionally targeted by farm programs.

Much research has been done and additional research is underway to evaluate the impacts of traditional commodity programs and some of the more recent modifications of those programs, including the more decoupled direct payments and countercyclical payments under the 2002 Farm Act. Recent research initiatives at the Economic Research Service have been approaching the analysis of these programs with some new questions and methods, to get a better picture of how these programs actually operate at the farm level. A series of projects are examining the impacts of updating base acres; potential risk reduction effects of countercyclical payments; farmers' use of planting flexibility; economic, political, and market conditions leading to the peanut and tobacco buyouts; and the long-run potential for buyout programs to permanently replace traditional farm programs. Although the results of most of this recent research have yet to be fully interpreted, preliminary findings suggest the value of a closer look at how farmers respond to different policy approaches. Farm-level decision making may not always follow expectations based on economic theory, and policy design may not always produce expected outcomes, varying by regional characteristics as well as by economic and demographic differences among operations and producers.

Contributing to this research has been the adoption of a broad-based research approach that applies multiple methodologies to these questions. Different methodologies will inform the

research in distinct ways, providing complementary insights and research findings from alternative frameworks. The methodologies employ a three-pronged approach—farmer discussions, specific questions in the Agricultural Resources Management Survey (ARMS), and experimental economics—as well as traditional econometric analysis of county, state, and national program and production data.

Farmer discussions are expected to elicit information on impacts and perceptions of current and potential programs on production decisions and management of risk. Attitudes and impacts can be associated with farm and operator characteristics through careful selection of participants, but the groups can not provide definitive answers. Responses to a specific set of questions on the ARMS for 2003 will provide useful data on producer attitudes and decisions in response to recent policy changes. Questions ask about land use, sources of income, allocation of decoupled payments, factor influencing planting decisions, and risk attitudes. Experimental economics is expected to inform our understanding of behavior in response to potential program scenarios in a controlled setting. Although the experimental method can not replicate every nuance of potential program scenarios or producer behavior, it can help us make better “educated guesses” about how programs are likely to work at the farm level.

Concluding thoughts

We return now to the question with which we began: can traditional approaches to farm policy meet domestic and international policy goals?

Despite the evolution of many of today's policies in response to structural change, global trade demands, and consumer and environmental issues, programs focused on commodity-based price and income support to producers continue to anchor U.S. domestic farm policy to its roots in the 1930s when the goal of farm policy was to stabilize a relatively large farm sector with expected benefits for the overall economy. The value of such programs to the overall economy or to farming itself in the first decade of the 21st century has become harder to defend--the farm sector now accounts for less than 1 percent of GDP and these traditional programs now reach only about one-third of U.S. farms. Most farm households derive the bulk of their income from sources other than the farm business, making farm programs less central to the economic well-being of even of those farmers receiving traditional program payments. Furthermore, the traditional domestic policy goal of protecting farm incomes has become increasingly problematic in the current global market. The traditional trade barriers and domestic support programs designed to accomplish this goal interfere with global competitiveness of U.S. agriculture and international policy goals of trade liberalization.

The evolution of policy setting and approaches has been an iterative process that has left U.S. farm policy with a somewhat idiosyncratic collection of programs. As the disconnect between traditional farm policy benefits and the realities of new economic and social structures in domestic and global agriculture and rural communities continues to grow, we may reach a stage in this evolutionary process that will require a greater change than this adaptive approach can provide. Traditional commodity-based price and income support policies as they currently exist cannot fully address the more recent domestic and international policy goals of competitiveness in global agricultural markets, rural economic development, environmental enhancement and

protection of agricultural and rural lands, and facilitating agricultural production that meets consumer demands. The lessons of the policy experience in the United States over the last 70 years have shown the value of some recent policy changes in reducing inefficiencies and inequities in our own farm policies and in their impacts on international trade. Continued research to better understand new and potential policy options will provide policymakers with tools to move forward in meeting evolving domestic and international policy goals as effectively as possible.

References

- Barnard, Charles, Richard Nehring, James Ryan, Robert Collender, and Bill Quinby. "Higher Cropland Value from Farm Program Payments: Who Gains?" *Agricultural Outlook*, November 2001, <http://www.ers.usda.gov/publications/agoutlook/nov2001/ao286h>.
- Bowers, D.E., Rasmussen, W.D., & Baker, G.L. 1984. *History of agricultural price-support and adjustment programs, 1933-84*. Agricultural Information Bulletin 485. Washington, D.C: USDA ERS.
- Brewster, David E... 1980. "Changes in the Family Farm Concept." In *Farm Structure: A Historical Perspective on Changes in the Number and Size of Farms*. Committee on Agriculture, Nutrition, and Forestry, U.S. Senate. 96th Congress, 2d Sess. April.
- Porter, Jane M., and Douglas E. Bowers. 1989. *A Short History of U.S. Agricultural Trade Negotiations*. Staff Report No. AGES 89-23. Washington, D.C: USDA ERS.
- ERS web briefing room on Farm and Commodity Policy, <http://www.ers.usda.gov/Briefing/FarmPolicy>.
- ERS web briefing room on U.S. Agricultural Trade, <http://www.ers.usda.gov/Briefing/AgTrade>.
- ERS web briefing room on WTO, <http://www.ers.usda.gov/Briefing/WTO>.
- Gardner, Bruce L. 2002. *American Agriculture in the Twentieth Century. How it Flourished and What it Cost*. Cambridge: Harvard University Press.
- Mishra, Ashok, Hisham S. El-Osta, Mitchell J. Morehart, James D. Johnson, and Jeffrey W. Hopkins. 2002. *Income, Wealth, and the Economic Well-Being of Farm Households*. Agricultural Economic Report Number 812, Washington, D.C.: USDA ERS.
- Ratchford, C. Brice. 1957. "The Nature of Income Problems of Farmers." In *Policy for Commercial Agriculture: Its Relation to Economic Growth and Stability*, pp. 26-37. Papers submitted before the Subcommittee on Agricultural Policy, Joint Economic Committee, 85th Congress, 1st Session. November 22.
- Westcott, Paul C. and C. Edwin Young, "Farm Program Effects on Agricultural Production—Coupled and Decoupled Programs," Chapter 1 in Mary E. Burfisher and Jeffrey Hopkins (editors), *Decoupled Payments in a Changing Policy Setting*, AER 838, November 2004, pp. 7-17. [<http://www.ers.usda.gov/publications/aer838/aer838b.pdf>]

Figure 1

Selected concerns of agricultural policy interest groups	
Small family farmers	
Limited-resource farmers	Income support; credit; education
Farming as primary occupation, low sales (<\$100,000)	Price and income support; credit; education
Farming as primary occupation, high sales (\$100,000-\$249,999)	Price and income support; price stability; credit; education; risk management
Retirement	Income support not tied to production; higher land values
Residential/lifestyle	Freedom to pursue lifestyle
Other family farmers	
Large farms (sales \$250,000-\$499,000)	Higher and more stable prices; freedom from government regulations; risk management
Very large farms (sales \$500,000+)	Higher and more stable prices; freedom from government regulations; risk management
Agribusiness	
Nonfamily farms	Higher and more stable prices; freedom from government regulations; risk management
Processors	Adequate high-quality supplies; low input prices; high processed product prices; strong export markets
Throughput companies	Adequate consistent-quality supplies; strong export markets
Taxpayers	
National	Low program costs; low administrative costs
Regional	Higher local tax revenue from increased incomes and higher land prices
Consumers	
	Low food prices, food safety; adequate food supplies; variety of food types; healthful food
Environmentalists	
Conservationists	Prevention of soil erosion Preservation of farmland
Water quality advocates	Agricultural practices that limit migration of agrichemicals from farms to surface and ground water
Wilderness advocates	Maintenance of open space
Animal rights advocates	Humane treatment of animals
Rural communities	
Long-time residents	Maintenance of traditional communities and rural lifestyle; employment opportunities; open space preservation; viability of rural communities
New residents	Open space; odor control; rural landscapes
Tourists	Rural landscapes; recreational/heritage activities

Social welfare advocates

Civil rights advocates

Adequate economic opportunities for minorities;
opportunities for minority farmers

Anti-poverty advocates

Provision of minimum income levels for rural
residents; food and nutrition programs

Agrarians

Maintenance of viable agriculture, small scale
agriculture

Figure 2

ERS Farm Typology

Small Family Farms (sales less than \$250,000)

Limited-resource farms. Any small farm with: (1) gross sales less than \$100,000, (2) total farm assets less than \$150,000, and (3) total operator household income less than \$20,000. Limited-resource farmers may report farming, a nonfarm occupation, or retirement as their major occupation.

Retirement farms. Small farms whose operators report they are retired (excludes limited-resource farms operated by retired farmers).

Residential/lifestyle farms. Small farms whose operators report they had a major occupation other than farming (excludes limited-resource farms with operators reporting a nonfarm major occupation).

Farming occupation/lower-sales. Small farms with sales less than \$100,000 whose operators report farming as their major occupation (excludes limited-resource farms whose operators report farming as their major occupation).

Farming occupation/high-sales. Small farms with sales between \$100,000 and \$249,999 whose operators report farming as their major occupation.

Other Farms

Large family farms. Farms with sales between \$250,000 and \$499,999.

Very large family farms. Farms with sales of \$500,000 or more.

Nonfamily farms. Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.

Figure 3

Milestones in U.S. agricultural policy

1933—Agricultural Adjustment Act

First “farm bill” established the New Deal mix of commodity specific price and income support programs.

1936—Soil Conservation and Domestic Allotment Act

First direct links created between soil conservation and commodity programs.

1949—Agricultural Act

Established policy of high, fixed price supports and acreage allotments as permanent farm policy. Programs revert to the 1949 provisions should a new farm bill fail to pass.

1954—Agricultural Act

Introduced flexible price supports to commodity programs.

1956—Agricultural Act

Established Soil Bank, which introduced use of conservation reserve (long-term land retirement) in addition to acreage control for supply management.

1965—Food and Agricultural Act

Introduced new income support payments in combination with reduced price supports and continued supply controls.

1970—Agriculture Act

First inclusion of title for Rural Development in a “farm bill.”

1973—Agriculture and Consumer Protection Act

Introduced target prices and deficiency payments to replace price supports, coupled with low commodity loan rates, to increase producer reliance on markets and allow for free movement of commodities at world prices.

1977—Food and Agriculture Act

First inclusion of title for Food Stamps and other commodity distribution programs in a “farm bill”; first inclusion of support for family farming in farm bill.

1985—Food Security Act

Introduced marketing loan provisions to commodity loan programs to reduce forfeitures by allowing repayment of loans at lower rate when market prices fell, with the intention of aiding in reducing government-held surplus grain. Reestablished a conservation reserve.

1996—Federal Agriculture Reform and Improvement Act

Replaced price support and supply control program with program of direct payments based on historical production. Introduced nearly complete planting flexibility.

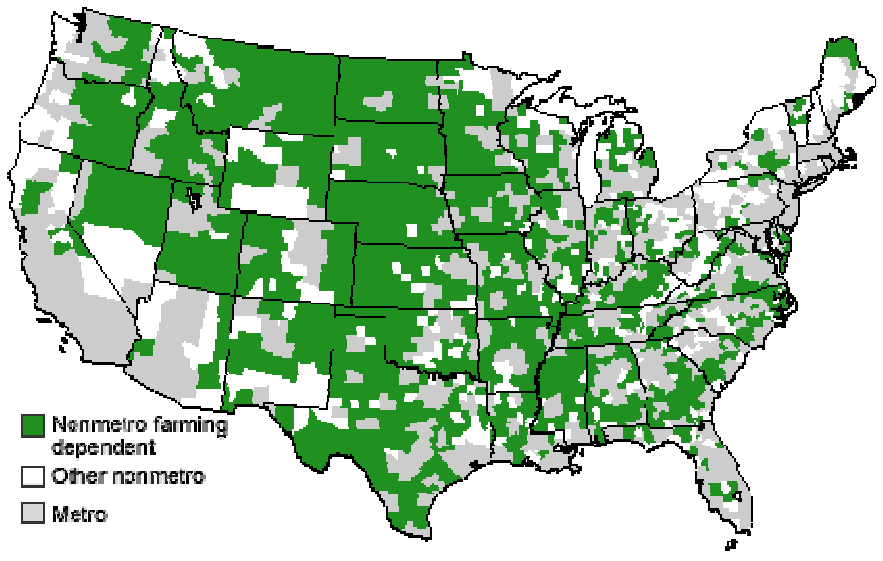
2002—Farm Security and Rural Improvement Act

Introduced counter-cyclical payments program triggered when current prices fall below a target level, but paid based on historical production. Introduced working-lands conservation payments through the Conservation Security Program. Continued planting flexibility and program of direct payments based on historical production, allowing updating of historical base acres and adding historical soybean acres.

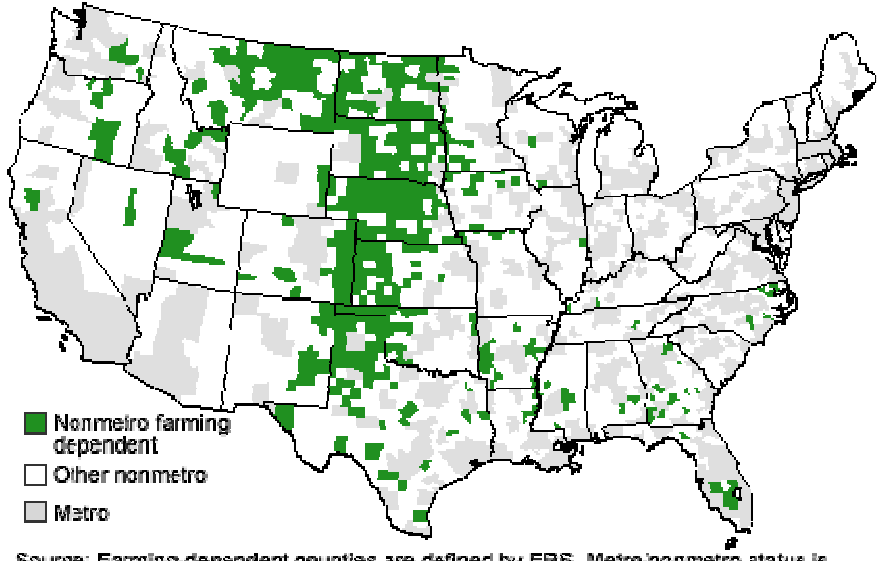
The complete texts of U.S. farm bills from 1933 to 2002 are available on the website of the National Agricultural Law Center (<http://www.nationalaglawcenter.org/farmbills/>).

Figure 4

Nonmetro farming-dependent counties, 1950



Nonmetro farming-dependent counties, 2000



Source: Farming-dependent counties are defined by ERS. Metro/nonmetro status is based on the Office of Management and Budget (OMB) June 2003 classification.

Figure 5

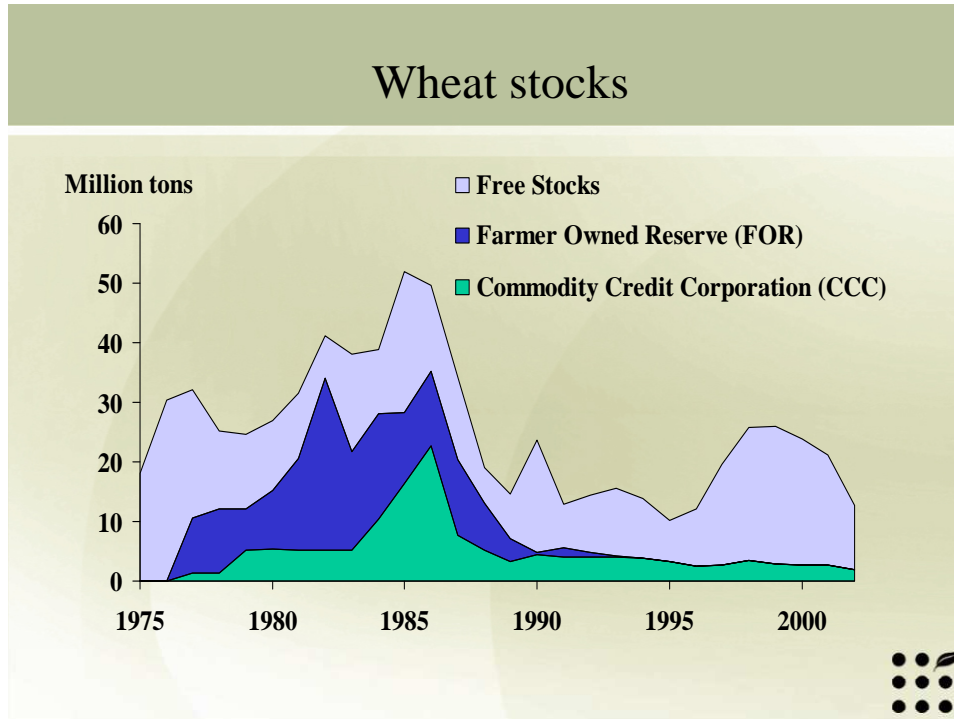


Figure 6

