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The ACRE Program

A Disaster in Waiting

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Introduction

The US Average Crop Revenue (ACRE) program was introduced as part of the 2008 Farm Bill. ACRE was marketed as a farm revenue safety net program, but in reality ACRE payments are largely driven by decreases in agricultural commodity prices from recent levels. As a result, the ACRE program is much more likely to generate subsidy payments for farmers of major crops like wheat, corn, and soybeans than the Countercyclical Payments program (which was introduced in the 2002 Farm Bill) or the long-standing loan rate price support program for which it currently substitutes. In fact, the ACRE program has the potential to be a federal budget nightmare because of the potential it creates for frequent and large subsidy payments that could amount to as much as \$10 billion in some years and average as much as, or more than, \$6 billion a year. The congressional deficit-reduction super committee should therefore pay special attention to the budgetary risks posed by Farm Bill initiatives that place ACRE, or ACRE-like programs like the recently proposed Agricultural Risk and Revenue Management (ARRM) program, at the center of a new and “reformed” US farm program in place of the \$5 billion subsidies that farmers currently receive through the Direct Payments program.

In addition to having the potential to be a major fiscal problem, the ACRE program also could be a serious problem with respect to US commitments under the provisions of the 1994 Marrakesh agreement that established the World Trade Organization (WTO) and introduced a specific agreement on agricultural trade and domestic policies. The likelihood of future large ACRE program subsidy payments could create issues for the United States in terms of its

commitments with respect to the current commodity-specific and overall levels of domestic supports (called “amber box” aggregate measures of support).

A more serious WTO problem is associated with the inherent structure of the ACRE program, which violates underlying commitments made by developed countries to refrain from introducing new programs that tie subsidy payments directly to current price and output levels. In addition, in periods when market prices for the subsidized commodities are declining, other countries are likely to file WTO complaints about serious prejudice under Article 6 of the WTO Agreement on Subsidies and Countervailing Measures (SCM) on the basis that the ACRE program is contributing to “price suppression,” lowering world prices, and adversely affecting their farmers. Such arguments would indeed be warranted.

The case histories associated with WTO disputes over price suppression resulting from domestic subsidies like ACRE that are tied to current production and market prices (especially the “Brazil cotton case”) strongly suggest that plaintiffs are likely to be successful and, as a result, the United States will be subject to more trade penalties. Those penalties can take the form of countervailing trade restrictions on other sectors of the US economy (typically export sectors) as well as the agricultural sector. Alternatively, they can generate absurd “Alice in Wonderland” compromises through which US taxpayers fund programs, to the tune of \$147 million a year, that improve the global competitiveness of Brazil’s cotton producers because American cotton producers insist on continuing to receive (and Congress insists on providing) subsidies that violate US WTO commitments.

The ACRE program is an expensive taxpayer liability. It is also a Pandora’s box invitation for other countries to successfully file WTO complaints against the United States that will damage US global trade relations and cost firms producing agricultural and many other

commodities access to important export markets. On both grounds, the ACRE program needs to be terminated as soon as possible and should under no circumstances be replaced by look-alike programs.

The ACRE Program

The ACRE program is almost ridiculously complicated, but essentially much of the complex detail is designed to enable producers to receive subsidies on most, and frequently all, of their current production of individual crops.¹ The crops to which the ACRE program applies, listed in table 1, include all of the major grain and oilseed crops, as well as peas, lentils, and peanuts. Without exception, these commodities are heavily traded in world markets, and the United States is a major exporter of most of them.

The ACRE program was introduced in 2008 as an alternative to the Countercyclical Payments program. Beginning with the 2009 crop year, producers could enroll a farm in the ACRE program and forgo their eligibility for any countercyclical payments. In addition, farmers who enrolled in ACRE had to agree to a 20 percent reduction in their direct payments and a 30 percent reduction in legislated national marketing loan rates (traditional price supports), the pre-ACRE price support program that guaranteed prices for their crops. Once a farm enrolls in the ACRE program, it has to remain in the program until the end of the 2012 crop year. Farmers are free to enter the ACRE program in any year—for example, in 2009, they could delay entry until 2010, 2011, or 2012, or never opt in.

Some analysts and commenters have been confused about whether farmers would receive ACRE payments for all of their production of an eligible crop in any given year. Farms

¹ Some of the ACRE rules were put in to reduce the tax-payer costs of the original proposal, which would have based guarantees and payments on farm yields instead of state yields.

established their base acreage and yields on the basis of planting decisions either in the early to mid-1980's, or between 1998 and 2002. Effectively, however, in most years a farm is likely to receive an ACRE payment for all acres it plants to a given crop. The reason is as follows. The maximum area on which a farm can receive ACRE payments in 2011 is the farm's total base acres for all crops on which it currently receives direct payments. However, if only one or two crops are eligible for an ACRE payment and the total area planted to those one or two crops is less than the farm's total base acres, then the farmer gets an ACRE payment for all the area planted to those one or two crops.² Some have argued that ACRE payments are made on only 85 percent of a farm's historical base acres, but the fact is that every acre of corn, wheat, or any other crop covered by the program and planted by a farm is likely to get a payment. ACRE payments are therefore linked to and influence current production decisions.

This reality is unlikely to escape other WTO member countries (Canada and Brazil, for example, have highly competent trade lawyers and economists on permanent retainers) and provides an instant rationale for price suppression complaints that may result in the implementation of trade penalties against the United States.³ As is so often the case with farm programs, legislative and implementation rules that appear to limit farm program benefits do not really work and in fact are often never intended to work in the first place.

Two facts about the program are critical to understanding its operations, its potential budgetary implications in an era of rising prices, and the potential for the ACRE program or some variant to exceed US WTO obligations for limiting domestic (amber box) support to

² To further confuse matters, total ACRE payments to a farm are then reduced by 15 percent, to 85 percent of the amount obtained by multiplying the area planted to the crop by the state ACRE payment (adjusted for differences between the farm's historical average yield and the statewide historical average yield).

³ The US Department of Agriculture recognizes that ACRE is paid on all production and therefore, as discussed below, reports ACRE payments as production and trade distorting subsidies, known as "amber box" subsidies in the WTO.

farmers. First, the price portion of the revenue guarantee is based upon the *previous two-year average* price. As prices escalate (as has been the general tendency for most crops since 2007), the price portion of the revenue guarantee also rises, locking in higher and higher levels of support. A floor (70 percent of the national loan rate) is placed under the price used to calculate the state and farm guarantees. However, no upper limit is placed on how high the prices used to establish the revenue guarantee can go. A second important point involves the yields used to compute the guarantee, which have increased significantly for many crops and especially for corn, cotton, and soybeans over the past ten years. These three crops' yields have been significantly improved through the adoption of biotech varieties, improvements in germ plasm and plant breeding, and other technological advances.⁴

These trends and their implications for the ACRE revenue guarantee are illustrated in figures 1 and 2. Figure 1 shows how the five-year Olympic statewide average of corn yields for Illinois, a major Corn Belt state, has increased over the past twenty years and what has happened to the two-year US national corn price average over the same period. The statewide five-year Olympic yield average has increased by about 50 percent over the period. The two-year national corn price average jumped from a little above \$2.00 a bushel in the early 2000s to about \$4.00 a bushel after 2008, far above the current corn price support level of \$1.95 provided by the loan rate program.

The potential shortcomings of an ACRE-type plan are obvious from the data presented figure 1. The recent yield increases and high prices that have characterized markets since late 2007 have substantially increased ACRE revenue guarantees. Figure 2 provides estimates of the

⁴ Some biotech companies have predicted a doubling of US corn, cotton, and soybean yields by 2030. See, for example, Monsanto, "Monsanto Will Undertake Three-Point Commitment to Double Yield in Three Major Crops, Make More Efficient Use of Natural Resources and Improve Farmer Lives," news release, June 4, 2008, <http://monsanto.mediaroom.com/index.php?s=43&item=607> (accessed October 31, 2011).

implied 90 percent state-level ACRE guarantees for the same period and illustrates how much higher those guarantees have become since 2007. The higher guarantees create two budgetary problems. First, they increase the likelihood of an ACRE payment. Second, they increase the expected absolute size of that payment on a per-acre and per-farm basis for any given proportional decline in statewide per-acre crop revenues from their expected levels.

A major WTO and federal budget problem with the ACRE program and other similar programs that have recently been proposed is that future support is essentially uncapped because of revenue guarantees that are allowed to climb as prices and yields increase. This contrasts with the long-standing price support programs based on loan rates, marketing loans, and deficiency payments, which pay subsidies only when prices fall beneath their generally much lower legislated levels. For example, the current national loan rate for corn is \$1.95 per bushel. In comparison, on October 4, 2011, the nearby futures contract (December 2011) was priced at \$5.99 and cash prices in southern Iowa were \$5.66. Under these conditions, cash market prices would need drop by about \$3.70 before loan rates would become a subsidy generating support mechanism. While the ACRE revenue guarantee cannot increase or decrease by more than 10 percent in any given year, the program still permits revenue guarantees to increase substantially and relatively quickly over time. Moreover, the 10 percent limit on downside reductions in the ACRE guarantee locks in high guarantees when prices fall sharply.

Figures 3a and 3b further illustrate how declines in market prices are likely to affect subsidy payments under the ACRE when prices are well above the traditional price support level (loan rate) for a crop. In figures 3a and 3b, the Illinois 2012 ACRE guarantee for corn is assumed to be \$665.00, equal to 90 percent of the national average price for 2010 and 2011 (\$4.36)

multiplied by the Olympic average of statewide yields for the five-year period of 2007–2011 (169.33 bushels), rounded to the nearest dollar).⁵

Figure 3a shows the estimated corn per-acre ACRE payments for current-year national average prices ranging from \$3.00 to \$4.00 a bushel, assuming that statewide yields in Illinois are at their five-year Olympic average. Figure 3b shows the total ACRE payments that would be made to Illinois farmers if all the acres planted to corn in 2011 were enrolled in the program. The range of \$3.00 to \$4.00 is quite realistic. In 2007, for example, the national average per-bushel price of corn was \$3.04, and in 2011 it was \$3.55; thus, in two of the past five years, the corn price fell well below \$4.00 per bushel.

At a current-year national average price of \$4.00, no ACRE payments would be made to Illinois farmers. However, at slightly lower prices, in the \$3.00 to \$4.00 range, they would receive substantial payments. For example, at a price of \$3.75, the per-acre payment for corn would be \$27.73 and, assuming all planted acres received an ACRE payment, total ACRE payments to Illinois farmers would be about \$347 million. If the national price fell to \$3.25, then per-acre payments would rise to \$112.73 and total payments to Illinois corn producers would increase to just over \$1.4 billion. If the national price fell to \$3.00, then per-acre payments would increase to \$155.23 (25 percent of the ACRE per-acre guarantee) and total ACRE payments for corn would rise to about \$1.94 billion. Were the national price of corn to fall to its fifteen-year average of \$2.72 per bushel, ACRE payments would be made at their maximum levels of \$166.31 per acre, with estimated total ACRE payments of just over \$2 billion, again implying very substantial taxpayer obligations for the program.

⁵ An Olympic average is determined by taking an average of the previous five years of yield data with the highest and lowest yields omitted. Thus, the average is determined by the average of three yields falling within the highest and lowest yields over the previous five years.

Enrollment in the ACRE program was in fact relatively limited in 2009, with 8 percent of farms and 13 percent of eligible acres being enrolled. This is partly because enrollment cost growers 20 percent of their direct payments for a four-year period in 2009 (and a three-year period if they enrolled in 2010). Direct payments represent a guaranteed source of revenues that remain very popular with many farmers and commodity groups. Producers enrolled in ACRE also give up eligibility for countercyclical payments. However, the recent high-price environment has made these payments largely irrelevant as prices have remained far above target prices for most crops. Enrollment in ACRE was more extensive in the central Corn Belt states, reflecting the fact that prices for the crops grown in these areas (corn, soybeans, and wheat) have been much higher than either loan rates or target prices since 2007. Figures 4 and 5 illustrate enrollment patterns.

The ACRE program functions as follows. A revenue guarantee is established at the state level for each ACRE crop. The farm's guarantee for each crop is determined by a combination of the state's historical average yields (a five-year Olympic average), the farm's yields (a five-year Olympic average), and a two-year average of the greater of the twelve-month national average price for the crop or 79 percent of the crop's national loan rate, whichever is bigger

A state revenue guarantee is set at 90 percent of the historical average revenue, as determined by historical average prices (two years) and yields (five-year Olympic average). If the current-year state average ACRE revenue, determined by the product of the current-year state average yield and national price, falls below the state revenue guarantee, ACRE payments become available to eligible producers.

A second farm-based trigger is needed to generate a payment for a farm. Each farm has its own expected average revenue. The farm's average revenue for a crop is the sum of the

farm's five-year Olympic average yield multiplied by the two-year average of national prices and the farm's per-acre crop insurance premium. If the state-level revenue falls beneath the state guarantee and the farmer's actual farm revenue falls beneath its estimated historical average revenue, a payment is then triggered for the farm. The amount of the payment is based upon the amount of the state-level shortfall with an adjustment to reflect historical differences in farm and state yields.

Before considering the policy implications of the ACRE program, several points merit emphasis. First, the state revenue guarantee is set by recent yields and prices and increases over time if either prices or yields increase. Both prices and yields have demonstrated strong upward trends in recent years. The ACRE program requires a double trigger to generate payments—state-level revenues must fall and farm-level revenues must be below normal—but given that decreases in national prices are the main drivers of ACRE payments at the state level and are also used to determine whether farms experience revenue shortfalls, most farms are likely to be eligible for an ACRE payment for a crop when the state as a whole is eligible. Enrollment to date has been limited and concentrated among larger farms, though all observers anticipate that the ACRE program (or a similar alternative) is likely to be attractive to many grower groups and legislators in the next Farm Bill. This reflects the likelihood that direct payments may be cut or even eliminated and the fact that current high prices and yields result in very high revenue guarantees.

Alternative ACRE Proposal for the 2012 Farm Bill

The attractiveness of the ACRE program in the current market and policy environment has been made clear by several commodity groups in their proposals for changes in farm policy. For example, the National Corn Growers released a 2012 Farm Bill commodity Title I proposal

on September 12, 2011, that encourages Congress to consider a program they term the Agricultural Disaster Assistance Program (ADAPT) that would replace the current direct payment program with a program that shares many of the characteristics of ACRE. Under ADAPT, the guarantee would be set at 95 percent of an Olympic average of five years of revenue. The maximum payment would be capped at 10 percent of the guarantee rather than 25 percent, as under ACRE. However, the program would also eliminate the required 30 percent reduction in marketing loan rates and would use harvest prices calculated from futures markets and actual planted acres as a basis for payments.

Of course, it should also be noted in this context that WTO provisions do allow disaster payments for agricultural producers but require losses to exceed 30 percent, not 10 percent, before disaster payments are justified, and they limit payments for losses to the amount of by which the loss exceeds of 30 percent of the farm's average revenue. Further, in nonagricultural situations in the United States, genuine disasters are expected to have much larger adverse impacts on an individual family or firm before the government is justified stepping in with relief for them, and payments would be limited only to those who experienced substantial losses, not everyone in the general area.

A program similar to ACRE has recently been proposed by the National Cotton Council (NCC). The NCC proposal recommends a revenue-based safety net and modifications to marketing loans that it claims would resolve current WTO disputes with Brazil. The revenue program would be based on current revenue insurance programs. The NCC proposal also indicates that the elimination of, or a substantial reduction in the level direct payments would be acceptable if the proposal were adopted. However, the current US crop insurance program is itself an amber box program because payments are triggered by losses that are smaller than 30

percent of a farm's expected revenues. So it is by no means clear that the NCC proposal would give the United States relief from future trade disputes.

A recent Farm Bill proposal by Senator Dick Lugar (R-IN) and Representative Marlin Stutzman (R-IN) places a modified ACRE program at the center of a "new" farm program for major row crops and peanuts. The proposed program, which is similar to an alternative recently outlined by Senator Kent Conrad (D-ND), is the subsidy "meat and potatoes" of a complex bill they engagingly titled the Reform Economic Farm and Ranch Sustainability and Hunger Act so that it could be called the REFRESH Act. The Lugar-Stutzman revised ACRE proposal is called the Aggregate Risk and Revenue Management Program (ARRM). Their proposal would make the ACRE program worse in some ways and superficially less offensive in others. The program would become worse because revenue guarantees would be established at the crop reporting district (CRD) level. CRDs are substate regions in which area yields are considerably more volatile than at the state level. Hence, payments would occur more frequently and almost surely increase in size because yield variability would become a more frequent cause of payments. On the surface, the new program proposed by Lugar and Stutzman would be a little less problematic in that maximum per-acre payments would be capped at 15 percent of the guarantee instead of 25 percent.

ACRE's Budgetary Costs

In 2008, when only 13 percent of eligible cropland was enrolled in the ACRE program and farm prices were at record highs, total government outlays on the ACRE program were \$422 million. "How bad could things become?" in terms of taxpayer-funded subsidies with higher enrollment, under either the current ACRE program or alternative proposals such as those being put forward by farm state legislators, is a legitimate question. A comprehensive analysis requires

a complex model that accounts for price variability at the national level for the covered crops and yield variability at the farm level by state and substate region for producers of the covered crops. However, a simple “back of the envelope” exercise for one commodity, corn, in the ten states that were the largest producers of corn in 2010 (and account for over 70 percent of total US corn production) provides an idea of how expensive either the current ACRE program or the Lugar-Stutzman variant could become for taxpayers.

Table 2 presents data on the number of acres planted to corn in each of the ten states in 2011 and the 2011 ACRE revenue guarantees for each of the states. If direct payments were abolished, as seems increasingly likely, the costs of participating in the ACRE program would essentially disappear for most corn producers, as well as for producers of wheat and most other program crops (given that loan rate price supports are so low relative to current market prices). So most corn producers and other farmers are likely to participate in the ACRE program after 2012. Suppose, therefore, that 80 percent of all farms enter the program and, as a result 80 percent of all the acres planted to corn in the ten major corn states are eligible for ACRE payments. If all of those farms were eligible for an ACRE payment equal to 25 percent of the guarantee (the maximum under the current program) because of a sharp drop in corn prices then, just for corn producers in those ten states, the government would expend about \$6.7 billion on ACRE subsidies. If those farms were eligible for a 15 percent ACRE payment (the maximum allowed under the Lugar-Stutzman bill), then, under the same assumptions about participation and eligibility, the corn producers in those ten states would receive just over \$4 billion.

How likely is it that the ACRE program would cost the taxpayer that much, just for corn? If ACRE payments were solely driven by variations in prices (state average yields being relatively stable) then a decrease of 25 percent in the current-year national average price from the

value used to compute the ACRE guarantee would be needed to generate a 15 percent ACRE payment (because the revenue guarantee is 90 percent of the expected revenue) and, similarly, a 35 percent decrease in the current-year price would be needed to generate a 25 percent ACRE payment. If the coefficient of variation of corn prices is about 20 percent and prices are normally distributed around their average levels, then a 25 percent or greater reduction in the corn price below its expected or average level would occur about once every ten years and a 35 percent reduction would occur about once every twenty-five years. However, if the ACRE revenue guarantee were based on prices above the expected or average level, then these events would be much more likely to occur. For example, if current prices were about 20 percent above the expected average level, as many would argue is currently the case for corn, there would be a 40 percent chance of an ACRE payout that would equal or exceed 15 percent of the ACRE guarantee and a 23 percent chance of a 25 percent ACRE payment (as ACRE payments are currently capped at 25 percent of the guarantee for a crop). The risk of a very large subsidy payout in excess of \$4 billion or even \$6 billion only for corn and only in those ten states is large.

If corn by itself is likely to be a Farm Bill budget buster, what about the potential budget cost of the ACRE program and other similar related proposals as a whole? The Congressional Budget Office (CBO) has scored the termination of direct payments, which currently provide farmers with about \$5.1 billion a year, at a net reduction in the budget baseline of about \$2.2 billion because of increased participation in the ACRE program. Implicitly, the current CBO estimate for a continued ACRE program is about \$2.9 billion a year. This may be an underestimate, perhaps because of conservative CBO assumptions about enrollment in ACRE and future yield and price movements. The average number seems likely to be close to 5 or 6

billion and in some years, when commodity prices all decline substantially from recent levels, could exceed \$10 billion.⁶ ACRE and the closely related proposals recently put forward by agricultural commodity groups and farm state legislators are expensive exercises in agricultural policy design.

One other implication of the ACRE program deserves discussion in this context. Effectively, as discussed above, farms receive an ACRE payment on all of their production of a crop. This means that bigger farms that plant more acres to crops will receive larger ACRE subsidies than smaller farms (even though total ACRE payments are nominally capped at a maximum of \$146,000 per farm).⁷ Bigger farms are generally owned by wealthier farm households with larger household incomes, so most taxpayer funded ACRE payments flow to farm households who are much wealthier than the average American family.

ACRE and the WTO

The 1994 Marrakesh WTO Agreement defines the framework within which WTO member countries manage their trade relationships with one another. Under the 1994 WTO Agricultural Agreement, member countries agreed to reduce trade barriers for agricultural imports (including both tariff and nontariff barriers such as import quotas and import licensing); meet specific obligations to limit domestic subsidies that distort trading patterns (amber box subsidies); end export subsidies; and base human, plant, and animal health (sanitary and phytosanitary) regulations that limit imports solely on sound science.

⁶ The Food and Agricultural Policy Research Institute has estimated that if participation in ACRE were to increase from 2009 levels to 100 percent then the average taxpayer cost of the program would increase by about \$3.7 billion from estimates based on current enrollment. This implies annual subsidy payments in the range of \$4 to \$5 billion.

⁷ A farm with two eligible people (two people actively involved in the farm's management) can receive up to \$73,000 per person in ACRE payments. The \$73,000 per person limit has two elements: a base cap of \$65,000 plus a supplementary addition to the cap. The supplementary addition is equal to the 20 percent reduction in the direct payments received by that individual if he or she enrolls in the ACRE program. As direct payments are capped at \$40,000 per person (and \$80,000 per farm) for farms not in the ACRE program, the maximum supplement to the base ACRE cap is \$8,000 per eligible person.

ACRE is clearly an amber box domestic support program and has been notified as such to the WTO by the US government. Domestic support programs are explicitly addressed in Articles 6 and 7 of the 1994 Agricultural Agreement (which are included in full in Appendix A). Subsidies linked to production limiting programs or programs that base payments on historical planting decisions and historical yields are not subject to WTO limits. The ACRE program and recent ACRE-like proposed policies simply do not meet those criteria. These program's subsidies are tied to current production and market prices.

These types of domestic subsidies open up two channels for WTO complaints against the United States. The first issue is whether the subsidies are sufficiently large to cause the United States to violate its amber box aggregate measure of support (AMS) commitments. Under the terms of the Marrakesh Agreement, the United States is now committed to spending no more than \$19.1 billion in total on all trade-distorting (amber box) domestic support programs for agricultural commodities. Expenditures of \$10 billion or more on ACRE payments in any given year would push the United States closer to that limit, but the probability of exceeding that commitment would be relatively small. In addition, like all WTO member countries, the United States has the ability to use the *de minimis* provisions of the WTO with respect to commodity specific subsidy payments. Crop specific subsidies that amount to less than 5 percent of the value of a commodity do not have to be included in the aggregate AMS for a country. So it is unlikely that a successful trade complaint would be based on those grounds under the current agreement.

However, a new WTO agreement is likely to be negotiated (probably well within the time period covered by a new Farm Bill), notwithstanding the extent to which the Doha round of negotiations for such an agreement stalled over the past decade. In any new WTO agreement, developed countries will almost surely face a substantially reduced limit on their amber box

aggregate measures of domestic support for agricultural commodities. A 60 percent reduction is well within the scope of any likely agreement, and a 50 percent reduction in the current 5 percent *de minimis* exemption provision is also likely.⁸ Under those circumstances, the US amber box AMS limit would decline to about \$8 billion and the current ACRE program (or the 15 percent version proposed by Lugar and Stutzman) could easily result in an AMS violation and a subsequent successful series of WTO complaints.

The second channel for successful WTO complaints is much more problematic for the WTO viability of the ACRE program. In periods in which world prices for an agricultural commodity are declining, countries have been successful in the WTO dispute resolution process in claiming that another country's domestic support programs have caused price suppression. Price suppression effects are covered under the WTO Subsidies and Countervailing Measures Agreement and until the end of 2003 were generally not an issue for agricultural commodities. Under a "peace clause" in the Agricultural Agreement (Article 13), countries agreed not to use provisions of the General Agreement on Tariffs and Trade beyond the Agricultural Agreement as the basis for WTO complaints. The peace clause expired in 2003, and since then, price suppression effects have been the basis for successful complaints about domestic agricultural policies.

The best known example is Brazil's complaint that the US cotton program lowered world cotton prices and caused substantial harm to Brazil's cotton farmers. A WTO dispute resolution panel and a subsequent appellate panel found that certain US cotton programs (marketing loans, countercyclical payments, and the Step 2 program) were responsible for lowering world prices and damaging Brazilian producers, and that the USDA Export Credit Guarantee program (known as GSM-102) and the Step 2 program constituted illegal export subsidies.

⁸ These reductions were specified in the proposed texts of a new WTO agreement in December 2005.

Clearly, the ACRE program provides subsidies to US farmers precisely when world and US domestic prices are falling (and the larger the declines, the larger the subsidies) and raises revenue guarantees when prices and yields are increasing. Equally clearly, the program also provides incentives for US farmers to expand their production of covered crops relative to the levels that would otherwise be selected, because the ACRE program increases expected returns from planting those crops. Moreover, as discussed above, the ACRE program places no effective limits on the production of those crops. So the ACRE program effectively creates an open season for WTO complaints against the United States with respect to all the covered commodities, as do all of the similar programs currently being proposed by farm lobbies and farm state legislators. The list of commodities covered by ACRE (see table 1) is extensive and includes all major grain crops and all oilseed crops, as well as peas, lentils, and peanuts. The scope for WTO challenges to the ACRE program is equally extensive. In effect, ACRE is a Pandora's box of future trade disputes and WTO cases, most of which the United States is likely to lose.

Conclusion

ACRE is a potentially expensive exercise in farm policy design. In the absence of direct payments or a substantial reduction in their size, many producers are likely to enroll in the program as the current required 20 percent reduction in direct payments is their only effective cost of ACRE participation. The consequence is that ACRE participation is likely to increase substantially from the 2009 level of 13 percent of eligible land. In fact, ACRE effectively provides a new price support program with much higher support prices than those available under the traditional loan rate price support program for most crops, even though it is nominally a revenue support program. So it is difficult to imagine that producers would not sign up for the

ACRE program because it is so potentially lucrative. If farms enroll 80 percent or more of the area eligible for the program, taxpayer costs would be very substantial—likely to exceed \$10 billion in years when prices are low compared to their long-run expected values and potentially averaging as much as \$6 billion annually. Several commodity groups and farm state legislators have put forward proposals for ACRE-like programs (for example, the ADAPT and ARRM policy initiatives) that are also likely to involve very substantial subsidy payments. The congressional deficit-reduction super committee should therefore view any Farm Bill initiatives that include ACRE and ACRE-like policies as replacements for the Direct Payments program, which currently hands out \$5.1 billion mainly to very well-off farmers, as budget neutral or close to budget neutral and insist on real and substantial cuts in agricultural subsidies.

Annual expenditures of the magnitudes associated with ACRE and ACRE-like programs would not necessarily create problems for the United States with respect to the current cap of \$19.1 billion on trade-distorting amber box domestic subsidies. However, if a new WTO agreement reduces amber box AMS caps by 60 percent, as seems likely, then the ACRE program would create substantial challenges for the United States and could well lead to trade disputes with other countries that the United States would lose.

A serious and more immediate problem with the ACRE program is that subsidies are tied to current production levels and current market prices. In particular, ACRE subsidies increase precisely when world prices decline, and that is precisely when other countries are likely to file trade-distortion complaints against the United States with the WTO under the price suppression provisions of the WTO General Agreement on Tariffs and Trade. Moreover, the ACRE program clearly increases expected farm revenues for the crops it covers and increases incentives for the production of those crops, all that other countries need to demonstrate to win sanctions against

the United States under those price suppression provisions. The United States has already lost the Brazil cotton case because Brazil was successful in persuading a WTO dispute panel and appellate panel that US domestic cotton subsidies depressed world cotton prices in the early 2000s. The ACRE program, because it applies to so many crops, therefore creates a cornucopia of options for countries to bring WTO challenges against the United States, with the concomitant probability of multiple trade sanctions. The result may be more “Alice in Wonderland” compromises on the part of the United States that, as in the case of Brazil cotton, force US taxpayers to fund programs that increase the global competitiveness of other countries’ farmers to allow US farmers to continue to enjoy ACRE subsidies.

If the ACRE subsidies were targeted to very poor farmers, then there might be some justification for them. However, as is the case for most US farm subsidy programs, ACRE payments will mainly go to large farms and relatively rich farmers because they are closely tied to farm size. The ACRE program is a policy disaster from a budget, trade relations, and simple fairness perspective and needs to be terminated as soon as possible. Moreover, nor should it be replaced by the look-alike ADAPT, ARRM, and other similar programs currently being put forward by farm groups and farm state legislators, all of which have similar problems.

Table 1. Crops Eligible for the Traditional and ACRE Farm Bill Title I Programs

| Crop | Eligible Programs for Each Crop | | | |
|-----------------------|--|---------------------------------|--|-------------|
| | Direct Payments | Countercyclical Payments | Loan Rate/Marketing Loan Price Supports | ACRE |
| Wheat | Yes | Yes | Yes | Yes |
| Corn | Yes | Yes | Yes | Yes |
| Grain Sorghum | Yes | Yes | Yes | Yes |
| Barley | Yes | Yes | Yes | Yes |
| Oats | Yes | Yes | Yes | Yes |
| Upland Cotton | Yes | Yes | Yes | Yes |
| Rice | Yes | Yes | Yes | Yes |
| Soybeans | Yes | Yes | Yes | Yes |
| Other Oilseeds | Yes | Yes | Yes | Yes |
| Peanuts | Yes | Yes | Yes | Yes |
| Dry Peas | No | Yes | Yes | Yes |
| Lentils | No | Yes | Yes | Yes |
| Small/Large Chickpeas | No | Yes | Yes | Yes |

Table 2. Simulated ACRE Payments for Corn in the Ten Major Corn-Producing States

| State | Area Planted to Corn in 2011 (millions of acres) ^A | ACRE Revenue Guarantee (\$ per acre) ^B | Statewide ACRE Payments: 25% of Guarantee (\$ millions) ^C | Statewide ACRE Payments: 15% of Guarantee (\$ millions) ^D |
|----------------------------|---|---|--|--|
| Illinois | 12.50 | \$639.32 | \$1,358.56 | \$815.13 |
| Indiana | 5.90 | \$579.85 | \$581.59 | \$348.95 |
| Iowa | 14.20 | \$635.61 | \$1,534.36 | \$920.62 |
| Minnesota | 8.10 | \$598.44 | \$824.05 | \$494.43 |
| Nebraska | 10.00 | \$449.76 | \$764.59 | \$458.76 |
| South Dakota | 5.20 | \$457.19 | \$404.16 | \$242.49 |
| Kansas | 5.10 | \$356.83 | \$309.37 | \$185.62 |
| Wisconsin | 4.15 | \$512.95 | \$361.89 | \$217.13 |
| Ohio | 3.50 | \$557.55 | \$331.74 | \$199.05 |
| Missouri | 3.25 | \$512.95 | \$283.40 | \$170.04 |
| Ten States | 71.90 | | \$6,753.71 | \$4,052.23 |
| United States (all states) | 92.28 | | NA ^E | NA ^E |

A. *Source:* USDA National Agricultural Statistical Service

B. The ACRE corn per-acre revenue guarantees for each state were obtained from the USDA Farm Service Agency.

C. These estimates of total ACRE payments assume that 80 percent of all acres are enrolled in the ACRE program and that farmers receive a total-acre payment that is capped at a 25 percent loss on 85 percent of the acres planted to corn.

D. These estimates of total ACRE payments assume that 80 percent of all acres are enrolled in the ACRE program and that farmers receive a total-acre payment that is capped at a 15 percent loss on 85 percent of the acres that are planted to corn.

E. NA denotes not available.

Figure 1. Example of State-Level ACRE Guarantee Determinants

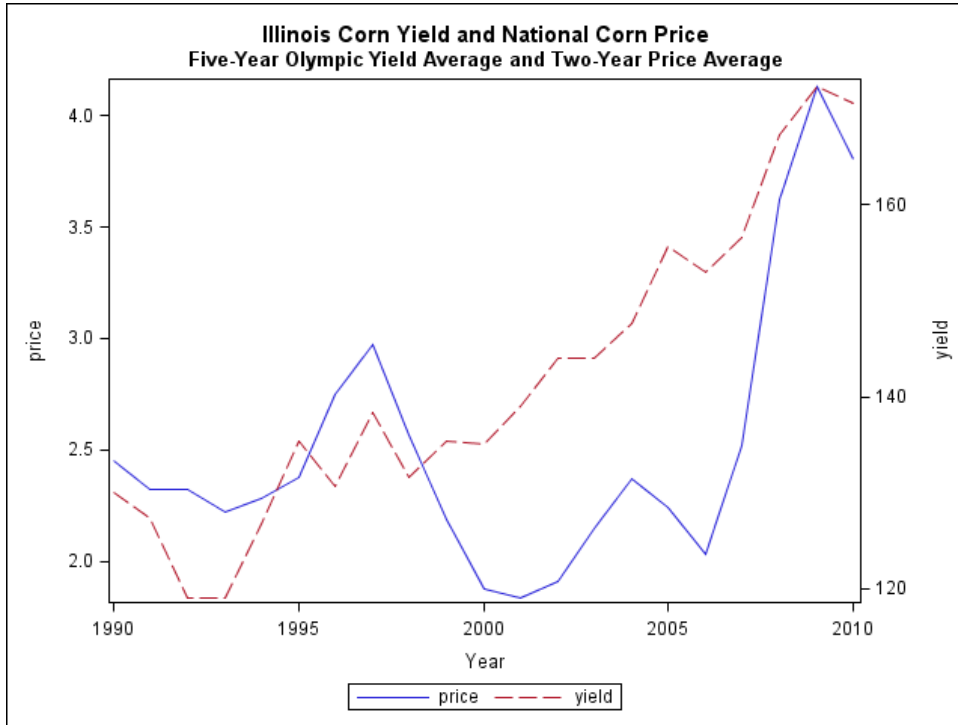


Figure 2. Implied State-Level ACRE Guarantee

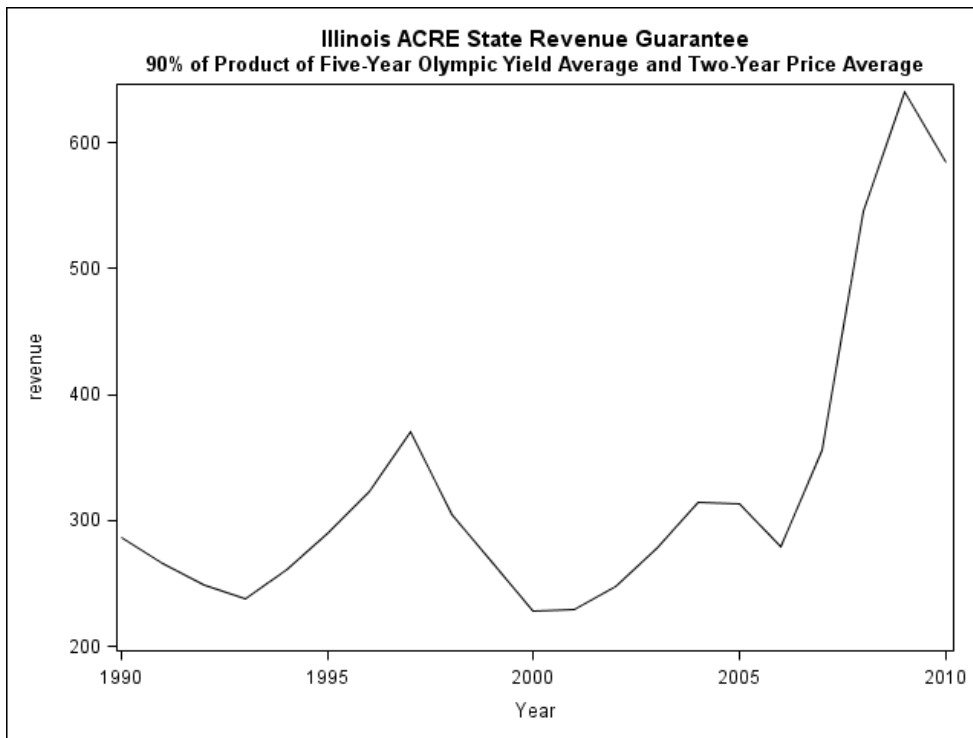


Figure 3a. Potential ACRE Payments in Illinois under Different National Average Price Scenarios (dollars per acre)

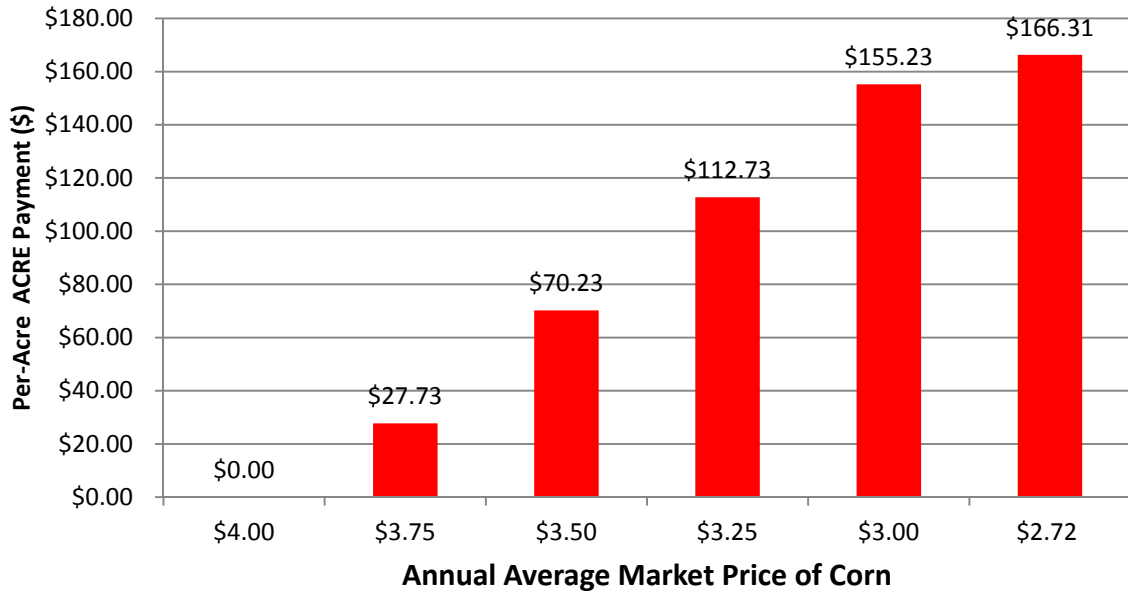


Figure 3b. Potential Total ACRE Payments in Illinois under Different National Average Price Scenarios (\$ millions)

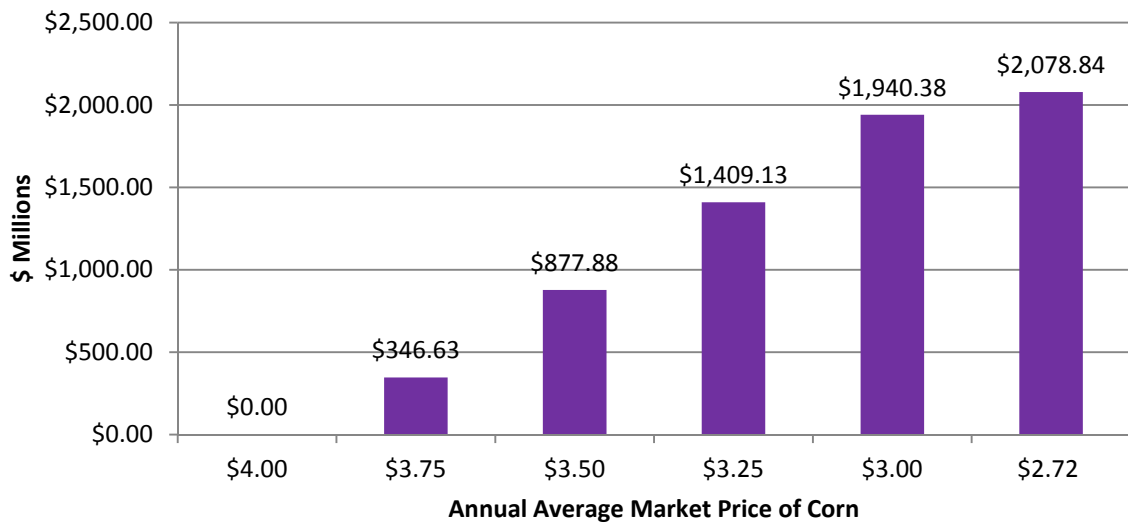


Figure 4. Enrollment in ACRE Program (Base Acres in 2009)

Acreage Enrolled in ACRE

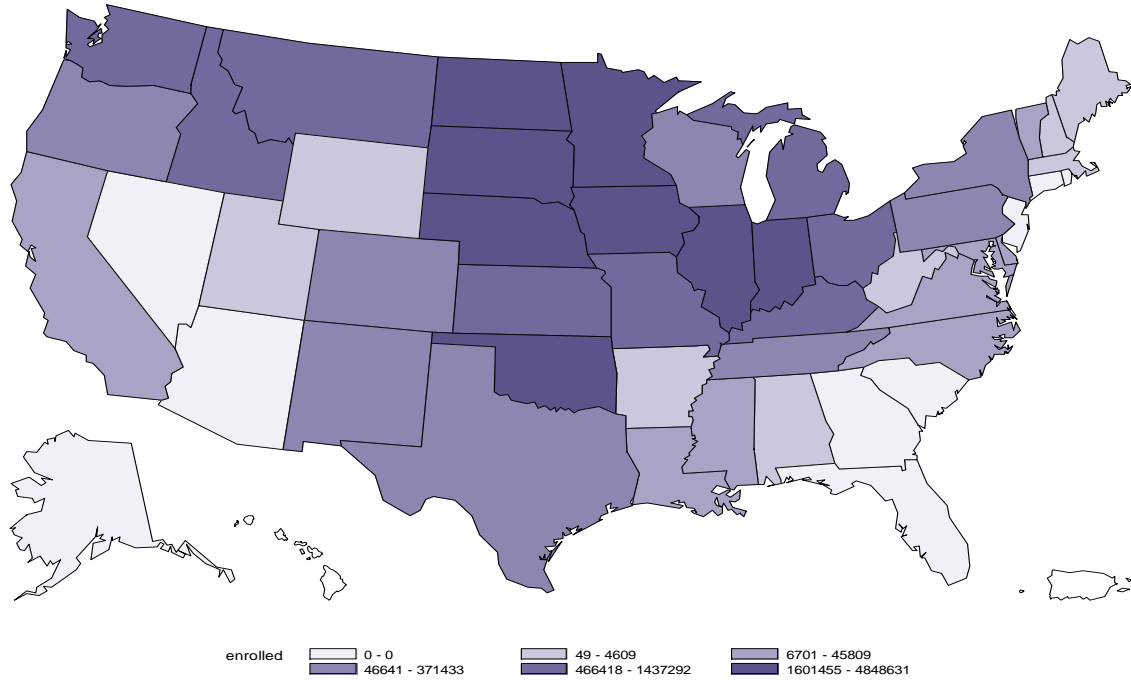
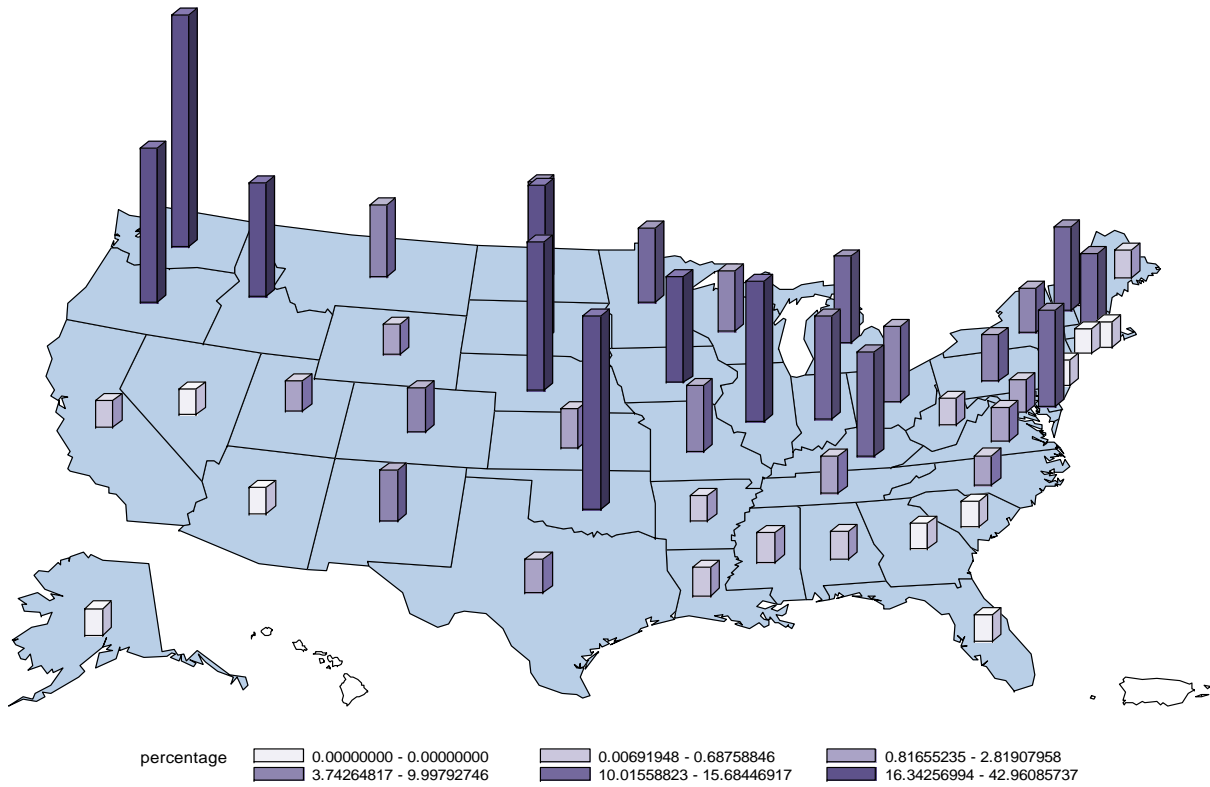


Figure 5. Proportion of Base Acreage Enrolled in ACRE in 2009

Proportion of Base Acreage Enrolled in ACRE



Appendix A. Articles 6 and 7 of the 1994 WTO Agricultural Agreement

Article 6 of the WTO Agricultural Agreement: Domestic Support Commitments

1. The domestic support reduction commitments of each Member contained in Part IV of its Schedule shall apply to all of its domestic support measures in favour of agricultural producers with the exception of domestic measures which are not subject to reduction in terms of the criteria set out in this Article and in Annex 2 to this Agreement. The commitments are expressed in terms of Total Aggregate Measurement of Support and "Annual and Final Bound Commitment Levels".
2. In accordance with the Mid-Term Review Agreement that government measures of assistance, whether direct or indirect, to encourage agricultural and rural development are an integral part of the development programmes of developing countries, investment subsidies which are generally available to agriculture in developing country Members and agricultural input subsidies generally available to low-income or resource-poor producers in developing country Members shall be exempt from domestic support reduction commitments that would otherwise be applicable to such measures, as shall domestic support to producers in developing country Members to encourage diversification from growing illicit narcotic crops. Domestic support meeting the criteria of this paragraph shall not be required to be included in a Member's calculation of its Current Total AMS.
3. A Member shall be considered to be in compliance with its domestic support reduction commitments in any year in which its domestic support in favour of agricultural producers expressed in terms of Current Total AMS does not exceed the corresponding annual or final bound commitment level specified in Part IV of the Member's Schedule.
4. (a) A Member shall not be required to include in the calculation of its Current Total AMS and shall not be required to reduce:
 - (i) product-specific domestic support which would otherwise be required to be included in a Member's calculation of its Current AMS where such support does not exceed 5 per cent of that Member's total value of production of a basic agricultural product during the relevant year; and
 - (ii) non-product-specific domestic support which would otherwise be required to be included in a Member's calculation of its Current AMS where such support does not exceed 5 per cent of the value of that Member's total agricultural production.
- (b) For developing country Members, the *de minimis* percentage under this paragraph shall be 10 per cent.
5. (a) Direct payments under production-limiting programmes shall not be subject to the commitment to reduce domestic support if:

- (i) such payments are based on fixed area and yields; or
 - (ii) such payments are made on 85 per cent or less of the base level of production; or
 - (iii) livestock payments are made on a fixed number of head.
- (b) The exemption from the reduction commitment for direct payments meeting the above criteria shall be reflected by the exclusion of the value of those direct payments in a Member's calculation of its Current Total AMS.

Article 7 of the Agricultural Agreement: General Disciplines on Domestic Support

1. Each Member shall ensure that any domestic support measures in favour of agricultural producers which are not subject to reduction commitments because they qualify under the criteria set out in Annex 2 to this Agreement are maintained in conformity therewith.
2. (a) Any domestic support measure in favour of agricultural producers, including any modification to such measure, and any measure that is subsequently introduced that cannot be shown to satisfy the criteria in Annex 2 to this Agreement or to be exempt from reduction by reason of any other provision of this Agreement shall be included in the Member's calculation of its Current Total AMS.
- (b) Where no Total AMS commitment exists in Part IV of a Member's Schedule, the Member shall not provide support to agricultural producers in excess of the relevant *de minimis* level set out in paragraph 4 of Article 6.