Major US farm support policies and their links to WTO domestic support commitments

Ivan Roberts and Neil Andrews

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Australian Bureau of Agricultural and Resource Economics

Postal address	GPO Box 1563	Canberra	ACT	2601	Australia
Location	7B London Circuit	Canberra	ACT	2601	
Switchboard	+61 2 6272 2000				
Facsimile	+61 2 6272 2001				

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Foreword

Under the domestic support provisions of the WTO Agreement on Agriculture, all WTO members have undertaken to limit their Aggregate Measurement of Support (AMS) that is considered to be trade distorting, to no more than specified levels. The actual calculation of a member's AMS is subject to a range of rules, exemptions and classifications, some of which are open to various interpretations.

Some countries, including the United States, have multi-layered support arrangements that contain ambiguities in how they relate to the WTO rules and classifications. Because of these ambiguities and the importance of the United States as a major producer and trader of agricultural products, the United States provides an important case study for the interpretation of the domestic support rules and the significance of those interpretations.

Under the WTO Agreement on Agriculture, the United States has undertaken to limit its AMS to US$19.1 billion a year from 2000. The US domestic support notifications to date have been based on a particular set of interpretations of WTO rules. This report highlights the critical nature of those specific interpretations in the US meeting its AMS commitments. The report also highlights the effects of alternative interpretations, including those arising from WTO rulings.

Elimination of ambiguities regarding classification of support measures and further clarification of the application of WTO rules will be important to ensure that agricultural support of all WTO member countries, including the United States, is reflected in their AMS calculations as clearly and correctly as possible. Addressing such issues is an ongoing task as support arrangements and the orientation of policies are changing.

Phillip Glyde
Executive Director
January 2009

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Key Findings

US agricultural support has been concentrated on farm program crops (that include wheat, feed grains, rice, cotton, oilseeds, and recently peanuts and some pulses), dairy products and sugar.

- Assistance to program crops has been mainly through government payments while that to dairy and sugar has been largely through price support underpinned by import limitations and, for dairy, some export subsidies and government payments.
- The payments for program crops have been through comprehensive, interacting measures providing minimum unit returns for actual production, and direct and countercyclical payments made on historical product-specific area and yield bases. To receive direct and countercyclical payments, producers are free to produce most products except fruit, vegetables and wild rice.

Until the past two years, the program crops accounted for about one-quarter of the total value of US agricultural production and those crops plus dairy and sugar accounted for less than 40 per cent of the total value of agricultural production. In 2007, program crops, sugar and dairy collectively accounted for 43 per cent of the total. The meat and horticulture industries which account for the majority of the rest of US agriculture are only lightly supported.

Since the mid-1980s, US support has varied widely without displaying either rising or falling trends. Support has been largely countercyclical to market prices.

In the Uruguay Round of WTO negotiations that was concluded in 1994, the United States undertook to limit its domestic support as measured by its Aggregate Measurement of Support (AMS) for agriculture in total to below specified amounts. Since 2000 the limit has been US$19.1 billion a year.

From 1995 to its latest notification for the 2005 marketing year, the United States has notified AMS levels well below its committed limits to the WTO.

Particular interpretations of WTO rules allowing exemption of direct payments from the AMS and classification of countercyclical payments as non-product-specific have been critical to the United States notifying support within its WTO limits.

- The exemption on direct payments has been on grounds of decoupling (green box exempt).
- The non-product-specific designation for countercyclical payments has allowed exemption of those payments. The reason has been because total non-product-specific support has been below a *de minimis* exemption threshold of 5 per cent of the total value of agricultural production. Such exemptions were possible even at times of relatively high support for program crops because the program crops accounted for only about one-quarter of the total value of US agricultural production.

Rulings in 2004 and 2005 of the WTO panel and Appellate Body in the United States – Subsidies on Upland Cotton case (the 'Upland Cotton' case) brought by Brazil included:

- US direct payments on upland cotton were not properly decoupled and cannot be classified as being exempt from inclusion in the AMS because farmers were precluded from program benefits if they produced fruit, vegetables or wild rice; and
- base related direct payments and countercyclical payments were support to a specific commodity. However, support to the specific commodity, in that case upland cotton, was limited to the area actually planted to upland cotton on its base when the area planted to cotton was less than the cotton base area.

The rulings in the Upland Cotton case were for upland cotton alone. However, the support arrangements for upland cotton are the same as for other farm program crops, and the reasoning and findings in that case might be considered to also apply for the other farm program crops.

While no rulings were made in the Upland Cotton case concerning changes to bases and the implications of this for classifying direct payments as exempt under the green box, it is notable that US payment bases were updated in the 2002 US Farm Bill (although not in the 2008 Farm Bill). Green box exemption on grounds of decoupling requires bases to be fixed. However, there is some debate concerning whether a fixed base should be fixed and unchanging or whether it can be replaced by another 'fixed' base.

The updating of bases along with changes to names but not the content of programs, that occurred in the 2002 Farm Bill raises additional concerns regarding the classification of US direct payments as decoupled and therefore exempt. Although legalities can be debated about whether changes to bases would fall within the conditions concerning decoupled income support in the WTO Agreement on Agriculture, there is no doubt about the incentives that such changes and the expectations that flow from them have. If producers expect bases may be updated, they would have an incentive to expand current areas and production to increase their bases in order to obtain higher future program benefits. As such, any changes to bases affect production and are not properly decoupled in an economic sense.

In this study an analysis has been carried out of alternative classifications involving direct and countercyclical payments using data from the actual US notifications and where necessary from the US Commodity Credit Corporation (CCC).

Analysis indicates that, if direct payments for all program crops were classified as non-exempt and both direct and countercyclical payments were classified as product-specific, the United States would have exceeded its AMS limit in five of the seven years from 1999 to 2005.

- These classifications appear to be most strongly in line with the findings in the Upland Cotton case.
- The extent to which the US commitment would have been exceeded would have been substantial in 1999 and 2000 and the margin would have been smaller, but still considerable, in 2001, 2004 and 2005.

Other scenarios were analysed using differing combinations of direct payments as green box exempt (as notified by the US Government), product-specific, or non-product-specific, and countercyclical payments as product-specific or non-product-specific. For all of these combinations the United States would have exceeded its AMS limit for 1999 and 2000 and, with the exception of the least plausible scenario examined, in 2001 as well.

The finding in the Upland Cotton case that base-related support for cotton was limited to the area planted when it was less than the base area, gave rise to what is known as the 'cotton to cotton' methodology. This is where the percentage of relevant payments applicable to cotton was limited to actual cotton plantings on cotton base areas as a percentage of total upland cotton area bases.

Application of the cotton to cotton methodology results in 'remainders' of support paid on that part of the specific product base area not planted to the base crop. Those remainders constitute agricultural support. However, no findings were made on whether these remainders should constitute support in favour of agricultural producers in general or whether they should be considered as support to other products that are produced on the remaining base land.

Further analysis was carried out for the effects of differing classifications of direct and countercyclical payments incorporating the cotton to cotton methodology where plantings for the various program crops were below base levels. Application of this methodology to all program crops usually, but not always, results in some reduction in aggregate US AMS levels.

- It was found that a key determinant of the extent of any such reductions was the treatment of the support remainders.
- In 2001, in a scenario where direct payments were considered to be exempt under the green box and where countercyclical payments were product-specific, application of the cotton to cotton methodology would have reduced the US AMS from just above the US$19.1 billion limit to just under it. The allocation of countercyclical payment remainders would have been critical in that instance. If the remainders were considered to be product-specific and allocated as product-specific support across all program crops on a value of production basis, the US AMS in that year for that scenario would have been US$19.3 billion. However, if the remainders were considered to be non-product-specific or no remainders were allocated, the AMS would have been US$18.6 billion.

A new Farm Bill in 2008 has maintained the existing support arrangements for major program crops, with some increases in target prices for wheat, barley, oats, grain sorghum and soybeans and a minor reduction in the target price for cotton. However, it also introduced an optional revenue assurance program termed the Average Crop Revenue Election program (ACRE) for program crops and peanuts, raised price support levels for sugar and changed support for dairy from providing a minimum support price for milk to minimum prices for butter, cheddar cheese and skim milk powder. The Bill also increased potential support payment levels under what is termed the Milk Income Loss Contract (MILC) scheme when monthly milk prices fall below a benchmark level and raises the benchmark level when feed prices exceed specified levels.

The ACRE program, which is optional for producers, could be attractive as a vehicle for support to most program farmers producing grains and oilseeds as the potential cost of entering the program seems likely to be small, whereas additional support in years of reduced market prices and/or yields could be large. In contrast to farmers producing grains and oilseeds, specialist cotton producers appear to have little incentive to join the program as they would receive greater payments and higher returns under the traditional support arrangements.

ACRE payments are related to prices and production variables for specific products and it appears that, subject to *de minimis* provisions, they would be most accurately classified for AMS purposes as product-specific, non-exempt support.

The change in dairy price support from an all inclusive milk basis to a limited product basis might provide a means of reducing future AMS levels as it might enable the United States to exclude support for drinking milk and milk for other dairy products from its AMS calculations.

- However, milk for drinking and for other products is still supported through minimum prices under milk marketing orders and such prices might potentially be relevant for future AMS calculation purposes.

The support price increase for sugar is estimated to add an extra US$120 million a year to the US AMS.

It appears world market prices for most of the main US farm program crops could remain above pre 2006 levels for several years, although the 2008 financial crisis has greatly increased the uncertainties in market price forecasting. A major reason for these price expectations is greater use of grain and oilseeds for bio energy production in response to higher petroleum prices and government policies promoting biofuel.

For the next few years, assistance **through traditional US support arrangements** appears likely to be lower than in the first half of the present decade. However, as in previous years, prices and yields for US producers will fluctuate. Under such conditions overall US support and the US AMS could be markedly affected by the uptake of the ACRE program. Consequently, the availability of ACRE means it cannot be concluded that the US AMS will be lower than in the first half of the current decade, even if market prices are higher than they were in that period.

The US AMS might also be markedly affected by how the US Government chooses to notify the modified support arrangements for dairy. There are many uncertainties surrounding this issue.

The multi-layered US support arrangements contain ambiguities in how they relate to rules and classifications set down in the WTO Agreement on Agriculture. Some of those were addressed in the Upland Cotton case. Elimination of such ambiguities and further clarification in the application of the WTO rules would guide policy changes and how support is notified, both by the United States and other WTO members. Addressing such issues is an ongoing task as support arrangements and the orientation of policies are changing, while revisions to the Uruguay Round WTO Agreement on Agriculture are also being negotiated in the Doha Round.

1 Introduction

The United States is one of the main advocates for more open trade in agricultural products in the multilateral negotiation forum, the World Trade Organisation (WTO). US leadership is critical in WTO negotiations. Its opposition to the protectionist positions of many countries is vitally important to achieving significant reform in trade negotiations. Also, the dominant positions occupied by the United States and the European Union in world agricultural trade mean that no effective multilateral agreement could be possible without the backing of these two agricultural super powers.

The United States is the world's largest exporter of agricultural products. Because of the size of its market and the extent of its production, consumption and exports, US agricultural policies have important international ramifications. Relatively small policy induced changes in the balance between US production and consumption can markedly affect supplies, demand and prices internationally.

For most agricultural products, the US market is relatively open to imports, with average tariffs for food and agricultural products being around 12 per cent (US Department of Agriculture 2001). However, dairy products and sugar constitute two important exceptions with substantial barriers against imports through tariff quotas.

While, the US market has been relatively open, with these important exceptions, the US Government has historically intervened to provide substantial domestic support to producers of specific crops under what are termed farm programs. These farm program crops include wheat, feed-grains, cotton, rice and oilseeds. Peanuts have received significant support through separate arrangements which since 2002 have been aligned with those for the farm program crops. Forms of support for some pulses have now also been aligned with those for the main program crops. US policies for farm program crops, and for dairy and sugar, influence international market supplies, demand and prices. Accordingly, decisions on these policies are viewed with great interest internationally.

Since the signing of the General Agreement on Tariffs and Trade (GATT) in 1947, a multilateral system of trade rules and negotiations has been developed to advance economic benefits for member countries through efforts 'directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce' (World Trade Organisation 1995, p.486). Agriculture was a laggard in attaining many such benefits because of various limitations and exemptions. It was not until the Uruguay Round which was concluded in 1994 that a comprehensive multilateral framework of rules was developed to advance the benefits from trade in agriculture. The framework included the WTO Agreement on Agriculture, in which a set of measures was developed to advance market access, reduce market distorting domestic support and reduce export subsidies (Young 1994).

The WTO Agreement on Agriculture provides the basis for the present multilateral rules and disciplines for domestic support. Currently negotiations are occurring in the Doha Round to modify or to replace some of the existing rules contained in that agreement. However, agreement is yet to be reached. Consequently, all analyses in this study are based on the currently applicable Uruguay Round rules as contained in the WTO Agreement on Agriculture.

Under the domestic support provisions of the WTO Agreement on Agriculture, the United States undertook to limit its Aggregate Measurement of Support (AMS) as defined in Article 1 and Annex 3 (see glossary) for agriculture as a whole to US$19.1 billion a year for the years from 2000 onwards. In its notifications to the WTO up to 2005, the United States has reported annual AMS levels well below its committed ceiling.

The AMS for a member's agricultural sector can be greatly influenced by whether particular forms of payments or other support meet the agreed criteria for exemption. The AMS can also be affected markedly by *de minimis* provisions (see glossary). Those provisions enable exemption of otherwise non-exempt support if product-specific support is less than 5 per cent of the value of production of the specific products and also if non-product-specific support is less than 5 per cent of the total value of agricultural production.

A characteristic of US agricultural support and protection policies is that they involve a range of measures for various products that may, under differing interpretations of the WTO rules, be treated differently with respect to inclusion or otherwise in its AMS. Also, the measures are periodically changed in US Farm Bills and other legislation which may influence how the measures are categorised under the various WTO rules. In this study, the links between US domestic agricultural support policies and current US WTO domestic support commitments are examined and analysed.

The significance of the analysis is twofold. First, it is to establish the importance of the interpretations of the WTO rules made by the United States in meeting its AMS commitments and the effects of possible alternative interpretations, including those arising from WTO rulings. Second, it is to help highlight areas where clearer interpretations of WTO rules may be of assistance in ensuring agricultural support of all WTO member countries is reflected in their AMS calculations as correctly and unambiguously as possible. The emphasis is on the provisions in the US 1996 and 2002 Farm Bills, how those provisions have been put into effect, the status of payments regarding inclusion in or exclusion from the AMS, and the implications for the overall level of the United States' current total AMS in particular years. In addition, changes in policies and policy settings in the recently enacted 2008 Farm Bill are outlined and a brief appraisal is made of their implications.

The scope of this paper is limited to the major US agricultural support programs, and does not include other forms of assistance. The United States utilises a variety of additional policy mechanisms which also have the effect of supporting agricultural producers and which may be relevant to calculation of US AMS levels. These include for example, disaster assistance, insurance subsidies and taxation exemptions for agricultural producers. The classification of such programs under the Agreement on Agriculture and their impact on US AMS calculations are not examined in this report.

2 Characteristics of US agricultural support

Levels of support and distribution of support between products

Support and protection levels through US farm policy are heavily skewed in terms of product coverage. The major farm program crops, wheat, maize, barley, oats, grain sorghum, cotton, rice, soybeans, other oilseeds and peanuts receive the bulk of the substantial government expenditure on commodity support. These crops have, in the past, usually accounted for about 25 per cent of the total value of US agricultural production. However in 2007, when market prices for grains and oilseeds rose sharply and when production levels were high, especially for corn, the proportion rose to 29.5 per cent (table 1).

Protection and support for milk and sugar has, over the years, been mainly through transfers from consumers. It has been provided primarily through internal market prices being maintained at levels which have usually been above world market prices through tariff quotas on imports and also some export subsidies for dairy products. However, between 2003 and 2008, with the surge in world prices for dairy products and the depreciation of the US dollar, direct export subsidies for dairy products were not used (WTO 2008). The support for dairy, underpinned by tariff quotas and export subsidies is translated to regional pricing through milk marketing orders under which minimum prices are set for various classes of milk (Manchester and Blayney 2001). In addition, under the MILC scheme, some budgetary subsidies are made to dairy farmers on the quantities of milk up to a limited volume per farm when internal prices fall below an indicator market price level.

Support for the farm program crops has been provided through a range of payments designed to ensure minimum unit returns to producers, to provide additional income support and also to subsidise crop insurance.

In aggregate, the high-support parts of US agriculture including the farm program crops, dairy and sugar, have until recently constituted around 36 per cent of the total commodity cash receipts from US agriculture. However, in 2007, corresponding with a sharp increase in market prices for program crops and dairy products, these traditionally highly supported parts of US agriculture accounted for about 43 per cent of the total cash receipts from US agriculture (table 1). The remainder of US agriculture, which includes the meat, vegetable, fruit and nut industries, receives far less support and/or protection. However, fruit and vegetables receive indirect support as a result of farm program crop payments being made conditional on program participants not planting fruit and vegetables. That condition would restrict the areas used for fruit and vegetables, resulting in market prices for those products being higher than would otherwise apply.

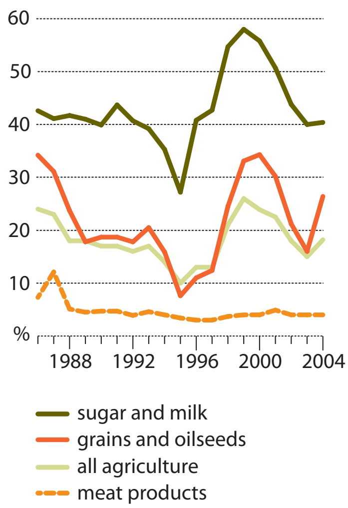
The disparate support levels applying between agricultural commodities in the United States are evident from product-specific Producer Support Estimates (PSEs) published by the

1 US cash receipts from farming

	2004		2005		2006		2007	
	US$b	% of US agriculture	US$b	% of US agriculture	US$b	% of US agriculture	US$b	% of US agriculture
Program crops								
Food grains	8.9	3.7	8.6	3.6	9.1	3.8	12.8	4.5
Feed grains	27.4	11.5	24.7	10.3	29.4	12.2	42.4	14.9
Cotton incl. seed	4.8	2.0	6.3	2.6	5.6	2.3	6.2	2.2
Oil bearing crops	17.9	7.5	18.4	7.6	18.5	7.7	22.6	7.9
Total main program crops	59.0	24.8	58.0	24.1	62.6	26.0	84.0	29.5
Dairy products	27.4	11.5	26.7	11.1	23.4	9.7	35.4	12.4
Sugar crops a	2.1	0.9	1.8	0.7	2.2	0.9	2.1	0.7
Total main program crops dairy and sugar	88.5	37.2	86.5	35.9	88.2	36.6	121.5	42.7
Other animal products								
Meat animals	62.4	26.2	64.8	26.9	63.5	26.4	65.0	22.8
Poultry and eggs	29.5	12.4	28.7	11.9	26.5	11.0	32.6	11.4
Other	4.3	1.8	4.6	1.9	4.8	2.0	4.9	1.7
Other products								
Vegetables and melons	16.8	7.1	17.0	7.1	18.5	7.7	19.9	7.0
Fruit and tree nuts	15.8	6.6	17.4	7.2	17.2	7.1	17.9	6.3
Other	20.6	8.7	21.9	9.1	22.1	9.2	23.0	8.1
Total all items	237.9	100.0	240.9	100.0	240.8	100.0	284.8	100.0

a Estimate derived from production and average returns.
Source: ERS 2008.

a Comparison of average support levels (PSEs) to producers of various groups of US farm products a



a The PSEs shown for the various product groups in this figure are weighted averages using values of production in 2003 as weights for individual commodities in each group.
Source: OECD 2006.

OECD that indicate support as a percentage of the supported value of production (table 2).

These differences are also evident from figure a which shows weighted averages of producer support for various commodity groups. Because of these disparities, aggregated data on the overall levels of support for US agriculture cannot be interpreted to be representative for the sector overall or indicative of levels for the various parts of the sector.

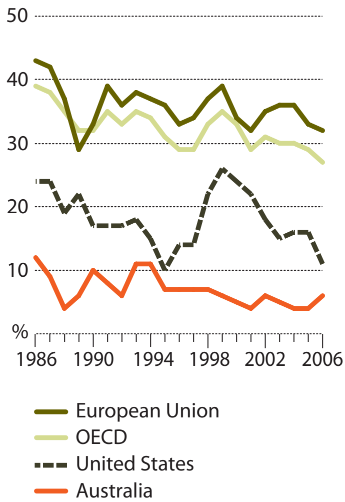
However, it is apparent from figure a, that support for both the major program grains and oilseeds as a group, and for dairy and sugar, has moved broadly in line with support for agriculture as a whole over time. Consequently data on **movements** in overall support for US agriculture has been indicative of **movements** in support for broad commodity groups over time but not of the **levels** of support for the main broad groups of supported products.

2 US producer support estimates (PSEs)a – per cent of the supported value of production

	wheat	rice	corn	oilseeds	sugar	milk	beef & veal	pigmeat	poultry	agriculture
1986	56	67	44	9	61	41	7	4	9	24
1987	58	48	41	5	64	39	7	3	23	23
1988	35	40	30	9	50	41	4	4	7	18
1989	23	37	23	7	41	42	5	4	4	18
1990	42	45	19	6	39	40	5	3	5	17
1991	50	38	16	7	52	43	5	3	5	17
1992	34	50	20	5	49	40	4	3	4	16
1993	42	43	20	10	53	38	5	7	3	17
1994	31	37	17	6	39	35	3	7	4	14
1995	15	26	6	5	41	26	3	3	4	10
1996	22	9	12	5	39	41	3	3	3	13
1997	25	10	14	5	39	43	3	3	3	13
1998	38	15	28	15	51	55	3	5	4	21
1999	50	39	34	24	69	57	4	4	4	26
2000	48	45	34	28	53	56	4	4	4	24
2001	43	52	27	27	59	50	5	4	5	22
2002	36	50	20	14	53	43	4	4	4	18
2003	22	31	13	16	62	38	4	4	4	15
2004	32	18	27	24	56	39	4	4	4	18

a Characteristics of PSEs are spelled out in the glossary.
Source: OECD 2006.

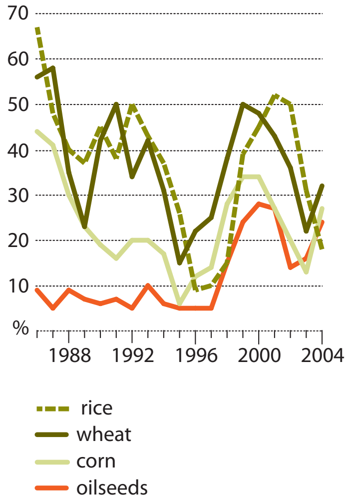
b Support levels for agriculture (PSEs) in selected OECD countries



These are relevant issues when comparisons of support levels are made between regions, especially between the United States and the European Union, the other dominant developed region which is a major agricultural producer. Average levels of US support for agriculture as a whole have varied around 20 per cent and have been substantially lower than those in the European Union where average support has varied around 35 per cent (figure b). However, support levels have been more evenly distributed over a far wider range of agricultural products in the European Union than in the United States. While average support levels for agriculture overall in the United States, as measured by PSEs, have only been a little more than half of those in the European Union, US support levels for the traditionally more highly supported items including dairy, sugar, wheat and rice have been similar to those in the European Union.

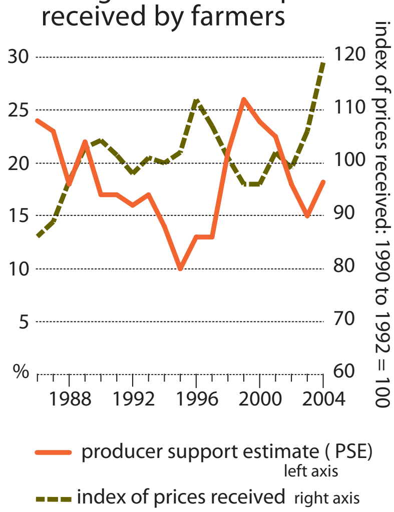
As well as there having been disparate levels of support between groups of agricultural products in

c US support levels (PSEs) for major grain program crops and oilseeds



Source: OECD 2006.

d US support levels (PSEs) for agriculture and prices received by farmers



Source: OECD 2006, ERS 2008.

the United States, there have been disparate levels of support for the various farm program crops (figure c). Within that group, support for rice and wheat has been highest and for corn has been lower but still appreciable. Support for oilseeds, primarily soybeans, has been lowest (*Note*: the OECD has not calculated the PSE for cotton). However, it is apparent there was a quantum shift upward in support levels for oilseeds, primarily soybeans, from 1998. The shift to greater support for soybeans probably represents the largest single change in US agricultural support relativities from the mid-1980s until the middle of the present decade. That change corresponded with the extension of farm program support for soybeans, which until 1998 had been solely through loan rate support, to include a wider range of government payments. In the 2002 Farm Bill, the full range of farm program payment benefits was made available to soybean and minor oilseed producers.

Levels of US agricultural support were high in the mid-1980s, much lower in the mid-1990s, high again in the late 1990s and in the early years of the present decade and lower since. For the farm program crops, such support could have been expected to be countercyclical to world market prices as support mechanisms for these have been adapted to ensure greater support when world prices fall. The extent of the support for the program crops, their counter cyclical nature and the general correspondence in movements in support for farm program crops and for dairy and sugar combined (figure a and table 2), have resulted in overall support to US agricultural producers being broadly countercyclical to prices received by US farmers for farm products overall (figure d). This is despite the substantial size of the lightly supported meat and horticultural industries.

Levels of support for individual commodities as indicated by product-specific PSEs have not been published by the OECD for the years since 2004. It is likely there would have been a decline in the US support levels provided directly to agricultural industries through government payments and price support in 2007 because market prices increased markedly in that year for grains, oilseeds and dairy products.

The previous examination of US levels of support for the main agricultural products and the ways in which support is provided reveals a number of characteristics. Some are:

- While overall levels of US agricultural support have varied widely since the mid-1980s, there has not been any sustained upward or downward trend.
- US support levels have been countercyclical to market prices.
- Probably the most prominent change in US support levels for agricultural products from the mid-1980s until the middle of the present decade has been a substantial increase in support for oilseeds dating from 1998.
- US agricultural support is provided mainly through direct transfer payments to farmers from taxpayers. As only a few commodities, primarily dairy products and sugar have received support primarily from tariffs or through tariff quotas, the average level of tariff support for US agriculture has been comparatively low.
  - However, substantial indirect support to some agricultural products, particularly corn, is now becoming available through support for domestically produced ethanol. That support has been mainly through tariff barriers against imports of ethanol and payments to processors for blending biofuels with fuels derived from mineral oil. The present and potential scale of ethanol production means that such support has substantial implications for future grain prices and supplies, both on the US and world markets. It will also markedly affect levels of agricultural support that are provided through the traditional main payment arrangements.

The role of farm bills in policy development

Every five or six years, the US Congress enacts 'omnibus' Farm Bill legislation. Each Farm Bill sets down guidelines for the application of farm policies over the ensuing period, and covers a range of issues, including commodity support arrangements and support price levels, environmental and conservation programs, trade policy, nutrition programs, rural development and energy.

Over the past three decades, Farm Bills have been enacted in 1981, 1985, 1990, 1996, 2002 and 2008. The latest covers the period from 2008 to 2012. The multi-year Farm Bills provide the US Congress, the US Administration and interest groups with the opportunity to periodically comprehensively address agricultural and food policy issues. Nevertheless, agricultural policy is also developed through stand alone legislation, such as occurred each year from 1998 to 2001 during which period four emergency support packages were enacted.

3 Policy measures for farm program crops that affect the US Aggregate Measurement of Support (AMS)

Support measures for farm program crops may be divided into two main groups: those where support is paid on actual production of particular products; and those where support is paid on historical area and yield bases

Measures where support is paid on actual production of particular program crops

Measures that are based on actual production include marketing loans, loan deficiency payments and certificate exchange gains. These measures ensure farmers receive unit returns on their production of each farm program crop that are at least as high as administratively set loan rates. Each of these measures provides direct or indirect payments to producers that cover the difference between the market price and the loan rate when market prices fall below the loan rate. Loan rates have effectively been set as a minimum unit return which program crop farmers receive for their production. A reason for having a range of measures to do effectively the same job arises from the need to adapt payments for producers who choose to take out government loans under the programs at the loan rate and for producers who do not.

The support through the loan rate has arisen through a long established system of crop financing under which farmers are eligible to receive government loans at a loan rate per bushel, hundredweight or pound, ahead of planting their program crops. The crops are used as collateral for the loans.

If market prices reached levels above the loan rate, the growers could repay the loan and keep the excess less interest on the loan. However, if the market price threatened to fall below the loan rate a government agency within the US Department of Agriculture, the Commodity Credit Corporation (CCC), was obligated to accept forfeitures of the crops used as collateral for the loans. This meant that the government effectively purchased such forfeited crops at the loan rate, with such crops being held as public stocks. The system, therefore, ensured that market prices did not fall below the loan rate. The CCC could then release the forfeited stocks to the market when conditions specified in the operative farm legislation arose. If such release resulted in state trading losses, the losses constituted product-specific subsidies to producers.

From the 1985 Farm Bill on, the US Government has been reluctant to accumulate public stocks and over time it has developed marketing loans, loan deficiency payments and certificate exchange gains to ensure that producers receive unit returns on their actual production at least as high as the loan rates, without the need for much government stock management or export subsidies.

Another reason for the United States reluctance to accumulate public stocks would be that with the Canada-US Trade Agreement (CUSTA) and later the North American Free Trade

Agreement (NAFTA), the US market became more open to imports of farm products from other relevant countries, making it more difficult to manage internal US market supplies and prices.

These loan rate related forms of support result in payments which fluctuate inversely to, or are countercyclical to, movements in market prices when such prices are below the loan rate.

Measures where payments are made on historical area and yield bases

Support measures where payments are related to bases include direct payments (DPs) and their pre 2002 predecessors, production flexibility contract payments (PFCPs); and countercyclical payments (CCPs) and their pre 2002 predecessors, market loss assistance payments. These payments provide support that is additional to the direct production-related support through the loan rate and associated payments, but have been made on 85 per cent of individual crop area bases and on yield bases determined from previous areas and yields, not on actual current production.

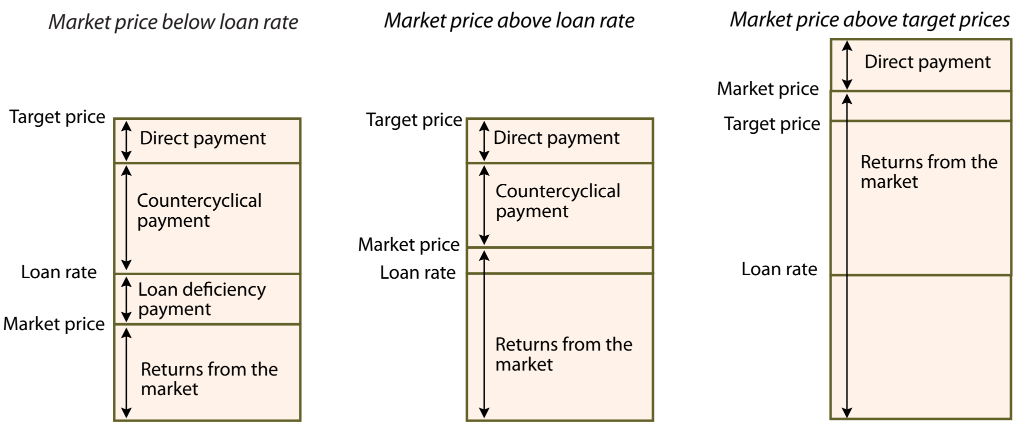
An important characteristic of both direct and countercyclical payments is that they are provided to all farmers who have commodity bases, irrespective of what they actually produce on those bases. Farmers do not actually have to produce anything on their bases to receive the payments. For example, a farmer with a wheat base could plant cotton, but would still receive the direct and countercyclical payments which apply to wheat. There is, however one exception that has potential implications for meeting WTO exemption requirements for direct payments: farmers cannot obtain their program payments if they plant fruit, vegetables or wild rice on their base areas.

These various base related payments may be divided into those with fixed payment rates which include direct payments and PFCPs, and those where payment rates vary inversely with prices, namely countercyclical payments and, in effect, the market loss assistance payments. However, there are some differences between direct payments and PFCPs in that direct payments were set in the 2002 and 2008 Farm Bills at constant rates, whereas PFCPs were set at gradually declining but pre-set rates in the 1996 Farm Bill.

Also there are some differences between countercyclical and market loss assistance payments. The rates for countercyclical payments that were introduced in the 2002 Farm Bill, and which have also been incorporated in the 2008 Bill, are determined as the difference between a set target price and the sum of the higher of the market price and the loan rate and the unit direct payment rate. As a result, countercyclical payments vary inversely with market prices when they are above the loan rate but below the target price less the unit direct payment. Market loss assistance payments were not determined in such a mechanistic way, although they were varied in the four emergency packages that applied from 1998 to 2001 in a way that made them move countercyclically to market prices. The interactions between the loan deficiency payments, countercyclical payments and direct payments are indicated in figure e.

The combination of direct payments at fixed rates and countercyclical payments that vary inversely with market prices within the specified range of prices, results in base related payments that vary countercyclically with market prices when market prices are above the loan rate. When provided in conjunction with loan rate related support measures that vary inversely

e US loan deficiency, countercyclical and direct payments



to market prices when prices are below the loan rate, the system is designed to provide support which is highly countercyclical over a considerable range of market prices.

A potentially important issue concerning the classification of US base related payments under WTO rules arises from the adaptation of US support measures over time. With changes in legislation which occur in each Farm Bill, changes are made to details concerning how the programs are applied. In some cases changes are made to the names of programs that are essentially a continuation of existing programs. Such changes occurred in the 2002 Farm Bill, with direct payments taking the place of PFCPs and countercyclical payments taking the place of market loss assistance payments. With the changeover from PFCPs to direct payments, gradually declining but pre-fixed rates of unit payments were replaced by fixed unit direct payments of similar magnitude throughout the period covered by the 2002 Bill. Also up to that stage, producers of soybeans that were eligible for the various supports arising from loan rates were not eligible for the base related PFCPs. In the 2002 Farm Bill, soybeans and minor oilseeds were fully incorporated into the farm programs, specific area and yield bases were created and soybean producers also became eligible to receive direct and countercyclical payments.

Also of potential importance from a WTO classification perspective, the 2002 Farm Bill enabled program crop farmers to update their area and yield bases. However, as will be discussed further, the status of direct payments as 'green box' exempt from inclusion in the AMS on grounds of the payments being decoupled is contingent on bases being in a defined and fixed base period.

Changes in program name and in some program details also occurred with the change from market loss assistance payments to countercyclical payments in the 2002 Farm Bill. As discussed previously, the market loss assistance arrangements provided a series of emergency payments which, in effect, varied inversely with prices. The introduction of countercyclical payments in the 2002 Farm Bill institutionalised and formalised the provision of base related support payments which vary countercyclically with prices. As with direct payments, soybeans and other oilseeds became eligible for countercyclical payments. However, soybeans and other oilseeds had also received some supplementary support through special oilseed payments under the various annual emergency packages that applied from 1998 to 2001.

4 Policy considerations in the 2008 Farm Bill

Farm program crops

A new Farm Bill, the Food, Conservation and Energy Act of 2008 was enacted in mid-2008. The Bill largely retains the structures of support in the 2002 Farm Bill for farm program crops with the addition of an optional revenue assurance program termed ACRE. In the new Bill, direct payment rates remain the same as in the 2002 Bill. Also for 2008 and 2009, loan rates remain unchanged from their previous levels for the major program crops and those same rates are retained from 2010 to 2012 except for increases for wheat (6.9 per cent), barley (5.4 per cent) and oats (4.5 per cent). The new Bill maintains target prices at their previous levels for 2008 and 2009 except for a minor reduction for upland cotton (1.6 per cent). It also maintains the existing target prices for corn and rice from 2010 to 2012. However, for those years, it increases target prices for wheat (6.4 per cent), barley (17.4 per cent), oats (24.3 per cent), grain sorghum (2.3 per cent) and soybeans (3.4 per cent). Target prices, loan rates and direct payment rates in the 2008 Farm Bill are compared with those in the 2002 Bill for major program crops in table 3.

3 Policy settings for major farm program crops under the *2002 Farm Security and Rural Investment Act* and the *2008 Food Conservation and Energy Act*

	wheat	corn	barley	grain sorghum	oats	cotton	soybeans	rice
	US$/bus	US$/bus	US$/bus	US$/bus	US$/bus	US$/lb	US$/bus	US$/cwt
Loan rate								
2002 Farm Bill								
2002-2003	2.80	1.98	1.88	1.98	1.35	0.52	5.00	6.50
2004-2007	2.75	1.95	1.85	1.95	1.33	0.52	5.00	6.50
2008 Farm Bill								
2008-2009	2.75	1.95	1.85	1.95	1.33	0.52	5.00	6.50
2010-2012	2.94	1.95	1.95	1.95	1.39	0.52	5.00	6.50
Direct payment								
2002 Farm Bill								
2002-2007	0.52	0.28	0.24	0.35	0.024	0.067	0.44	2.35
2008 Farm Bill								
2008-2012	0.52	0.28	0.24	0.35	0.024	0.067	0.44	2.35
Target price								
2002 Farm Bill								
2002-2003	3.86	2.60	2.21	2.54	1.40	0.724	5.80	10.50
2004-2007	3.92	2.63	2.24	2.57	1.44	0.724	5.80	10.50
2008 Farm Bill								
2008-2009	3.92	2.63	2.24	2.57	1.44	0.7125	5.80	10.50
2010-2012	4.17	2.63	2.63	2.63	1.79	0.7125	6.00	10.50

Another change in the 2008 Farm Bill is the introduction of target prices and countercyclical payments for some pulse crops, namely dry peas, lentils, small chickpeas and large chickpeas. Dry peas, lentils and small chick peas were eligible for support through loan rates and the associated payments in the 2002 Farm Bill but did not receive support through the target price arrangements. There is no provision for direct payments for these pulse crops in the 2008 Bill.

In the new Bill, a small modification is made to the areas on which direct payments are provided. In the 2002 Bill both direct and countercyclical payments were provided on 85 per cent of base areas. The new Bill provides for countercyclical payments to continue to be provided on 85 per cent of base areas. However, direct payments will only be provided on 85 per cent of base areas for the 2008 and 2012 crop years. For the 2009 to 2011 crop years payment acres for direct payments will be reduced to 83.3 per cent of base areas.

A potentially important addition to the new legislation provides an option for producers to choose to receive revenue assurance payments under the ACRE program which covers all program crops and peanuts for years from 2009 to 2012. This applies when average revenue falls below levels determined from moving averages of past yields and market prices. The choice for producers applies from when they have agreed to adopt the ACRE program up to and including 2012. This means producers would not be able to make annual changes between revenue assurance and traditional program support. Also producers must enter all of their eligible crops into the ACRE program, not just one program crop or a selection. When farmers elect to receive revenue assurance payments they would be subject to a 20 per cent reduction in direct payments and a 30 per cent reduction in loan rates.

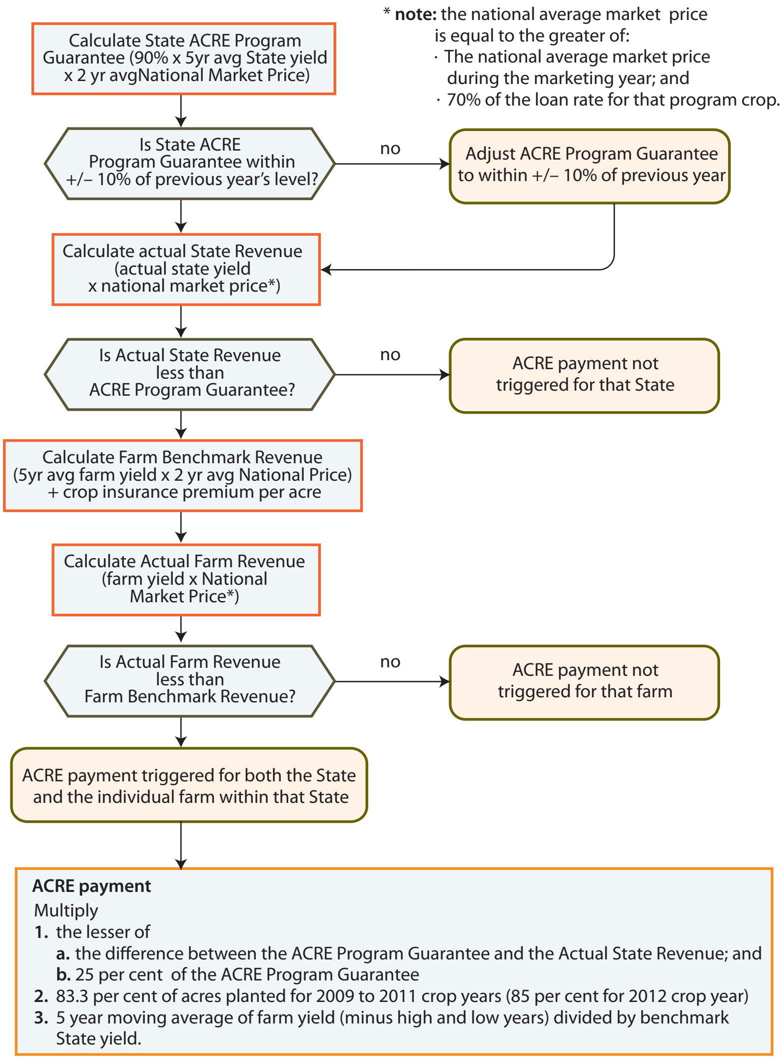
The basic idea behind the ACRE program is that if there is a marked drop in participating farmers' revenue from previous levels because of either or both reduced yields or reduced prices, those farmers receive support.

Payments under the ACRE program are made when both of two thresholds are triggered. Actual state revenue an acre for the supported crop during the crop year must be less than the state ACRE program guarantee, and the producer's actual farm revenue an acre for the supported crop for the crop year must be below the farm's benchmark revenue.

Both the state program guarantee and the farm benchmark revenue are determined through multiplying moving averages of past actual yields and past actual national market prices. For both this guarantee and this revenue, the yields are averages for the previous five years with the highest and the lowest excluded and the national average market prices are for the previous two years. The state program guarantee is set at 90 per cent of the moving average yield multiplied by the moving average price. Annual changes in the state program guarantee are also limited to plus or minus 10 per cent of the previous year's level.

Payments under the ACRE arrangements are to be made on 83.3 per cent of farmers' production of the relevant crops for years from 2009 to 2011 and 85 per cent in 2012, and the total area on which payments are made is limited to the farm's total base acreage. The various elements of the program are depicted in figure f.

f 2008 Farm Bill: ACRE payments



The implications of the ACRE program option for US support and potentially for US AMS levels depends on producers' uptake of the program, the levels of the guarantee benchmarks and the degrees to which both annual yields and market prices vary from their moving average benchmarks. The initial state program guarantee levels for the major grains and oilseeds which constitute most farm program crops will be relatively high because price levels over the past two years have been high relative to previous levels. Also the rule that the state program guarantee cannot change by more than 10 per cent a year will help to lock in relatively high guarantee levels over the program period for those commodities. These factors could provide significant incentives for program crop farmers who produce mainly grains and/or oilseeds to adopt the ACRE program. However, the producers of cotton, for which market prices have been well below the target price and who would lose countercyclical payments and other traditional program benefits by changing to the ACRE program appear much less likely to adopt the program. A fuller assessment of issues related to the choice between ACRE and traditional farm programs is provided in Roberts, Haseltine and Andrews (2008).

Dairy

There are significant changes in the new Farm Bill for dairy that could potentially have important implications for US AMS levels. In the past, US Government support for dairy has mainly been for milk prices with such support being underpinned by tariff quotas on imports of dairy products and export subsidies for some products. Those arrangements have been complemented by pricing arrangements for milk under federal and state milk marketing orders. Those orders involve setting minimum prices at processing plants for milk of various classes which is used for drinking milk and for milk which is used in the various categories of dairy products (Manchester and Blayney 2001).

In the 2002 Farm Bill a floor was set to internal prices through a USDA purchase price of US$9.90 for 100 pounds of milk. This was the same level as applied under the 1996 Farm Bill. Since the early 1990s, the Farm Bill support prices for milk were set well below market prices and had 'little more than a psychological effect' (Manchester and Blayney 2001). Even so, this support price has been used as the administered support price in the calculation of price support for dairy in determining the US AMS and it has been sufficiently high to result in price support for milk of between US$4.5 billion and US$4.8 billion a year. This is substantial in the context of there being a national AMS limit of US$19.1 billion for agriculture as a whole.

In addition, the 2002 Bill provided that producers receive direct milk income loss contract (MILC) payments on up to 2.4 million pounds of milk for a farm each year when the monthly Boston price for class 1 milk, as defined for federal milk marketing orders, fell below a benchmark price of US$16.94 for 100 pounds. The rate of payment was set at 34 per cent of the difference between the class 1 price in Boston and that benchmark price. The same Boston benchmark price (US$16.94 for 100 pounds for class 1 milk) is maintained in the 2008 Farm Bill. However, in that Bill both the quantity limit for each farm and the rate of payment are increased for the period from 1 October 2008 to 31 August 2012. Over that period, the quantity limit for each farm is to be raised to 2.984 million pounds a year and the payment rate is to be raised to 45 per cent. The increased rates would result in higher direct support through MILC at times of up to 64 per cent when the payments are triggered. After 31 August 2012, the quantity limit for each farm reverts to 2.4 million pounds a year and the payment rate reverts to 34 per cent.

An initiative in the 2008 Farm Bill is to adjust the MILC benchmark support price upward if feed prices rise above specified levels. This has the effect of both triggering MILC payments at higher market prices and increasing levels of potential MILC payments. The feed price threshold for increasing the benchmark support price for milk as calculated for a National Average Dairy Feed Ration is to be US$7.35 per 100 pounds for any month from 1 January 2008 to 31 August 2012 and US$9.50 for 100 pounds thereafter. In months when the average price of dairy feed exceeds US$7.35 for 100 pounds, the US $16.94 benchmark rate will be increased by 45 per cent of the percentage increase in the price of feed above US$7.35 for 100 pounds. Farmers will then receive MILC payments if the class 1 price in Boston is less than the new, higher, benchmark price.

A major change has been made in the method of providing minimum price support for dairy in the 2008 Farm Bill, with support prices being set for major bulk processed products. Previously, minimum price support was provided for whole milk. The support prices for cheddar cheese are US$1.13 a pound in blocks and US$1.10 a pound in barrels; for butter it is US$1.05 a pound and for non-fat dry milk (skim milk powder) it is US$0.80 a pound. These support prices appear to be relatively low in comparison with market prices in recent years. However, there have been some instances during the earlier years of the present decade when market prices have fallen somewhat below the support prices. This suggests that the support prices are meant to provide a safety net at times such as seasonal flushes and when demand is relatively weak such as applied in the lowest price periods in 2002 and 2003 (table 4). Also, in late 2008, there were marked reductions in US milk and dairy product prices. The reductions were particularly sharp for non-fat dry milk and there have been some US Commodity Credit Corporation (CCC) purchases at the support price of US$0.80 a pound (Cattle Network 2008).

The change from milk-based to dairy-product-based support prices could have important implications for how the United States notifies its AMS support for milk or dairy products. It could mean that milk used for direct human consumption and for dairy products, other than cheddar cheese, butter and non-fat dry milk, might no longer be considered to be supported

4 Support prices for butter, cheese and non-fat dry milk in the 2008 Farm Bill and market prices from 2001 to 2006

Support prices in the 2008 Farm Bill for 2008-2012	US$/pound
Cheddar cheese in barrels	1.10
Cheddar cheese in blocks	1.13
Butter	1.05
Non-fat dry milk	0.80

Average market prices	2001 US$/ pound	2002 US$/ pound	2003 US$/ pound	2004 US$/ pound	2005 US$/ pound	2006 US$/ pound
Cheddar cheese in barrels a						
High b	1.68	1.35	1.58	2.17	1.72	1.44
Low b	1.06	1.03	1.02	1.23	1.30	1.05
Cheddar cheese in 40 pound blocks a						
High b	1.78	1.39	1.60	2.20	1.76	1.43
Low b	1.07	1.02	0.99	1.30	1.36	1.12
Butter a						
High b	2.25	1.38	1.48	2.36	1.74	1.41
Low b	1.13	0.93	1.00	1.39	1.33	1.14
Non-fat dry milk c	0.98	0.90	0.81	0.84	0.94	0.89

a Quotes reported by National Agricultural Statistics Service from Chicago Mercantile Exchange. **b** Figures are the high and low prices for any trading day during the year. **c** National Agricultural Statistics Service.
Source: National Agricultural Statistics Service, 2008a.

for the purposes of calculating the US AMS. Such milk is estimated to currently constitute almost two-thirds of the total milk produced in the United States giving a potential for a marked reduction in the US AMS. Nevertheless, such milk continues to be supported both through the border measures and price support arrangements for major dairy products and through federal and state Milk Marketing Orders for the various grades of milk.

Several potential questions arise concerning how dairy support will be incorporated into the US AMS as a result of the change in the basis of US dairy support contained in the 2008 Farm Bill. Some questions which could be particularly relevant are:

- Could the change mean that US milk used for direct human consumption and for dairy products other than cheddar cheese, butter and non-fat dry milk is now considered not to receive price support, with such support to be excluded from the US AMS?
- If the change to federal price support for dairy to a major processed product basis rather than a whole milk basis results in the United States calculating its price support for dairy products rather than for milk, what base levels for external reference prices will be used for determining price support for the supported products?
- Should administered prices under milk marketing orders be used to determine price support for milk that is not used in the production of cheddar cheese, butter and non-fat dry milk?
- If the change to a processed product basis requires a change in base prices and in the coverage of commodities from milk to dairy products, what are the implications for the base levels of support for dairy and for US agriculture as a whole, and should any changes be reflected in overall US committed AMS limits for agriculture as a whole?

Sugar

For sugar, the new Bill progressively raises loan rates from US18 cents a pound for raw cane sugar in 2008, by US0.25 cents each year to reach US18.75 cents in 2011, and maintains it at US18.75 cents in 2012. The loan rate for refined beet sugar for 2008 is to remain at its previous level of US22.9 cents a pound. For the years from 2009 to 2012, the loan rate is to be set at 128.5 per cent of the rate for raw cane sugar, bringing it to US24.1 cents a pound in 2011 and 2012. The higher loan rates will be reflected in an estimated increase of approximately US$120 million a year in price support which would result in a slightly higher total US AMS.

In recent Farm Bills it has been stipulated that the Secretary of Agriculture shall operate the program to the maximum extent practicable at no cost to the Federal Government by avoiding the forfeiture of sugar to the government's stock management agency, the Commodity Credit Corporation. In this context it may be observed that the high support received by the US sugar industry is funded directly by consumers through their paying domestic market prices that are well above world market prices. Such prices can only be sustained through management of the flow of supplies to the internal market. Measures which have been used to manage supplies include tariff quota restrictions on imports of sugar, restrictions to limit quantities marketed by processors to quantities within specified allotment quantities, and/or assessments on domestic producers to limit supplies reaching the market.

In the 2008 Farm Bill, marketing allotments for processors are designed to secure a minimum of 85 per cent of domestic consumption for the domestic sugar industry. The Bill also includes a directive to manage imports at the minimum level necessary to ensure compliance with international trade agreements. In the event of a domestic supply shortfall, provision is made to ensure supplies by increasing tariff quotas. The 85 per cent minimum market share is broadly consistent with average levels in recent years.

Under the 2008 Farm Bill, in ensuring as far as possible that forfeitures to the government are avoided at times of large supplies when prices threaten to fall below the loan rates, provision is made for quantities of sugar, as well as cane and beet, to be diverted to ethanol production. Having diversion to ethanol as a safety valve appears to be motivated at least in part by the access that Mexican sugar now has to the US market under the North American Free Trade Agreement. Such access gives rise to the possibility that sugar imports from Mexico, possibly resulting from displacement of Mexican sugar by US high fructose corn syrup, could increase supplies on the US market. Imports of Mexican sugar might therefore compromise the ability of the US authorities to maintain internal prices above the loan rate and to secure the minimum of 85 per cent of the domestic market for the domestic industry.

The use of diversions to ethanol as a safety valve to prevent US sugar price reductions and forfeitures could result in costs to US taxpayers, with the extent depending on the price of ethanol and the price at which the US Department of Agriculture buys the sugar (LMC 2008). If quantities are diverted to ethanol and if costs to US taxpayers result, those losses could contribute to future AMS levels.

5 Relevant WTO conditions and US undertakings

The main external limitations on US agricultural policies are currently through the provisions of the WTO Agreement on Agriculture. Under that agreement member countries made commitments to limit their domestic agricultural support other than that which was considered to be minimally market distorting (green box exemptions) or production limiting (blue box exemptions). Also support is exempted when it is relatively low (*de minimis* exemptions). The amount that is subject to limitation, known as the Aggregate Measurement of Support (AMS), is subject to the committed limitations for agriculture as a whole. The approach to calculating the AMS is summarised in box 1.

As with other developed countries, the United States undertook in the Uruguay Round to reduce its annual AMS limit by 20 per cent between 1995 and 2000, from a base level of the average from 1986 to 1988. In 1995, the US AMS limit was US$23.9 billion. Since 2000, it has been capped at US$19.1 billion.

box 1 Calculation of the AMS

The AMS is the sum of price support and non-exempt government payments, less specific agricultural levies and fees. It is calculated through summing non-exempt support that is product-specific with non-exempt support that is non-product-specific (WTO Agreement on Agriculture Annex 3).

For individual products, separate specific non-exempt support (amber box) levels are calculated as:

Product-specific support = price support + non-exempt product-specific payments or assistance – product-specific agricultural levies or fees

The price support element for each product is determined from the difference between current administered support prices for each commodity and fixed external reference prices set at their average level for the base period of 1986 to 1988. The external reference prices are export parity prices when the country is a net exporter and import parity prices when the country is a net importer. The difference between the current administered support price and the fixed external reference price is multiplied by the quantity that is supported to give the level of price support for each supported commodity.

The support arrangements for the United States are such that the main commodities where price support is important in the AMS are dairy and sugar. Support for most other products, mainly the farm program crops has been primarily through government payments.

If the product-specific non-exempt support exceeds the *de minimis* threshold of 5 per cent of the commodity's total value of production, it is included in the AMS. If it is less than the threshold it is exempted.

Non-product-specific support includes support through various forms of payments and assistance that is not for individual commodities but which is provided in favour of agricultural producers in general (WTO Agreement on Agriculture Article 1(a)). Examples would be non-exempt insurance subsidies covering all agricultural products and subsidies on inputs such as water or energy that can be used for a wide range of agricultural activities. If non-product-specific support exceeds the non-product-specific *de minimis* threshold of 5 per cent of the total value of agricultural production it is included in the AMS. If it is less than the threshold, it is excluded.

continued...

box 1 **Calculation of the AMS** *continued*

Rules for exemption

Green box

A wide range of government payments and assistance through infrastructure, research and development, domestic food aid, income insurance, disaster relief, decoupled payments, structural adjustment and environmental and regional programs is considered minimally market distorting and exempted under Annex 2 of the Agreement on Agriculture.

Rules regarding decoupled income support are of particular significance for the categorisation of support for US program crops as exempt under the green box. In paragraph 6 of Annex 2 of the Agreement, it is specified that eligibility for decoupled status requires that the payments must be determined in a defined and fixed base period. It is also specified that decoupled income support must not be related to the type or volume of production, prices, either domestic or international or factors of production employed in any year after the base period. Additionally, no production should be required in order to receive such payments.

Blue box

Exemptions of payments under the blue box for production-limiting programs are permitted under Article 6 of the WTO Agreement on Agriculture if:

1. such payments are based on fixed area and yields; or
2. such payments are made on 85 per cent or less of the base level of production; or
3. livestock payments are made on a fixed number of head.

Blue box exemptions were used for deficiency payments for US program crops in 1995 at a time when acreage reduction programs (ARPs) were still operating. However, with the discontinuation of ARPs and deficiency payments in the 1996 Farm Bill, blue box exemptions have subsequently not been used by the United States.

Proposals regarding new arrangements for product-specific AMS limits and limitations for blue box exemptions are currently under consideration in the Doha Round. A final Doha Round agreement, if it eventuates, will result in revisions to provisions of the Uruguay Round Agreement on Agriculture. However, at the time of writing, agreement has not yet been reached.

US domestic support measures and WTO classification

WTO member countries are required to notify the WTO as to the extent of their total agricultural support, how various support measures are classified according to the criteria set down in the Agreement on Agriculture, and their overall AMS. This is to ensure members comply with their commitments and that methods employed to calculate their AMS are transparent and consistent with the provisions in the Agreement. If any member believes that another member has not notified measures which ought to have been notified, or has notified a measure or measures incorrectly, there are avenues to pursue these issues through WTO mechanisms.

The United States has notified the WTO of the classifications and extent of its domestic support up to 2005.

Major US domestic support measures and how they have been notified to the WTO

Loan deficiency payments, marketing loan gains and certificate exchange gains

Since notifications commenced in 1995 after the conclusion of the Uruguay Round, the United States has notified loan deficiency payments and marketing loan gains as product-specific amber box support. Certificate exchange gains (see glossary) were treated in the same way after they were introduced in 1999.

Deficiency payments

Deficiency payments were an integral component of US farm program support until 1996 but have since been discontinued. For 1995 the US Government categorised deficiency payments as direct payments under production limiting programs as at that time acreage reduction programs (ARPs) were still in place. They were also paid on 85 per cent of base acreage with program yields having been held constant. As such, they were notified as blue box payments that were exempt from agreed cuts to domestic support.

Production flexibility contract payments and direct payments

The PFCPs provided from 1996 to 2002 were paid on fixed area and yield bases and did not vary with changes in internal or external prices. The rates of payment were, however, preset to decline gradually over the period from 1996 to 2002 according to a scale set down for budgetary reasons in the 1996 Farm Bill. Also, producers with bases did not need to produce the program crop or anything at all to receive these payments. Payments were conditional on the farmer not producing fruit, vegetables or wild rice. They were notified to the WTO as decoupled payments which were exempt from reduction commitments under the green box.

Direct payments are conceptually the post 2002 Farm Bill equivalent of PFCPs. They are paid on fixed area and yield bases. As with PFCPs, direct payments are provided even if the farmer produces products other than the base program crop or if the farmer produces nothing at all, and payments are conditional on the farmer not producing fruit, vegetables or wild rice. Direct payments have been notified to the WTO as decoupled payments that are exempt under the green box.

Under the 2002 Farm Bill, producers were allowed to update their area bases. This would appear to be contrary to the requirement for fixed bases under the WTO rules on decoupled income support. Critical issues concerning this change include the interpretation of what exactly is meant by a fixed base, and whether a WTO member can avoid the fixed base requirements of decoupled income support simply by changing the name of the program and claiming it is a different program.

Market loss assistance payments and countercyclical payments

The market loss assistance payments which applied from 1998 to 2001 were notified to the WTO as non-product-specific amber box payments. When these payments were succeeded by countercyclical payments in the 2002 Farm Bill, the countercyclical payments were also notified as non-product-specific amber box payments. The classification as amber box payments could have been expected as the payments are related to prices of specific commodities. Whether these payments should be considered as product-specific or non-product-specific is discussed further.

AMS levels and limits and issues of interpretation and notification

AMS levels and limits

With the classifications and valuations used by the US Government for its domestic support notifications, US AMS levels have been notified to the WTO as being below the limits that were committed under the Uruguay Round (table 5). For most years other than from 1999 to 2001, the notified AMS level was substantially below the limit and even from 1999 to 2001 the notified levels were appreciably below the limit.

Classification issues markedly affecting AMS levels

While the US notifications have resulted in AMS levels below the permitted limits, the actual AMS level depends on how various forms of support are classified and the exemption status of the support given the various classifications. In the following sections, issues concerning the classifications for the United States are examined and their implications for the AMS are analysed and assessed.

5 US notified AMS levels and committed AMS limits (US$ billion)

	notified AMS	AMS limit
1995	6.21	23.08
1996	5.90	22.29
1997	6.24	21.49
1998	10.39	20.70
1999	16.86	19.90
2000	16.80	19.10
2001	14.41	19.10
2002	9.64	19.10
2003	6.95	19.10
2004	11.63	19.10
2005	12.94	19.10

Source: WTO 2007 and previous notifications.

Classification of PFCPs and direct payments as green box exempt

The United States has notified both PFCPs and direct payments as green box exempt decoupled payments that are therefore excluded from the AMS calculations. There is a range of issues which bring the validity of that categorisation into question. The payment of PFCPs and direct payments is conditional on program crop farmers not producing fruit, vegetables or wild rice. This condition was ruled on by the WTO panel in 2004 in the Upland Cotton case. The panel, in a finding upheld by the Appellate Body, ruled that the US condition that cotton farmers could not claim program benefits if they grow fruits, vegetables or wild rice on their base areas did not fully conform with paragraph 6(b) of Annex 2 of the Agreement on Agriculture on decoupling, and therefore could not be considered green box measures that are exempt from the reduction commitments (WTO 2005, paras. 341, 342).

Paragraph 6(b) of Annex 2 specifies that for support to be decoupled and therefore green box exempt, it must not be related to the type of production. However, US program crop farmers are subject to the condition that receipt of program benefits is contingent on farmers not producing fruit, vegetables or wild rice on farm program land. That condition places a restriction on the type of production. That restriction has applied throughout the period since AMS levels have been notified under the Agreement on Agriculture. Consequently it could be argued that direct payments, and also PFCPs, do not meet the requirements for green box exemption and should have been included in the AMS calculations throughout the period after 1995.

The classification of direct payments as exempt under the green box could also be open to challenge on grounds that, in the 2002 Farm Bill, farmers were given the option to update area bases which had previously applied for PFCPs and which would apply to direct payments in subsequent years.

In paragraph 6(a) of Annex 2 of the WTO Agreement on Agriculture it is stipulated that eligibility for decoupled payments 'shall be determined by clearly defined criteria such as income, status as a producer or land owner, factor use or production level in a defined and fixed base period'. US direct payments were, in concept, effectively a continuation of PFCPs, but their area bases which related to the use of a key production factor, being land, were able to be updated when farmers applied for direct payments under the provisions of the 2002 Farm Bill. As such, the status of the direct payments as decoupled and therefore exempt under Annex 2 could be called into question. In this context it may be noted that as well as direct payments being conceptually equivalent to PFCPs, their amounts were broadly equivalent (table 6) after account is taken for the extension of these payments to soybeans which received direct payments of around US$600 million a year from 2002. Consequently the change from PFCPs to direct payments might be considered as a change in name only and not a change in the essential characteristics and extent of the program.

6 US production flexibility contract payments and direct payments

		US$m
2000	Production flexibility contract payments	5 068
2001	Production flexibility contract payments	4 100
2002	Direct payments	5 299
2003	Direct payments	5 266
2004	Direct payments	5 259
2005	Direct payments	5 218

Source: WTO 2007 and previous notifications.

The potential implications of this for the decoupled and thus green box status of direct payments could be significant. If for example, direct payments were interpreted to be fundamentally a continuation of PFCPs but under a different name, the change in bases in the 2002 Farm Bill could be interpreted to fall outside the requirement contained in paragraph 6(a) of Annex 2; that payments be determined by certain criteria 'in a defined and fixed base period'. If, on the other hand, the interpretation was made that PFCPs and direct payments were two separate and different support arrangements, the 2002 updating of bases might be interpreted to be compatible with the provisions of Annex 2, paragraph 6(a) of the WTO Agreement on Agriculture. These arguments were raised in the Upland Cotton case, but the issue was not ruled on by the panel.

At issue in this context are two fundamental questions: first, what constitutes a fixed base period?; and second, what constitutes a particular program of payments if essentially that same program can be considered to be a different program simply because its name has been changed?

There could be differing legal interpretations of what constitutes a fixed base period. For example, a strict interpretation could be that 'fixed' means 'fixed and unchanging' or 'unchangeable'. Yet an alternative interpretation might be that a 'fixed base period' could be considered to be a 'period that is fixed', but is capable of being replaced some time in the future by another base period that is also 'fixed'. As yet there is no WTO ruling on this issue of interpretation. It may be noted that updating did not occur under the 2008 Farm Bill.

From an economic perspective, the changing of payment bases, especially their updating, is contrary to the economic principles under which decoupled production can be considered minimally market distorting, as is required by paragraph 1 of Annex 2 of the Agreement on Agriculture. Also, it is inconsistent with the provisions in paragraph 6 of Annex 2 regarding a fixed base period. The idea behind the contention that decoupled payments may be considered minimally distorting is that production must be absolutely independent of support and therefore not affected by support. If producers have expectations that they can update their payment bases for particular program crops and for their program crops overall, they have an incentive to expand their areas and production of base crops to lock in higher future program benefits. As such their plantings and production would be influenced by any actual or expected change in bases and not independent of support – producers' decisions on planting and production would not be properly decoupled from payments and would not be minimally market distorting.

Also, it appears direct payments and PFCPs would not, in the event that they were not exempted as decoupled under the green box, be eligible for exemption under the blue box. This is because they do not satisfy the conditions for a production-limiting program as set out in paragraph 5(a) of Article 6 of the Agreement on Agriculture.

If the conditions for payment of direct payments and PFCPs did not conform to the green or blue box exemption provisions they would have to be classified as amber box support and, therefore, subject to the *de minimis* provisions, included in the US current total AMS.

Classification of market loss assistance payments and countercyclical payments as non-product-specific

The reasons behind the US classification of market loss assistance payments and their successor countercyclical payments as non-product-specific are not clear. It appears the basis for the classification is that producers with program crop bases are free to produce any product (with the exception of fruit, vegetables and wild rice), or not produce anything at all, and still receive the payments. Because of such freedom of choice, the payments might be considered to be non-product-specific. However, the payments are made on product-specific bases and vary with individual product prices providing reasons for classification as product-specific.

Another important consideration is that only a select group of US farmers, those with bases for producing a specific group of products, is eligible for these payments. Because many US farmers are not eligible for these payments, and because eligibility for receiving these payments is confined to those with specific crop bases, these payments do not appear to meet the WTO definition of non-product-specific support as support 'provided in favour of agricultural producers in general' (Article 1(a) of the WTO Agreement on Agriculture). Therefore that classification as non-product-specific support is open to question.

A critical issue: classification of payments as product-specific or non-product-specific and links to de minimis exemptions

Whether particular means of support may be classified as product-specific or non-product-specific may, at first glance, appear to be relatively inconsequential. However, this classification can be critical for establishing the AMS because it can determine whether those particular payments and other forms of payments as well are exempt or not from inclusion in the AMS on *de minimis* grounds. Particular circumstances include:

- if a form of support is classified as product-specific and its total along with other product-specific, non-exempt support for that product is less than 5 per cent of the commodity's value of production, all product-specific support for that commodity is **excluded** from the AMS on product-specific *de minimis* grounds;
- if a form of support is classified as product-specific and its total along with other product-specific, non-exempt support for that product is greater than 5 per cent of the commodity's value of production, all product-specific support for that commodity is **included** in the AMS;
- if a form of support is classified as non-product-specific and its total, along with other non-product-specific non-exempt support is less than 5 per cent of the total national value of agricultural production, all forms of non-product-specific support are **excluded** from the AMS on non-product-specific *de minimis* grounds;
- if a form of support is classified as non-product-specific and its total, along with other non-product-specific, non-exempt support is greater than 5 per cent of the total national value of agricultural production, all forms of non-product-specific support are **included** in the AMS.

The critical nature of this issue for a country's AMS arises from the 'all in or all out' nature of large components of support payments depending on whether the *de minimis* threshold is exceeded. It should also be noted that the *de minimis* provisions relate to the value of agricultural production in each marketing year. Consequently, the *de minimis* threshold varies with changes in the value of production.

Each of the four main types of US payments that have been made on farm commodity bases, (PFCPs, market loss assistance payments, direct payments and countercyclical payments) has characteristics which can complicate their classification as product-specific or non-product-specific. Considerations include:

- program crop farmers are free to plant other program and non program crops on their product-specific base areas with the exception of fruit, vegetables and wild rice, or to plant nothing at all. Because farmers can produce other crops on specific crop bases, the payments might be considered to be non-product-specific;
- however, all four types of payments are made on product-specific bases and might therefore be considered as product-specific payments;
- even if farmers don't produce program crops, they still must have program crop bases for specific crops to be eligible for support. As such, the support payments are exclusive on a product-specific basis, and;
- payments for program crops have, in the past applied for only about one-quarter of the total value of US agricultural production. Consequently classifying support as non-product-specific could be brought into question on grounds it constitutes support for only a limited part of agriculture and not 'provided in favour of agricultural producers in general'. Therefore, farmers producing most of the total value of US farm production are not eligible to receive the payments.

The US notification of direct payments and PFCPs as decoupled, and exempt under the green box, means the issue of whether these payments should be classified as product-specific or non-product-specific has not yet arisen. However, as indicated previously, these payments for cotton were ruled by a WTO panel in the Upland Cotton case as not to be decoupled income support because of the planting flexibility limitations.

While the findings in the Upland Cotton case only cover cotton, the conditions for direct payments to producers of the other program crops regarding not producing fruit, vegetables or wild rice, and the characteristics of direct and countercyclical payments, are the same for producers of other program crops as they are for producers of cotton. Consequently, it appears the cotton rulings could be taken as precedents for treatment of the other program crops.

If, because of the Upland Cotton case ruling or for other reasons, such as updating of bases, direct payments are not considered to be decoupled exempt green box payments but are reclassified as non-exempt amber box payments, the classification of such payments as product-specific or non-product-specific would become important.

The US notification of market loss assistance payments and countercyclical payments as non-product-specific amber box payments has enabled the United States to exclude such payments from its AMS on non-product-specific *de minimis* grounds. This is because the sum of these payments and other non-product-specific payments has been less than 5 per cent of the total value of US agricultural production.

It could be considered that because the sum of the non-product-specific payments has been less than 5 per cent of the value of US agricultural production, such payments are relatively small, and therefore of minor consequence. However, farm program crops have until recently contributed only about one-quarter of the value of US agricultural production. Also, most of the crop insurance that applies primarily for farm program crops is classified as non-product-specific. Consequently, the payments which have been excluded from the AMS on *de minimis* grounds have constituted substantial support relative to the value of the supported program crops in several years.

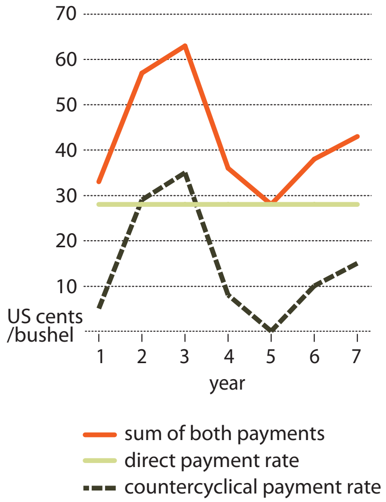
As well as the Upland Cotton case having potentially important implications for the classification of direct payments, it could be important for the classification of countercyclical payments and their forerunner, market loss assistance payments. In the Upland Cotton case, it was ruled that support paid on historical bases, including countercyclical and market loss assistance payments as well as direct and production flexibility contract payments, constitutes 'support to a specific commodity'. While this ruling was in the context of Article 13(b) (ii) of the WTO Agreement on Agriculture (see Peace Clause in glossary), it provides a useful starting point for determining what constitutes 'product-specific support' in the context of Article 1 of the Agreement on Agriculture (see item for Aggregate Measurement of Support in glossary). If there were a reclassification of countercyclical and market loss assistance payments as product-specific, rather than as at present, non-product-specific, it could have major implications for *de minimis* exemptions and for the overall US AMS.

Cumulative effect of direct and countercyclical payments and classification of direct payments as decoupled and therefore green box exempt

The issue of classification as product-specific or non-product-specific payments applies to both of the payments that are made on area and yield bases, namely direct and countercyclical payments. These two forms of support share a number of characteristics. They are both paid on identical base acres for the program crops and on similar base yields. Farmers who receive a countercyclical payment must also receive a direct payment. The main difference between these payments is that the payment rate for direct payments is fixed, at least for the period covered by each Farm Bill, while the payment rate for countercyclical payments varies depending on prevailing market prices (when they are within the range between the loan rate and, the target price minus the unit direct payment rate).

Because the payment rate for countercyclical payments varies inversely with prices within this range and the payment rate for direct payments is fixed, the total of countercyclical and direct payments varies inversely with market prices when market prices are within that price range (figure g). When market prices are within that range, farmers have received a total of countercyclical and direct payments equal to the difference between the target price and the market price multiplied by 85 per cent of the base areas, multiplied by the base yields. Also, because the area bases are the same for countercyclical and direct payments, and the yield bases for the two forms of payments do not differ much, the total of these two payments varies inversely with market prices and differs little from payments which would apply if the

g Hypothetical example of the cumulative effect of direct and countercyclical payments for a particular farm program crop



bases for the two components were identical. So when market prices are within this range, direct payments are a part of what is effectively a single payment that varies countercyclically with market prices. As such, in terms of their actual effects on production, direct payments, (that is the fixed part of the total that varies countercyclically with market prices), may be construed not to be properly decoupled; just considered as part of an overall payment which varies countercyclically with prices.

As it stands, the WTO panel rulings in the Upland Cotton case mean US direct payments for cotton should not be classified as decoupled income support because their payment is conditional on farmers not producing fruit, vegetables or wild rice. However, the issue of the decoupled status of direct payments, when considered in conjunction with countercyclical payments made on the same area bases and similar yield bases, was not considered in that case.

The arguments in this section, along with the rulings in the Upland Cotton case and the changing of payment bases in the 2002 Farm Bill cast doubt on the correctness of classifying US direct payments as being properly decoupled both in their effects on production and in meeting the criteria set down in Annex 2 of the Agreement on Agriculture.

Support to specific commodities when payments are made on base areas but actual areas are below base areas – the 'cotton to cotton' methodology

A further issue relevant for product-specific support addressed in the Upland Cotton case is the treatment of support paid on total product-specific bases, but where planted areas are less than base areas.

In the US context, this issue could be relevant for PFCPs, direct payments, market loss assistance payments and countercyclical payments, all of which are, or have been, paid on area and yield bases, not on what is actually currently produced. In its ruling in the Upland Cotton case in relation to the interpretation of 'support to a specific commodity' in Article 13(b)(ii) of the WTO Agreement on Agriculture (see Peace Clause in the glossary), the WTO panel adopted what is termed the 'cotton to cotton' methodology. This methodology limits the calculation of payments with respect to upland cotton base acres to physical acres which were actually planted with upland cotton when the actual areas planted were less than farmers' base acres. If, for example, a farmer planted three-quarters of the farm's upland cotton base area to upland cotton, three-quarters of these various payments would be considered to be support for upland cotton. However, the panel did not rule on what the remainder, in this case one-quarter of the payments, should be allocated to. Consequently key issues remaining unresolved include what these 'remainders' should be allocated to and how they should be allocated.

Such 'remainders' constitute support to program crop farmers and therefore should be included in determining the AMS. However, there could be differing ways in which these remainders might be classified; as support for the actual crops or livestock products produced on the remainder of the program commodity base area (however data on this are not readily available); or as non-product-specific support. Either way the classification could have major effects on AMS levels if the inclusion of remainders were to increase either non-exempt product-specific support or non-product-specific support beyond the 5 per cent *de minimis* thresholds.

6 Effects of classification of payments on AMS levels

As previously discussed, it is apparent three issues of classification can have a major influence on US AMS levels.

- whether direct payments or PFCPs should be considered exempt under the green box or otherwise;
- whether countercyclical payments and market loss assistance payments, and potentially PFCPs and direct payments if they were considered non-exempt, should be classified as product-specific or non-product-specific; and
- the levels of the various payments which can be considered as support for specific commodities when the areas planted to specified program crops are below the program areas on which the payments are made, as discussed in the context of the 'cotton to cotton' methodology.

If initially the issues involving the 'cotton to cotton' methodology are set aside, comparisons can be made between AMS outcomes under differing assumptions as to how various payments are classified. Estimates are shown in table 7 and in figures h1 to h6 for six scenarios involving various alternative assumptions, using the data from the actual US notifications for the various forms of payments over the period from 1996 to 2005 (WTO 2007). This has been supplemented where necessary by data from USDA publications (Farm Service Agency 2004, 2007, 2008). Instances under the various hypothetical scenarios where the maximum AMS level to which the US Government committed under the WTO Agreement on Agriculture would have been exceeded are shaded.

It is apparent from table 7 that an upsurge in US domestic support in the late 1990s resulted in the US AMS peaking over the period from 1999 to 2001. It is also evident that only with the combination of classifications actually used by the United States for notifying domestic support, would the US AMS have been below the US AMS limit in all years since 1996.

The critical elements of that combination were the classification of direct payments and PFCPs as exempt decoupled support under the green box, and of countercyclical and market loss assistance payments as non-product-specific support. The latter, along with the extent of other support notified as non-product-specific meant countercyclical and market loss assistance payments as well as the other non-product-specific support, were excluded from the final AMS under the non-product-specific *de minimis* exemption rule.

For any combination of the classifications shown in table 7 other than that actually used, the United States would have exceeded its AMS limit at least twice during the period examined. This limit would have been exceeded most frequently under scenario 6 — in five of the seven years from 1999 to 2005. Under Scenario 3 it would have been exceeded in the first four of the seven years from 1999 to 2005.

7 Estimated US AMS levels under alternative assumptions concerning the status of specified payments [a]

	1996 US$b	1997 US$b	1998 US$b	1999 US$b	2000 US$b	2001 US$b	2002 US$b	2003 US$b	2004 US$b	2005 US$b
US AMS threshold	22.3	21.5	20.7	19.9	19.1	19.1	19.1	19.1	19.1	19.1
Scenario 1. Actual notified AMS (DPs green box exempt, CCPs non-product-specific)	5.9	6.2	10.4	16.9	16.8	14.4	9.6	7.0	11.6	12.9
Scenario 2. DPs green box exempt and CCPs product-specific	5.9	6.2	13.2	22.3	22.3	19.3	11.4	7.5	15.9	17.7
Scenario 3. Both DPs and CCPs non-product-specific	5.9	6.2	20.6	29.7	29.1	25.3	20.0	7.0	11.6	12.9
Scenario 4. DPs non-product-specific and CCPs product-specific	5.9	6.2	13.2	22.3	22.3	19.3	11.4	7.5	15.9	17.7
Scenario 5. DPs product-specific and CCPs non-product-specific	11.1	12.7	16.1	22.3	21.9	18.7	14.5	12.0	17.5	17.6
Scenario 6. Both DPs and CCPs product-specific	11.1	12.7	18.9	27.8	27.3	23.4	16.3	12.5	21.8	22.4

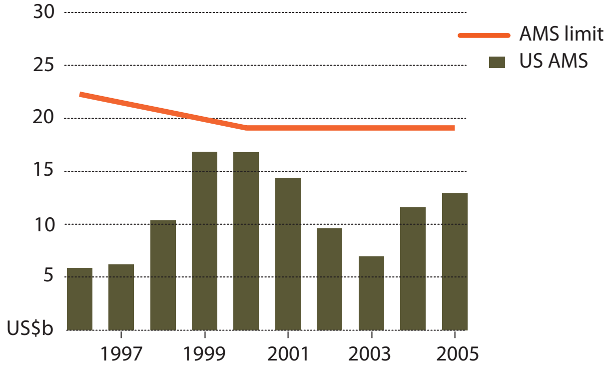
a To simplify the headings in this table, both production flexibility contract payments and direct payments are referred to as direct payments (DPs), while both market loss assistance payments and countercyclical payments are referred to as countercyclical payments (CCPs).

Under Scenario 5, this limit would have been exceeded least frequently and by the smallest margins. However, the combination of product-specific direct payments and non-product-specific countercyclical payments in Scenario 5 would appear to be the least plausible of the combinations examined. It would be highly unlikely that countercyclical payments which vary with prices of individual commodities could be considered non-product-specific if direct payments which do not vary with prices of individual commodities, at least during the period covered by each Farm Bill, were considered product-specific.

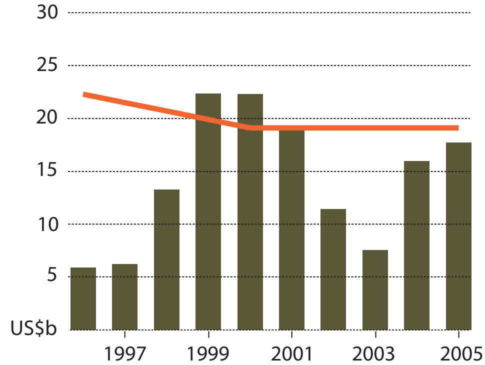
The United States' WTO domestic support commitment would have been exceeded by the greatest margins in 1999 and 2000 for all scenarios other than Scenario 1, as these were peak years for support. By far the greatest margins in those two years would have been for Scenario 3 and Scenario 6, with margins of around US$10 billion in both of those years under Scenario 3 and around US$8 billion a year under Scenario 6. For these scenarios, both direct and countercyclical payments are given the same classifications – both non-product-specific for Scenario 3 and both product-specific for Scenario 6. Having the same classifications for both of those forms of payments increases the likelihood of *de minimis* thresholds being exceeded, resulting in inclusion of direct and countercyclical payments in the AMS and the inclusion of other support that would otherwise have been excluded on *de minimis* grounds.

It is notable that a surge in support for the major program crops in 2004 and 2005 would have resulted in the US AMS limit being exceeded under Scenario 6 but not under Scenario 3 in both of those years. The reason lies in the distribution of non-exempt forms of support between commodities as well as in the levels of support.

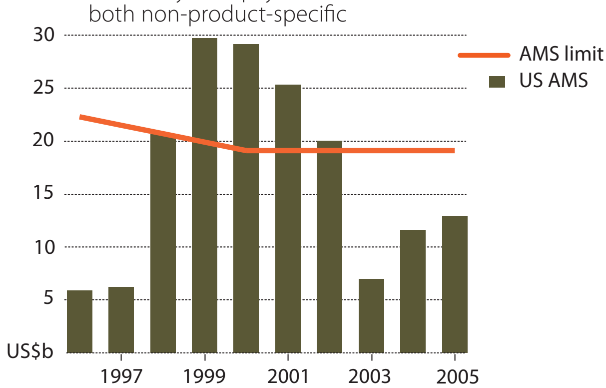
h1 US notification Scenario 1:
Direct payments exempt, countercyclical payments non-product-specific



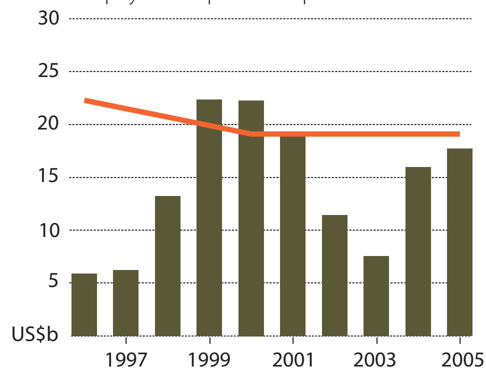
h2 US AMS Scenario 2:
Direct payments exempt, countercyclical payments product-specific



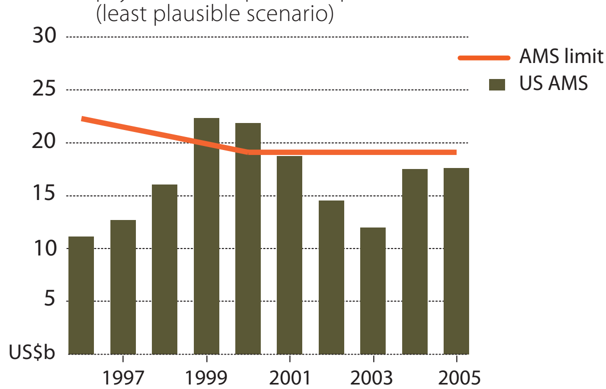
h3 US AMS Scenario 3:
Direct payments and countercyclical payments both non-product-specific



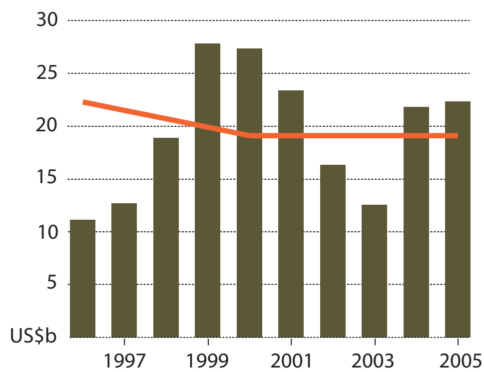
h4 US AMS Scenario 4:
Direct payments non-product -specific, countercyclical payments product-specific



h5 US AMS Scenario 5:
Direct payments product-specific, countercyclical payments non-product-specific (least plausible scenario)



h6 US AMS Scenario 6:
Direct payments and countercyclical payments both product-specific



Under Scenario 6, both direct and countercyclical payments are assumed to be product-specific. Such were the levels of those payments for some major commodities that product-specific *de minimis* levels would have been exceeded resulting in the aggregate AMS exceeding the US$19.1 billion limit. However, under Scenario 3 where both direct and countercyclical payments are assumed to be non-product-specific, the aggregate levels of those payments, and of other forms of notified non-product-specific support, did not exceed the non-product-specific *de minimis* threshold. As a result of this and the exclusion of direct and countercyclical payments from product-specific support under Scenario 3, the US AMS under that scenario would have fallen well short of the limit in 2004 and 2005.

From the previous analysis it can be concluded that the classifications used by the United States in its notifications of its domestic support payments have been critical to the US AMS being below its WTO limit in several years since 1999. With all other plausible classifications, the United States would have exceeded its AMS limit in at least three years. For Scenario 6 it would have exceeded the limit in five of the seven years between 1999 and 2005.

Estimates using 'cotton to cotton' methodology

As indicated in previous discussion, it was considered by the WTO panel in the Upland Cotton case that where farmers planted cotton on only a proportion of their cotton base, only that proportion of their base-related payments should be considered to be support for upland cotton.

The 'cotton to cotton' methodology was developed in relation to interpretation of Article 13 (b)(ii) of the WTO Agreement on Agriculture — support to a specific commodity. The Appellate Body in the Upland Cotton case stated that 'support provided to a specific commodity' can include, but is not limited to 'product-specific support' (WTO 2005 paragraph 365). Consequently, it could be appropriate to apply the same methodology to calculate product-specific support for the purposes of Article 1, Article 6 and Annex 3 of the WTO Agreement on Agriculture.

If the 'cotton to cotton' methodology was adopted for other program crops as well as for cotton, the classification of the 'payment remainders' for each crop where plantings were below specific commodity base areas becomes an important conceptual and practical issue. One possibility could be to allocate the 'remainders' to the products other than from the base crop that was actually produced on specific crop bases. For example, if a farmer with a cotton base planted three-quarters of the base area to cotton and one-quarter to corn, three-quarters of the payments made on the cotton base might be considered to be support for cotton while the remaining one-quarter could be considered to be support for corn.

An alternative approach for dealing with the 'payment remainders' might be to consider them to be non-product-specific support. A reason which could be advanced for this approach could be that program crop farmers were free to produce anything they wished on such remaining areas, except fruit, vegetables and wild rice. Because of this freedom of choice, the support might be considered to be non-product-specific. However, these payments are still only available to producers with program crop bases; they aren't 'in favour of agricultural producers in general' as required by Article 1(a) of the WTO Agreement on Agriculture.

A further issue of potential significance for estimates of support to specific crops arises from the fact that base related support payments have been made on 85 per cent, not 100 per cent of individual commodity base areas. In applying the 'cotton to cotton' methodology, the question arises 'should the actual plantings be related to the full commodity base area, or should they be related to 85 per cent of that base area?'. For example, if a farmer had a cotton base of 100 acres, and planted 75 acres of the farm's cotton base to cotton, should 75 per cent of the direct and countercyclical payments be considered to be support for cotton? Or should the relevant percentage of payments be related to payment acres? In this example, the relevant proportion would be 88.2 per cent as 75 acres of cotton base have been planted to cotton out of total payment acres of 85.

In the absence of comprehensive data on the areas of the various crops actually planted and other land uses in each year for land in each commodity's base, accurate estimates cannot be made for allocating base-related payments between commodities using the 'cotton to cotton' methodology. Nevertheless broad approximations may be made on the basis of proportions of the various program crop bases planted to the base crops and making alternative assumptions for allocating the 'payment remainders'. One such alternative could be to allocate the total of the 'payment remainders' between products using either areas planted to each program crop as a proportion of total program crop plantings, or the value of production of each program crop as a proportion of the value of production of all program crops. Such estimates would only be an approximation as areas or value of production of non-program crops, other products or of fallowing on program crop base land are not taken into account. Another alternative would be to assume that the 'payment remainders' were classified as non-product-specific.

Following are two sets of comparisons of AMS estimates under various assumptions for the 'cotton to cotton' methodology for support allocations. As for table 7, these estimates are determined from actual data in the US notifications on domestic support to the WTO and additional data on direct (also PFCP) and countercyclical (also market loss assistance) payments drawn from the FSA Budget Division, the President's Budget and ERS Statistical indicators (see glossary).

Whereas six scenarios were considered in table 7 where no 'cotton to cotton' methodology was applied for program crops, the cotton on cotton methodology was applied to only two of those scenarios – Scenario 2 and Scenario 6. There are three main reasons for this:

- Scenario 3 in table 7, where both direct payments (DPs) and countercyclical payments (CCPs) are assumed to be non-product-specific, is not applicable as the 'cotton to cotton' methodology relates to support for a specific commodity;
- results for Scenario 4 (DPs non-product-specific and CCPs product-specific) from applying 'cotton to cotton' methodology corresponded exactly with the 'cotton to cotton' outcomes for Scenario 2 (DPs green box exempt and CCPs product-specific), as the level of direct payments was not sufficient in any of the years examined to raise the non-product-specific support levels above the *de minimis* threshold, and;
- Scenario 5 (DPs product-specific and CCPs non-product-specific) appears most unlikely to apply in practice. This is because CCPs vary with changes in individual product prices and would be unlikely to be classified as non-product-specific at the same time as DPs which do not vary with individual product prices are classified as product-specific.

In table 8, comparisons are made for an assumed scenario under which direct payments (and PFCPs) are green box exempt as they have so far been notified, but countercyclical payments (and market loss assistance payments) are assumed to be product-specific. This corresponds with Scenario 2 in table 7 where no account is taken of the 'cotton to cotton' methodology.

Within table 8, comparisons are made between:

- the outcome for Scenario 2 without the 'cotton to cotton' methodology;
- outcomes with the 'cotton to cotton' methodology applied to the full individual commodity bases; and
- outcomes with the 'cotton to cotton' methodology applied using 85 per cent of each commodity base area, which is the area on which actual payments have been made.

Three assumptions for the treatment of 'remainders' have been used in the 'cotton to cotton' calculations:

- 'remainders' are product-specific;
- 'remainders' are non-product-specific; and
- 'remainders' are not allocated.

For the purpose of this exercise, where 'remainders' of support are assumed to be product-specific they have been allocated between the farm program crops on the basis of the value of production of each program crop. The crops included for such allocation throughout the period examined include all program crops for which data on value of production was notified to the WTO including wheat, rice, barley, corn, grain sorghum, oats, cotton, soybeans, minor oilseeds and peanuts.

In table 9, comparisons are made for an assumed scenario under which both direct payments (and PFCPs) and countercyclical payments (and market loss assistance payments) are taken to be product-specific. This corresponds with Scenario 6 in table 7 where no account is taken of the 'cotton to cotton' methodology. Where 'remainders' of support apply, these have been allocated between the farm program crops on the basis of the value of production of each program crop.

Under all conditions indicated in table 8 where the 'cotton to cotton' methodology was applied to Scenario 2 from table 7, when countercyclical payments are product-specific, but direct payments are green box exempt as they have been notified to date, the United States would have exceeded its AMS limit in 1999 and 2000.

When 'cotton to cotton' methodology was applied, the treatment of the 'remainders' from the countercyclical payments would have been critical to whether the United States would also have exceeded its AMS commitment threshold in 2001. If 'remainders' were classified as product-specific and allocated according to the method assumed, the threshold would have been just exceeded in that year. However, if the 'remainders' were classified as non-product-specific or if no 'remainders' were allocated, the AMS would have fallen short of the threshold in that year.

Also in this scenario, if the program payment base of 85 per cent of the area base is used rather than the full base area for allocation of payments and 'remainders', the United States would have exceeded its AMS limit in 2001 if countercyclical payment 'remainders' were considered to be product-specific. As with the case when using the full payment bases, the AMS would have fallen short of the threshold in 2001 if the countercyclical payment 'remainders' were assumed to be non-product-specific or if none were allocated. However, the extent to which it would have fallen short would have been less when the program payment base was used rather than the full area base, as the areas that are allocated as receiving support through countercyclical payments are larger relative to the program payment base areas, than relative to the full area bases.

The results in table 9 indicate that for Scenario 6 under which both direct and countercyclical payments are assumed to be product-specific the number of instances when the AMS would have been exceeded is greatest. Of the seven years examined, the limit would have been

8 Comparison of estimates for US AMS applying 'cotton to cotton' methodology to Scenario 2 with DPs green box exempt and CCPs product-specific

	1999 US$b	2000 US$b	2001 US$b	2002 US$b	2003 US$b	2004 US$b	2005 US$b
Without 'cotton to cotton' methodology	22.3	22.3	19.3	11.4	7.5	15.9	17.7
With 'cotton to cotton' methodology using 100% of base area							
With countercyclical payment 'remainders' product-specific a	22.3	22.3	19.3	11.0	7.4	15.6	17.4
With countercyclical payment 'remainders' non-product-specific	21.6	21.6	18.6	11.0	7.4	15.3	17.1
With no 'remainders' allocated	21.6	21.6	18.6	11.0	7.4	15.3	17.1
With 'cotton to cotton' methodology using 85% of base area							
With countercyclical payment 'remainders' product-specific a	22.3	22.3	19.3	11.2	7.5	15.8	17.6
With countercyclical payment 'remainders' non-product-specific	22.1	22.0	19.0	11.2	7.4	15.7	17.5
With no 'remainders' allocated	22.1	22.0	19.0	11.2	7.4	15.7	17.5

a 'Remainders' allocated between all program crops including soybeans and peanuts according to value of production.

9 Comparison of estimates for US AMS applying 'cotton to cotton' methodology to Scenario 6 with both DPs and CCPs product-specific

	1999 US$b	2000 US$b	2001 US$b	2002 US$b	2003 US$b	2004 US$b	2005 US$b
Without 'cotton to cotton' methodology	27.8	27.3	23.4	16.3	12.5	21.8	22.4
With 'cotton to cotton' methodology using 100% of base area							
With both DP and CCP 'remainders' product-specific a	27.8	27.3	23.4	17.0	13.2	21.8	23.0
With both DP and CCP 'remainders' non-product-specific	26.3	26.0	22.1	15.1	11.6	20.3	20.9
With no 'remainders' allocated	26.3	26.0	22.1	15.1	11.6	20.3	20.9
With 'cotton to cotton' methodology using 85% of base area							
With both DP and CCP 'remainders' product-specific a	27.8	27.3	23.4	17.0	12.4	21.8	22.2
With both DP and CCP 'remainders' non-product-specific	27.4	26.8	22.9	15.8	12.2	21.2	21.8
With no 'remainders' allocated	27.4	26.8	22.9	15.8	12.2	21.2	21.8

a 'Remainders' allocated between all program crops including soybeans and peanuts according to value of production.

exceeded in five – 1999, 2000, 2001, 2004 and 2005 – as was also the case for this scenario if the 'cotton to cotton' methodology had not been applied. Even if none of the 'remainders' were allocated, the limit would have been exceeded in those same five years. However, the reductions in the AMS estimates as a result of applying the 'cotton to cotton' methodology were considerable when none of the 'remainders' were allocated (in the fourth and seventh data lines), or when both the 'remainders' from direct and countercyclical payments were considered to be non-product-specific support (in the third and sixth data lines).

A potentially important observation from table 9 is that application of 'cotton to cotton' methodology would not necessarily reduce the overall level of the US AMS, especially when both direct and countercyclical 'remainders' are considered to be product-specific. It is estimated that for 2002, and especially for 2005, the application of the 'cotton to cotton' methodology using full commodity base areas when both direct payment and countercyclical payment 'remainders' are product-specific, would have resulted in higher overall AMS levels than if no 'cotton to cotton' methodology was used.

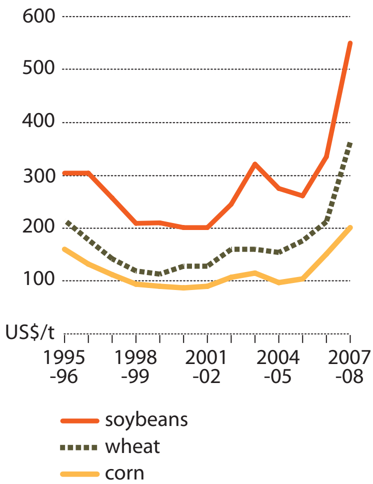
At first glance this appears to be counterintuitive as application of the 'cotton to cotton' methodology results in reduced amounts of countercyclical and direct payments being considered as non-exempt support for this scenario. The reason for the apparently counterintuitive estimates for those years lies in the allocation of the 'remainders'. In both 2002 and 2005, if the 'cotton to cotton' methodology is not used (the first data row in table 9), total non-exempt support for soybeans, including direct and countercyclical payments as well as other non-exempt product-specific support, would have fallen below the product-specific *de minimis* threshold. Consequently, otherwise non-exempt support for soybeans would have made no contribution to the overall AMS. However, when the 'cotton to cotton' methodology is used and the 'remainders' for both of these forms of payments were allocated as product-specific support (the second data row in table 9), the *de minimis* thresholds for soybeans were exceeded in 2002 and 2005, thereby resulting in substantial contributions from support for soybeans to the overall AMS.

From the results shown in table 8 and table 9, some important conclusions can be drawn from applying 'cotton to cotton' methodology to base related payments:

- classification of countercyclical and/or direct payments as product-specific, non-product-specific or green box exempt can markedly affect overall US AMS levels, both when 'cotton to cotton' methodology is used and when it is not;
- the treatment of 'remainders' as product-specific or non-product-specific can, along with interactions with *de minimis* thresholds, have a considerable impact on overall AMS levels;
- the method used for allocating 'remainders' between commodities when base related payments have 'cotton to cotton' methodology applied, can interact with *de minimis* thresholds to markedly affect overall AMS levels; and
- application of 'cotton to cotton' methodology using payment bases of 85 per cent of the commodity base areas has usually, but not always, resulted in AMS levels that have been higher than when using area bases of 100 per cent.

7 Agricultural prices, future support payments and future AMS levels

i World indicator prices for wheat, corn and soybeans **a b**



a For years ending 30 June 1996 to 2008. The indicator prices used are; wheat, US hard red winter wheat fob Gulf; corn, US no. 2 yellow corn delivered US Gulf; soybeans, US cif Rotterdam (October-September basis) **b** Price data for 2007 ABARE estimate; price data for 2008 ABARE forecast. *Source*: ABARE 2008.

Since 2006 there has been a major surge in market prices for agricultural products internationally, especially for grains and oilseeds (figure i).

Levels of world market prices markedly affect whether the various forms of US support payments are triggered and the levels of the payments. If, for example, future world prices consistently exceed US target prices for most program crops, US countercyclical payments, loan deficiency payments, marketing loan payments and certificate exchange gains would be lower than previously. Consequently the contributions of these payments to the US AMS would also be lower than previously.

Many factors combined to bring about the surge in world market prices for grains and oilseeds since 2006. Some, including poor seasons internationally for wheat in 2006 and 2007 and early flood damage to 2008 US corn plantings, might be short term, although climate change might increase the frequency of such events in future. Mitchell (2008) concluded that 'the increase in internationally traded food prices from January 2002 to June 2008 was caused by a confluence of factors, but the most important was the large increase in biofuels production from grains and oilseeds in the United States and the European Union'.

In an assessment of the forces affecting the outlook for prices of the major US farm program crops, Roberts, Haseltine and Andrews (2008) concluded that there are probably greater uncertainties concerning future prices for grains and oilseeds now than at most times, because of the fall out from the 2008 financial crisis. Several factors including large increases in factory capacity to produce ethanol and biodiesel which have already occurred, and government policies which are still encouraging biofuel production seem likely to result in relatively high prices for grains and oilseeds by historical standards over the next few years.

Nevertheless, there are also negatives arising from reductions in the price of oil since mid-2008 and the effects of the fallout from the international financial crisis on demand. On balance it appears prices of grains and oilseeds are unlikely to be as high as the peak levels which applied during much of 2008, but prices could well remain above US target prices.

However for cotton, the direct factors associated with additional demand for biofuels which have contributed to high recent world market prices for grains and oilseeds do not apply, and cotton prices seem likely to remain below the target prices for some time.

If large numbers of US farm program crop farmers adopt the new ACRE revenue assurance program, there is a potential for substantial government payments under that program in years when market prices and/or yields drop sharply. As indicated in the section titled 'Policy considerations in the 2008 Farm Bill', there appear to be significant incentives for program crop farmers who produce mainly grains and/or oilseeds to adopt ACRE. However, specialised cotton farmers appear to have few incentives to adopt ACRE.

The ACRE payments are based on individual crop prices, areas and yields. Also the payments are not under production limiting arrangements and would therefore not qualify for exemption under the blue box. It would appear the most appropriate classification for these payments would be product-specific and, subject to the *de minimis* rules, they should be included in the AMS.

From analysis, it appears US AMS payments made under the traditional support arrangements are likely to be less over the period from 2008 to 2012 than for most of the current decade. However, the availability of the ACRE program and the likely variability in prices and yields means there could be a substantial potential for payments under that program. If those payments are classified as within the AMS, the existence of the ACRE program means it is not possible to conclude strongly that US AMS levels will be lower over the next few years than in past years.

8 Concluding comments

Ordinarily, with current market prices for most agricultural products being at relatively high levels and also high relative to US support prices, it might be expected that under the WTO Agreement on Agriculture, US AMS levels would be lower in the next few years than in the first half of the present decade.

Nevertheless, the ACRE program and the changes to the support for dairy introduce many uncertainties about potential US AMS levels. Under some conditions, such as with a sharp market price fall for the ACRE crops following two high price years and if many eligible producers have much reduced yields at the same time, substantial amounts of revenue assurance payments could potentially be provided. It appears these payments should be classified as product-specific amber box support. Consequently, when ACRE payments are included it is uncertain whether US AMS levels will be lower overall than they were in the first half of the present decade.

There have been many ambiguities about how several of the support mechanisms which have been applied by the United States should be classified for the purpose of determining the US AMS. This is clear from extensive argumentation in the Upland Cotton case. It is desirable for all WTO members that the ways in which various forms of domestic agricultural support are classified for determining the AMS are as clear as possible, both under existing WTO agreements and in the event of a Doha Round outcome. The Upland Cotton case has gone some distance toward such clarification, at least in the context of the Uruguay Round rules, but many uncertainties remain.

appendix A Glossary

ACRE – the Average Crop Revenue Election program: The ACRE program is a new revenue assurance program for US producers of farm program crops and peanuts, enacted in the Food, Conservation and Energy Act of 2008. The program is to apply from 2009 to 2012. Eligible growers have been given the option to make a one-off choice to participate in the program for that period rather than to continue receiving countercyclical payments. In accepting the program and receiving the attendant benefits, producers also accept a 20 per cent reduction in direct payments and a 30 per cent reduction in marketing loan rates. Under the program, payments to producers are made on their plantings of specific commodities when returns per acre fall below both of two trigger points, one at the state level and the other at the farm level.

The state trigger is set at 90 per cent of the average of yields for the previous five years, excluding the highest and the lowest years, multiplied by the national average price over the previous two years. This trigger point is subject to limits on annual changes of plus and minus 10 per cent.

The farm level trigger is the average farm level yield over the previous five years, excluding the highest and the lowest years, multiplied by the national average market price over the previous two years. If both the state and the farm level revenues are below the triggers, growers receive support payments on 83.3 per cent of their planted area from 2009 to 2011, and on 85 per cent in 2012. The total area on which payments are made is limited to the total base acreage of all commodities and peanuts on the farm.

Acreage reduction programs (ARPs): Provisions under US farm programs through which farmers refrain from planting a proportion of their historically determined crop acreage base in return for benefits from varioUS Government payments. Acreage reduction programs were discontinued from the 1996 Farm Bill.

Aggregate Measurement of Support (AMS): The measured level of non-exempt domestic support for a WTO member's agriculture in total under the WTO Agreement on Agriculture and which is subject to cuts and limitations. It is the sum of non-exempt support for each commodity and non-exempt non-product-specific support. It includes market price support measured as the difference between current internal administered support prices and a fixed reference price (import parity for net importers and export parity for net exporters for the 1986 - 88 base period), multiplied by the supported quantity, plus non-exempt direct payments or any other subsidy not exempted from reduction commitments, less specific agricultural levies or fees paid by producers (WTO Agreement on Agriculture Article 1 and Annex 3).

Area base: The area which a farmer is considered to have previously planted to a given program crop for purposes of calculating entitlements and obligations under commodity programs. The base is determined from the area planted or 'considered planted' to the crop during a specified number of previous years.

Amber box support: Domestic support under the terms of the WTO Agreement on Agriculture that is not exempt from inclusion in a member's Aggregate Measurement of Support (AMS) under production limiting programs (blue box support) (WTO Agreement on Agriculture Article 6) or minimally market distorting support (green box support) (WTO Agreement on Agriculture Annex 2).

Blue box exempt support: Support under production limiting arrangements that is exempt from inclusion in a WTO member's current AMS. The conditions for such exemption are that payments are based on fixed area and yields, or they are made on 85 per cent or less of base production, or they are livestock payments made on a fixed number of head (WTO Agreement on Agriculture Article 6).

Certificate exchange gains: In 1999, the US Government introduced commodity certificates as a means for program crop farmers to redeem their government loans while minimising forfeitures of their crops into government stocks when market prices fall below the loan rate. The arrangement operates through farmers with outstanding loans purchasing commodity certificates at current market prices as indicated by the local posted county price, or for cotton and rice, the adjusted world market price, and exchanging them for their loan collateral. That is, when market prices are below the loan rate, the certificates are used to effectively repay the loans at the market price and not at the loan rate. The difference is a gain to the producer and a subsidy cost to the government.

Commodity credit corporation (CCC): A government body within the US Department of Agriculture which handles all money transactions of the department for farm price and income supports.

Conservation reserve program: A program under which erosive cropland is diverted to conservation uses, such as planting to trees and grass, for 10 to 15 years, in return for government rental payments and assistance with conversion costs.

'Cotton to cotton' methodology: Methodology used to limit the amount of support attributed to a specific product to that area on which the crop is actually planted when the area planted to that product is below the area on which support payments are made. This methodology was developed in the WTO case brought by Brazil against the United States on subsidies on upland cotton. The Appellate Body for that case concluded that support calculated in accordance with the 'cotton to cotton' methodology through production flexibility contract, market loss assistance, direct and countercyclical payments, was support granted to the specific commodity upland cotton for the purposes of Article 13(b)(ii) of the WTO Agreement on Agriculture.

Countercyclical payments (CCPs): Payments which vary inversely with farm-gate prices for a farm program commodity when market prices are within a range as specified in the 2002 and 2008 Farm Bills. The unit countercyclical payment is equal to a target price stipulated in the Farm Bill minus the effective price, which is the sum of the unit payment rate for direct payments and the higher of the national average farm-gate market price or the loan rate. In the 2002 and 2008 Farm Bills these payments are made on 85 per cent of the producer's specific commodity base even if base holders produce other items or nothing at all. However, farmers are not eligible for payments if they plant fruit, vegetables or wild rice.

de minimis **exemption:** Under de minimis provisions for the domestic support arrangements in the WTO Agreement on Agriculture, non-exempt (amber box) product-specific domestic support is exempted from a member's AMS if that support totals less than 5 per cent of the total value of production of that product. Non-product-specific support is also exempt if total non-exempt (amber box) non-product-specific support is less than 5 per cent of the total value of the member's agricultural production (WTO Agreement on Agriculture Article 6).

Deficiency payments: Payments which applied to participants in farm commodity programs that bridged the gap between the average farm price for specific commodities and the target price when the former was below the latter. However, when the average market price fell below the loan rate, deficiency payments were limited to the difference between the target price and the loan rate. The deficiency payment arrangements have been discontinued since 1996.

Direct payments (DPs): Fixed rate payments made per bushel, hundredweight or pound on a farmer's individual farm program crop area and yield bases as specified in Farm Bills. In the 2002 Farm Bill, these payments were made on 85 per cent of the farm's historical crop area base. In the 2008 Farm Bill they will be paid on 85 per cent of the crop area base in 2008 and 2012 and on 83.3 per cent of the base from 2009 to 2011. The payments are provided even if the farmer produces products other than the base commodity or if the farmer produces nothing at all. The payments are conditional on the farmer not producing fruit, vegetables or wild rice.

ERS: The Economic Research Service of the US Department of Agriculture.

Farm Bills: Comprehensive US farm and agricultural trade legislation enacted every five or six years spelling out policies to be pursued, policy settings and directives for the administration of agricultural policies for the periods covered by the Bills.

Farm program bases: Historically determined areas and yields for individual farm program crops on which base related program benefits are paid.

Farm program crops: A group of field crops which are eligible for a range of specified farm program government benefits which are spelled out in each Farm Bill. These crops now include wheat, corn, barley, grain sorghum, oats, rice, cotton, soybeans, other oilseeds and peanuts. Pulses including dry peas, lentils, small chick peas and large chick peas now also obtain many farm program benefits. As currently constituted, the main farm program benefits include various forms of payments. These include loan deficiency payments, marketing loans and certificate gains which are made on actual production and which ensure farmers receive unit returns at least as high as the loan rate. They also include direct and countercyclical payments paid on historical area and yield bases.

FSA: The Farm Service Agency of the US Department of Agriculture.

Gallon (US): 1 US gallon is equivalent to 3.7853 litres.

Green box support exemption: Support which is exempted from a WTO member's current total AMS on the grounds of it being considered to be minimally market distorting. Categories under which such exemptions are defined include general services (eg. R&D, extension and infrastructure), public stockholding for food security, domestic food aid, decoupled income support, insurance and safety net programs, disaster relief, structural adjustment through producer retirement programs, structural adjustment through resource retirement programs, structural adjustment through investment aids, payments under environmental programs and payments under regional assistance programs. Conditions for exemptions for support within these categories are set down in Annex 2 of the WTO Agreement on Agriculture.

Loan rate: Rates set for each farm program crop per bushel, hundredweight or pound at which the CCC is empowered to make loans to producers who participate in commodity programs and who submit their crops as collateral. The loan rate is also, in effect, the price at which the CCC purchases program commodities from producers who choose to discharge the debt from such loans by forfeiting their crops to the CCC. As the US Government has become reluctant to accumulate public stocks arising from such forfeitures, the loan rate has increasingly become a benchmark support price at which unit returns are supported with various types of instruments being used to cover the gap between market prices and the loan rate when market prices fall below the loan rate. Those instruments include marketing loans for farmers who take out government loans, loan deficiency payments for farmers who choose not to take out loans and certificate exchange gains.

Loan deficiency payments: Payments to US farmers who do not take out farm program commodity loans, to make up the difference between market prices and the loan rate when market prices fall below the loan rate. These payments are made on the farmer's actual production of the program crop.

Marketing loan: A procedure whereby program crop producers can be authorised to discharge their CCC loans by paying the market price of the commodity that was used as collateral when the market price is below the loan rate. Under those conditions the difference between the market price and the loan rate is an effective subsidy to the farmer who took out the loan.

Market loss assistance payments: Emergency payments made from 1998 to 2001 to crop producers. The payments were designed to cushion the shock to farm incomes from both depressed market conditions and declining production contract payments.

Milk income loss contract (MILC) payments: Direct support payments paid to dairy farmers up to a quantity for each farm that is stated in legislation when the market price falls below a specified benchmark price level. That level has been set at US$16.94 for 100 pounds for both the 2002 and 2008 Farm Bills for the monthly Boston price for class 1 milk as defined for federal milk marketing orders.

Payment remainders: For the purposes of this report, payment 'remainders' are the amounts by which relevant payments such as direct and countercyclical payments which are made on specific commodity bases exceed the amounts attributed as support for the specific base commodities using the 'cotton to cotton' methodology. As indicated in the definition for the 'cotton to cotton' methodology, when actual areas planted to particular program crops are below the base area, only that part of the support relating to the actual area planted may be considered to be support for the specific base commodity. Because the actual areas planted to the base crops are below the areas on which payments are made, some of the payments are left over as 'remainders'. Those 'remainders' constitute support to the farmers who receive them, but it is not considered to be support to the specific program crops for which the payments were made.

Peace Clause: Article 13 of the WTO Agreement on Agriculture under which members agreed not to pursue claims concerning subsidies and countervailing duties against other members to ensure their WTO rights in relation to domestic support measures which conformed fully to the provisions of Annex 2 of that agreement. For this report, the relevant clause is Article 13 (b)(ii) of the Agreement on Agriculture which exempted certain domestic support measures from actions under paragraph 1 of Article XVI of GATT 1994 or Article 5 and Article 6 of the WTO Agreement on Subsidies and Countervailing Measures, provided such measures did not grant support to a specific commodity in excess of that decided during the 1992 marketing year. The Peace Clause expired on 31 December 2003.

PSEs (Producer support estimates): Estimates of support to agriculture and agricultural industries which are published by the OECD (Organisation for Economic Cooperation and Development). The PSE indicates the support received both through price support arrangements that result in higher prices to producers than those for traded products on the world market and support through government transfers. The PSE estimates which have been published indicate the level of support received by producers as a percentage of the value of their production plus support. Up to 2004, these estimates were published for individual agricultural commodities as well as for agriculture as a whole for each OECD member economy. Since 2004, estimates for individual commodities have been discontinued and the emphasis has been on overall levels of support for agriculture and on the characteristics of the forms of support which have been applied.

Target price: Target prices are support prices set down in US legislation for the purpose of determining countercyclical payment rates.

USDA: US Department of Agriculture.

WTO: The World Trade Organisation.

Yield base: The yield for specific crops from which a program crop farmer's base- related payments are determined. That yield base is derived from yields for the crop over a specified number of previous years.

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10.08

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